

Negative Pressure Wound Therapy (NPWT) (Vacuum-Assisted Wound Closure)

Date of Origin: 03/2018

Last Review Date: 07/22/2020

Effective Date: 08/01/2020

Dates Reviewed: 03/2018, 08/2019, 07/2020

Developed By: Medical Necessity Criteria Committee

I. Description

Negative pressure wound therapy (NPWT) is a therapeutic technique consisting of the use of a negative pressure therapy or suction device to aspirate and remove fluids, debris, and infectious materials from the wound bed to promote the formation of granulation tissue. These devices may also be used as an adjunct to surgical therapy or as an alternative to surgery in a debilitated patient.

II. Criteria: CWQI HCS-0224

A. Moda Health considers Negative Pressure Wound Therapy (NPWT) (*vacuum-assisted wound closure*) (*Wound vac*) medically indicated when **ALL** of the following are present:

a. **Treatment of Wounds** as indicated by **1 or more** of the following:

i. **Initial 30-day trial for the treatment of 1 or more** of the following qualifying wounds:

1. Following skin graft or dermal substitute for acute or chronic wounds
2. Diabetic ulcer or wound, as indicated by **1 or more** of the following:
 - a. Wagner or University of Texas classification of grade 1 diabetic wound that has not responded to conventional treatment after 30 days
 - b. Wagner or University of Texas classification of grade 2 or greater diabetic ulcer or diabetic wound
3. Traumatic or surgical wounds (*i.e. open fracture, etc.*) with **1 or more** of the following:
 - a. Delayed primary closure
 - b. Dehiscence
 - c. Exposed bone, cartilage, tendon, or foreign material within the wound
 - d. An ulcer or wound is encountered in the inpatient setting and, after other wound treatments have been tried or considered and ruled out, NPWT is initiated because it is considered in the judgment of the treating physician, the best available treatment option
 - e. Sternal infection following cardiovascular surgery
4. Pressure ulcers when **ALL** of the following are present:
 - a. Stage III or IV pressure ulcer with high-volume drainage that has failed to heal after 90 days or more of optimal wound care that includes **ALL** of the following: (*See B for stages of pressure ulcers*)

- i. The patient has been appropriately turned and positioned
 - ii. The patient has used a support surface for pressure ulcers on the posterior trunk or pelvis (*i.e., mattress overlay, alternating pressure and low air loss mattresses and overlays, etc.*)
 - iii. The patient's moisture and incontinence have been appropriately managed
 - 5. Venous insufficiency ulcers which has failed to heal after 90 days when **ALL** of the following are met:
 - a. Compression bandages and/or garments have been consistently applied
 - b. Leg elevation and ambulation have been encouraged, or is not applicable
- ii. **Continuation of wound therapy** is indicated when **ALL** of the following are met:
 - 1. Completion of an initial 30-day therapeutic trial with documentation of **1 or more** of the following:
 - a. Development of granulation tissue
 - b. Decreasing wound size
 - c. Decreasing wound depth
 - d. Epithelial spread from the wound margins
 - b. Conventional wound management ongoing (*i.e., debridement as indicated*)
 - c. No active bleeding or exposed vasculature in wound
 - d. Documentation in the patient's medical record of evaluation, care, and wound measurements by a licensed medical professional
 - e. No eschar or necrotic tissue
 - f. No exposed cortical bone, nerves, or organs
 - g. No malignancy in wound
 - h. No uncontrolled soft tissue infection or osteomyelitis
 - i. No unexplored fistulas or fistulas to body organs or cavities

B. Stages of Pressure Ulcers:

- a. Suspected Deep Tissue Injury:
 - i. Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue
- b. Stage I:
 - i. Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area
- c. Stage II:
 - i. Partial thickness loss of dermis presenting as a shallow open ulcer with red or pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister

- d. Stage III:
 - i. Full thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining or tunneling
- e. Stage IV:
 - i. Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining and tunneling
- f. Unstageable:
 - i. Full thickness tissue loss in which the depth of the ulcer is covered by slough (*yellow, tan, gray, green or brown*) and/or eschar (*tan, brown, or black*) in the wound bed

III. Information Submitted with the Prior Authorization Request:

1. Patient's medical records of evaluation, care, and wound measurements
2. Record of treatment goals

IV. CPT or HCPC codes covered:

Codes	Description
97605	Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (DME), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters
97606	Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (DME), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters
97607	Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters
97608	Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters
A6550	Wound care set, for negative pressure wound therapy electrical pump, includes all supplies and accessories
A7000	Canister, disposable, used with suction pump, each
A9272	Wound suction, disposable, includes dressing, all accessories and components, any type, each
E2402	Negative pressure wound therapy electrical pump, stationary or portable
K0743	Suction pump, home model, portable, for use on wounds
K0744	Absorptive wound dressing for use with suction pump, home model, portable pad size 16 square inches or less

K0745	Absorptive wound dressing for use with suction pump, home model, portable pad size more than 16 square inches but less than or equal to 48 square inches
K0746	Absorptive wound dressing for use with suction pump, home model, portable, pad size greater than 48 square inches

V. CPT or HCPC codes NOT covered by Medicare:

Codes	Description
A6000	Wound Vac (includes non-contact wound warming cover)
E0231	Noncontact wound-warming device (temperature control unit, AC adapter and power cord) for use with warming card and wound cover
E0232	Warming card for use with the noncontact wound-warming device and noncontact wound-warming wound cover

VI. Annual Review History

Review Date	Revisions	Effective Date
3/2018	New criteria: revised MCG NWPT guidelines and added indications for pressure ulcers, venous insufficiency ulcers	04/01/2018
07/2018	Added dehiscence to traumatic wounds	07/10/2018
08/2019	Annual Review: No changes	09/01/2019
07/2020	Annual Review: Removed A9272 from non-covered table; - in some circumstances, the hcpc code is covered by Medicare	08/01/2020

VII. References

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4. Schimmer C, Sommer SP, Bensch M, Leyh R. Primary treatment of deep sternal wound infection after cardiac surgery: A survey of German heart surgery centers. Interact Cardiovasc Thorac Surg. 2007;6(6):708-711.
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8. Capobianco CM, Zgonis T. An overview of negative pressure wound therapy for the lower extremity. Clin Podiatr Med Surg 2009; 26:619.
9. Ubbink DT, Westerbos SJ, Nelson EA, Vermeulen H. A systematic review of topical negative pressure therapy for acute and chronic wounds. Br J Surg 2008; 95:685.
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Appendix 1 – Applicable Diagnosis Codes:

Codes	Description
E10.40-E10.49	Type 1 diabetes mellitus with diabetic neuropathy
E11.40-E11.49	Type 2 diabetes mellitus with diabetic neuropathy
E13.40-E13.49	Other specified diabetes mellitus with diabetic neuropathy
E10.51-E10.59	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E11.51-E11.59	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E13.51-E13.59	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene
E10.610 -E10.69	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
E11.610-E11.69	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E13.610-E13.69	Other specified diabetes mellitus with diabetic neuropathic arthropathy
I70.231-I70.25	Atherosclerosis of native arteries of extremities with ulceration
I70.261-I70.269	Atherosclerosis of native arteries of extremities with gangrene
I73.9	Peripheral vascular disease, unspecified
I83.001-I83.029	Varicose veins of lower extremities with ulcer
L02.01-L03.90	Other cellulitis and abscess
L89.003- L89.894	Pressure ulcer stage III or IV
S21.101-S21.149	Open wound of chest (wall), complicated [deep sternal wound infection]
S31.100-S31.159	Open wound of abdominal wall
S31.600-S31.659	Open wound of abdominal wall with penetration into peritoneal cavity
S31.001-S39.91	Other injury of abdomen [abdominal traumatic injuries]
S41.021-S61.529	Open wound of upper limb, complicated
S71.021- S81.849	Open wound of lower limb, complicated
T81.31- T81.32x	Disruption of external or internal operation (surgical) wound, not elsewhere classified
T81.4xx	Infection following a procedure [other than deep sternal wound infections]
T81.89	Other complications of procedures, not elsewhere classified [other than deep sternal wound infections]

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):

NCD/LCD Document (s):

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC