

Medical Coverage Policy | Negative Pressure Wound Therapy



EFFECTIVE DATE: 12|04|2007

POLICY LAST UPDATED: 12|17|2013

OVERVIEW

Negative pressure wound therapy (NPWT) consists of the use of a negative pressure or suction device to reduce infection and promote healing in wounds of various etiologies

PRIOR AUTHORIZATION

BlueCHiP for Medicare and Commercial

Prior Authorization is required for BlueCHiP for Medicare and recommended for Commercial Products after 45 days.

POLICY STATEMENT

BlueCHiP for Medicare and Commercial

Negative pressure wound therapy is covered for the first 45 days without prior authorization. Prior Authorization is recommended/required after the initial 45 days. –Once the service has been approved after the initial 45 days, continued services will be re-reviewed every 30 days

Services not meeting the criteria are considered not medically necessary.

In addition, NPWT is not medically necessary for the following indications as there is no clinical information that supports the efficacy of treatment:

- wounds with eschar if debridement is not attempted
- untreated osteomyelitis within the vicinity of the wound
- cancer present in the wound
- active bleeding
- the presence of a fistula to an organ or body cavity within the vicinity of the wound

MEDICAL CRITERIA

BlueCHiP for Medicare and Commercial

NPWT is indicated for use for patients who have meet the criteria for the type of wound, documentation to support treatment and wound improvement and have failed all other forms of treatment.

Type of Wound

Must meet one of the following

- Stage III or IV pressure ulcers;
- Neuropathic (for example, diabetic) ulcers;
- Chronic arterial or venous insufficiency ulcers;
- Complications of surgically created or traumatic wounds.

Documentation to support treatment

Must meet all criteria for the particular wound

Stage III or IV pressure ulcers:

- a. Has been appropriately turned and positioned, and
- b. Has used a support surface for pressure ulcers on the posterior trunk or pelvis
- c. Moisture and incontinence have been appropriately managed

Neuropathic (for example, diabetic) ulcers:

- a. The beneficiary has been on a comprehensive diabetic management program, and
- b. Reduction in pressure on a foot ulcer has been accomplished with appropriate modalities

Venous insufficiency ulcers:

- a. Compression bandages and/or garments have been consistently applied, and
- b. Leg elevation and ambulation have been encouraged

Continuation of Services (after initial 45 days)

Documented improvements must meet one of criteria below:

- the development and presence of healthy granulation tissue
- progressive wound contracture and decreasing depth,
- the commencement of epithelial spread from the wound margins.

Continuation of the powered NPWT system is considered not medically necessary when any of the following occurs:

- The wound has developed evidence of wound complications contraindicating continued NPWT, OR
The wound has healed to an extent that either grafting can be performed or the wound can be anticipated to heal completely with other wound care treatments.

BACKGROUND

The management and treatment of chronic wounds, including decubitus ulcers, remain a treatment challenge. Most chronic wounds will heal only if the underlying cause, i.e., venous stasis, pressure, infection, etc., is addressed. In addition, cleaning the wound to remove nonviable tissue, microorganisms, and foreign bodies is essential to create the optimal conditions for either re-epithelialization (i.e., healing by secondary intention) or preparation for wound closure with skin grafts or flaps (i.e., healing by primary intention). Therefore, debridement, irrigation, whirlpool treatments, and wet-to-dry dressings are common components of chronic wound care.

Negative pressure wound therapy (NPWT) consists 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. The devices may be used as an adjunct to surgical therapy or as an alternative to surgery in a debilitated patient. Although the exact mechanism has not been elucidated, it is hypothesized that negative pressure contributes to wound healing by removing excess interstitial fluid, increasing the vascularity of the wound, reducing edema and/or creating beneficial mechanical forces that lead to cell growth and expansion.

Evidence from comparative clinical trials demonstrated that there is a subset of problematic wounds where the use of negative pressure wound therapy (NPWT) may provide a significant clinical benefit. Use of NPWT for other wounds is considered not medically necessary as these wounds are likely to heal with conventional wound management, i.e., the evidence does not demonstrate an incremental improvement in wound healing with use of the NPWT for these cases.

Reports with small numbers of patients using the non-powered (mechanical) gauze-based NPWT system are insufficient to draw conclusions about its impact on net health outcome, both for the device itself and in comparison with current care. There are important unanswered questions about efficacy and tolerability. Well-designed comparative studies with larger numbers of patients are needed. Since the impact on net health outcome compared to existing technology is not known, non-powered (mechanical) NPWT is considered not medically necessary as there is no proven efficacy.

COVERAGE

BlueCHiP for Medicare and Commercial:

Benefits may vary between groups/contracts. Please refer to the appropriate evidence of coverage, subscriber agreement, or Benefit Booklet for the applicable Medical Equipment, Medical Supplies, and Prosthetic Devices benefit/coverage.

Concurrent use of Hyperbaric Oxygen Therapy (HBO) and Vacuum-Assisted Wound Closure: see hyperbaric oxygen therapy medical policy for clinical indications. Coverage is based on limited criteria and medical review is needed for this service.

CODING

BlueCHiP for Medicare and Commercial:

The following codes are covered when the above medical criteria has been met:

97605, 97606, E2402

The following codes are covered:

G0456, G0457, K0743, K0744, K0745, K0746

The following code is considered not medically necessary:

A9272

RELATED POLICIES

Coding and Payment Guidelines

PUBLISHED

Provider Update	Feb 2014
Provider Update	Feb 2013
Provider Update	Sept 2011
Provider Update	Dec 2010
Provider Update	Feb 2009
Provider Update	Sept 2006
Policy Update	Oct 2005
Policy Update	May 2004

REFERENCES

1. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Vacuum-assisted closure in the treatment of chronic wounds. TEC Assessments 2000; Volume 15, Tab 23.
2. Samson D, Lefevre F, Aronson N. Wound-healing technologies: low-level laser and vacuum-assisted closure. Evidence Report/Technology Assessment No. 111. (Prepared by the Blue Cross and Blue Shield)

Association Technology Evaluation Center Evidence-based Practice Center, under Contract No. 290-02-0026.) AHRQ Publication No. 05-E005-2. Rockville, MD: Agency for Healthcare Research and Quality 2004.

3. Ubbink DT, Westerbos SJ, Evans D et al. Topical negative pressure for treating chronic wounds. *Cochrane Database Syst Rev* 2008; (3):CD001898.
4. Sullivan N, Snyder DL, Tipton K et al. Technology assessment: Negative pressure wound therapy devices. 2009. Available online at: www.ahrq.gov/clinic/ta/negpresswtd. Last accessed December, 2012.
5. Peinemann F, McGauran N, Sauerland S et al. Negative pressure wound therapy: potential publication bias caused by lack of access to unpublished study results data. *BMC Med Res Methodol* 2008; 8:4.
6. Peinemann F, Sauerland S. Negative-pressure wound therapy: systematic review of randomized controlled trials. *Dtsch Arztebl Int* 2011; 108(22):381-9.
7. Gregor S, Maegele M, Sauerland S et al. Negative pressure wound therapy: a vacuum of evidence? *Arch Surg* 2008; 143(2):189-96.
8. Noble-Bell G, Forbes A. A systematic review of the effectiveness of negative pressure wound therapy in the management of diabetes foot ulcers. *Int Wound J* 2008; 5(2):233-42.
9. Vikatmaa P, Juutilainen V, Kuukasjarvi P et al. Negative pressure wound therapy: a systematic review on effectiveness and safety. *Eur J Vasc Endovasc Surg* 2008; 36(4):438-48.
10. Xie X, McGregor M, Dendukuri N. The clinical effectiveness of negative pressure wound therapy: a systematic review. *J Wound Care* 2010; 19(11):490-5.
11. Moues CM, Vos MC, van den Bemd GJ et al. Bacterial load in relation to vacuum-assisted closure wound therapy: a prospective randomized trial. *Wound Repair Regen* 2004; 12(1):11-7.
12. Braakenburg A, Obdeijn MC, Feitz R et al. The clinical efficacy and cost effectiveness of the vacuum-assisted closure technique in the management of acute and chronic wounds: a randomized controlled trial. *Plast Reconstr Surg* 2006; 118(2):390-7; discussion 98-400.
13. Mody GN, Nirmal IA, Duraisamy S et al. A blinded, prospective, randomized controlled trial of topical negative pressure wound closure in India. *Ostomy Wound Manage* 2008; 54(12):36-46.
14. Wanner MB, Schwarzl F, Strub B et al. Vacuum-assisted wound closure for cheaper and more comfortable healing of pressure sores: a prospective study. *Scand J Plast Reconstr Surg Hand Surg* 2003; 37(1):28-33.
15. <http://www.ngsmedicare.com/ngs/portal/ngsmedicare>

CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

