



**MEDICAL POLICY STATEMENT  
OHIO MEDICAID**

Policy Name		Policy Number	Date Effective
Negative Pressure Wound Therapy (NPWT)		MM-0224	09/01/2020
Policy Type			
<b>MEDICAL</b>	Administrative	Pharmacy	Reimbursement

Medical Policy Statement prepared by CSMG Co. and its affiliates (including CareSource) are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

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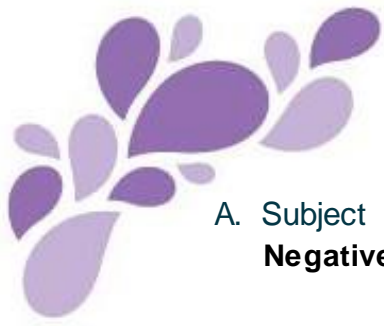
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## A. Subject

### **Negative Pressure Wound Therapy (NWPT)**

## B. Background

Negative Pressure Wound Therapy (NPWT), which is also known as vacuum-assisted wound closure, is a type of wound therapy that is used to treat chronic wounds such as ulcers related to pressure sores, venous or arterial insufficiency or neuropathy. In the United States, there is an estimated \$25 billion dollars spent on an annual basis for wound management. There are many causes for pressure ulcers such as diabetes, vascular insufficiencies or an underlying medical condition.

NPWT involves the controlled application of subatmospheric pressure to the surface of a wound. This type of therapy utilizes an electrical pump, connected to a specialized dressing that then removes debris and exudate from the wound and drains into a collection canister. NPWT is a noninvasive type of therapy that has been shown to be an effective way to accelerate the wound healing of many different types of wounds and ulcers.

To provide a more conducive environment for wound healing, the Negative Pressure Wound Therapy (NPWT) method utilizes a semipermeable dressing that remains moist and warm at all times. This therapy can be done in the home or in an outpatient treatment facility. NPWT typically does not require in-patient monitoring.

## C. Definitions

- **Neuropathic Ulcer:** a type of ulcer that occurs due to lack of sensation secondary to Neuropathy which causes skin and underlying tissue to begin to breakdown causing ulcers further complicated by infection.
- **Venous Insufficiency Ulcer:** a type of ulcer that occurs due to the lack of properly functioning venous valves, which causes the veins to increase in size. This causes blood pooling, typically in the lower limbs, and as a result allows proteins from the blood to start deteriorating the subcutaneous tissue.
- **Arterial Insufficiency Ulcer:** a type of ulcer that develops due to the lack of delivery of oxygen-rich blood to the tissue which causes the tissue to begin to deteriorate and develop into an open wound.
- **Deep Tissue Pressure Injury:** a type of injury resulting from a serious pressure ulcer that has advanced. A pressure ulcer that has advanced to a DTI has additional necrosis of underlying soft tissue that may or may not be visible. A DTI will present in the form of a blood blister or dark wound bed that may also be covered in thin eschar. Deep tissue injuries are not typically found until extensive wound intervention is warranted to stop the deterioration of the soft tissue.
- **Pressure Ulcer:** a type of ulcer that develops due to an extended amount of time when there is compression of the soft tissue overlying bony prominences and an outside object causing tissue necrosis.
- **Slough:** avascular (dead) soft tissue found in higher stage ulcers.
- **Undermining:** subcutaneous tissue deterioration around the margin of a wound and may occur in any direction

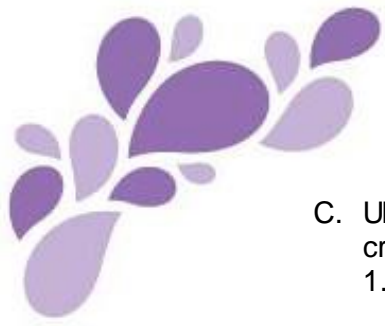


- **Tunneling:** channels of tissue deterioration that extend from the wound to the subcutaneous tissue typically in a unidirectional direction. Typically associated with an additional infection.
- **Dehisced Wounds:** a wound that has ruptured along the wound margin typically due to infection.
- **Eschar:** black or brown, thick, leathery feeling dead tissue covering an ulcer.

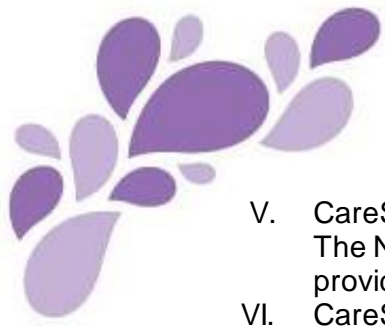
<b>STAGING PRESSURE ULCERS</b>	
<b>Stage 1</b>	A localized area of skin that is intact with non-blanchable erythema. Changes in sensation, temperature or firmness of the skin may be present prior to visual alterations of the skin. If discoloration is purple or maroon, this may be indicate a deep tissue injury.
<b>Stage 2</b>	A surface area of skin that has partial-thickness loss of skin with exposed dermis. May initially present as a serum-filled blister that has ruptured. The wound bed will be moist, red/pink and the skin should be viable. There should be no evidence of visible adipose (fatty) tissue, eschar, slough or granulation visible.
<b>Stage 3</b>	A surface area of skin that has full-thickness loss of skin, there will be adipose (fat) tissue and granulation visible. The wound edges are often rolled (epibole), and there may be eschar and slough visible. Undermining and tunneling may occur in the wound. At this stage, there should be no fascia, muscle, tendon ligament, cartilage and/or bones exposed.
<b>Stage 4</b>	A surface area of skin that has full-thickness loss of skin. At this stage, there will be fascia, muscle, tendon, ligament, cartilage or bone that is visible or directly palpable. The wound edges will be rolled (epibole), and there is typically eschar and slough visible. Undermining and tunneling occur often in the wound.
<b>Unstageable</b>	Inability to fully assess the extent of the tissue damage due to eschar or slough obscuring your visibility, but you can see that there is full-thickness skin and tissue loss, then it would be unstageable.

#### D. Policy

- I. Prior authorization is required for Negative Pressure Wound Therapy
- II. Coverage is indicated when ONE of the following eligible conditions are present:
  - A. Stage III or IV pressure ulcer (see staging criteria above) in individuals who meet ALL of the following:
    1. Member has been on an every 2 hour turning and repositioning regimen
    2. Pressure relief techniques and/or pressure-reducing surfaces have been ordered and documented ongoing compliance is in member medical record (ex. foam overlay mattress, egg crate foam mattress or low-air-loss devices)
    3. Member's incontinence and moisture issues have been appropriately managed.
  - B. Chronic Neuropathic Ulcer that meets BOTH of the following criteria:
    1. A comprehensive diabetic management program has been implemented including A1C management, medication management and ongoing diabetic education
    2. Foot care has been done by medical professional to include general inspection, nail care, reduction in pressure on foot ulcer, and monofilament testing.



- C. Ulcers related to venous or arterial insufficiencies, that meet ALL of the following criteria:
    - 1. (In venous insufficiency ) Compression garments/dressing/bandages are being applied consistently per physician orders in documented plan of care for at least thirty days.
    - 2. Ambulation and leg elevation have been ordered and documented ongoing compliance is in member medical record
  - D. High-risk open fracture
  - E. Wound that has either dehisced (separation of a previously closed surgical incision), has exposed bone or has exposed hardware
  - F. Post sternotomy wound complication or infection (mediastinitis)
  - G. Surgically created wound with complications resulting in a need for accelerated granulation therapy that cannot be achieved by other treatment modalities such as topical wound treatment
  - H. Open non-healing amputation site in diabetic
  - I. Delayed healing or non-healing of skin graft which is likely due to irregularly contoured or inadequate blood flow from the graft bed
- III. CareSource members may be eligible for the continuation of NPWT treatment for an additional 31 days when documentation by a licensed medical professional includes ALL of the following criteria:
- A. Documentation that a licensed medical professional has directly performed the dressing change
  - B. Wound has progressive and measureable improvement.
    - 1. Measurable improvement in wound healing is defined as measurable changes in the following: drainage; inflammation; swelling; pain and/or tenderness; wound dimensions (surface measurements (length times width), depth); granulation tissue; necrotic tissue/slough; or tunneling or undermining.
    - 2. If no measurable degree of improvement in wound healing has occurred from month to month, the approval for the NPWT will be discontinued.
    - 3. Exception to measureable improvement is when a wound has been debrided within the last approval period, documentation of debridement must accompany the request for continuation of NPWT. Before and after images are preferred.
  - C. If abnormal, provisions have been made to the members nutritional status
  - D. Members underlying medical conditions are being monitored and controlled by licensed medical professional
- IV. CareSource does not cover NPWT for non-healing wounds or ulcers under ANY of the following medical conditions because it is not considered medically necessary:
- A. Exposed nerves, blood vessels or organs in the vicinity of the wound.
  - B. Infection present in the wound or osteomyelitis that is not being concurrently treated with the intent to cure
  - C. Malignancy is present in the wound
  - D. Necrotic tissue is present in the wound with eschar and has not been debrided.
  - E. Open fistula is present to an organ or body cavity within the vicinity of the wound
  - F. Active bleeding
  - G. Uncontrolled soft tissue infection or osteomyelitis within the vicinity of the wound



- V. CareSource does not reimburse separately for NPWT when applied during surgery. The NPWT is covered under the surgery code. After the initial 31 day approval, the provider can request a continuation of NPWT.
- VI. CareSource will only approve up to the following maximum allowances for supplies:
  - A. 15 dressing kits per wound, per 31 days
    - 1. Additional dressing kits may be authorized if the wound size requires more than 1 dressing kit for each dressing change
  - B. 10 canister sets per 31 days
    - 1. Additional canister sets may be approved if there is sufficient documentation showing a large volume of drainage, greater than 90 ml of exudate per day.

E. Conditions of Coverage

F. Related Policies/Rules

G. Review/Revision History

	DATE	ACTION
<b>Date Issued</b>	05/31/2018	New Policy
<b>Date Revised</b>	04/15/2020	Revised and Updated
<b>Date Effective</b>	09/01/2020	Effective Date
<b>Date Archived</b>	08/01/2021	

H. References

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2. Hot Topics. (n.d.). Retrieved April 16, 2018, from National Pressure Ulcer Advisory Panel: Staging of Pressure Ulcers
3. Wound Care Centers: Negative Pressure Wound Therapy (n.d.).
4. Peinemann F, Sauerland S. Negative-Pressure Wound Therapy: Systematic Review of Randomized Controlled Trials. *Deutsches Ärzteblatt International*. 2011;108(22):381-389.
5. Webster J, Liu Z, Norman G, et al. Negative pressure wound therapy for surgical wounds healing by primary closure. *Cochran Database Syst Rev* 2019; 3:CD009261. [https://www.cochrane.org/CD009261/WOUNDS\\_negative-pressure-wound-therapy-surgical-wounds-healing-primary-closure](https://www.cochrane.org/CD009261/WOUNDS_negative-pressure-wound-therapy-surgical-wounds-healing-primary-closure)
6. Gestring, Mark (2019) Negative Pressure Wound Therapy

**The Medical Policy Statement detailed above has received due consideration as defined in the Medical Policy Statement Policy and is approved.**

*Independent medical review – 4/2020*