

Clinical Policy: EpiFix Wound Treatment

Reference Number: CP.MP.140

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[Coding Implications](#)

[Revision Log](#)

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Description

EpiFix® (MiMedx Group) is dehydrated human amniotic tissue that is used as an allograft material (or tissue graft) to treat nonhealing wounds. It is prepared using a proprietary process by which placental tissues are gently separated, cleaned of viable cells, reassembled, and dehydrated, preserving factors important in healing. EpiFix is processed from human tissue according to the American Association of Tissue Banks (AATB) standards, and is regulated as a human cell, tissue, or cellular or tissue-based product.

Policy/Criteria

- I. It is the policy of health plans affiliated with Centene Corporation® that EpiFix is **medically necessary** for the treatment of chronic foot ulcers when all of following criteria are met:
 - A. Age \geq 18 years;
 - B. Type I or Type II diabetes;
 - C. Foot ulcer surface area* $> 1\text{cm}^2$ and $< 25\text{cm}^2$;
 - D. Ulcer duration of ≥ 4 weeks, unresponsive to standard wound care;
 - E. No clinical signs of infection;
 - F. Ulcer does not probe to tendon, muscle, capsule or bone;
 - G. Serum creatinine < 3.0 mg/dl;
 - H. HbA1c $< 12\%$;
 - I. Adequate circulation to the affected extremity as demonstrated by dorsum transcutaneous oxygen test (TcPO₂) $> 30\text{mmHg}$, or ankle-brachial index (ABI) between 0.7 and 1.2 or triphasic or biphasic Doppler arterial waveforms at the ankle of affected leg.

**Surface area can be calculated by multiplying width in cm by length in cm.*
- II. It is the policy of health plans affiliated with Centene Corporation that continued treatment with EpiFix is **not medically necessary** when the ulcer fails to heal by $\geq 50\%$ within the first 6 weeks of treatment. Treatment beyond 12 weeks is considered **not medically necessary** regardless of wound status.
- III. It is the policy of health plans affiliated with Centene Corporation that treatment with EpiFix for any other types of nonhealing wounds is considered **investigational**.

Background

Lower extremity ulceration is a common complication for patients with diabetes. Diabetic foot ulcers lead to some form of amputation in 20% of patients and are associated with higher morbidity and mortality. The presence of peripheral vascular disease, neuropathy and poor blood glucose control contribute to the development of lower extremity wounds, their slow rate of healing and their propensity to recur. Evidence-based guidelines for the management of lower extremity diabetic ulcers include moist dressings, debridement, wound offloading, infection

control and implementation of advanced wound therapies if the ulcer does not decrease in size by 40% or more after 4 weeks of standard therapy.¹

EpiFix is proposed to promote cellular migration to enhance soft tissue repair in acute and chronic wounds free of necrotic tissue and infection; partial- and full-thickness wounds; venous, diabetic, pressure, and chronic vascular ulcers; trauma wounds, including burns; and surgical wounds. EpiFix is not indicated for wounds that probe to bone or are infected. EpiFix is typically ordered and applied by wound care specialists in an outpatient setting.

The general steps involved in using EpiFix include:

- Surgical debridement of infected or decaying tissue until the wound base is visible and has good blood flow.
- If necessary, trimming of the EpiFix membrane to produce a 1-millimeter (mm) overlap with the wound margin. The product may be applied either dry or moistened with saline.
- Confirmation of the correct orientation of the EpiFix membrane, which is then placed over the wound and secured with adhesive strips.
- Application of a nonadherent contact layer followed by a moist dressing.

The membrane typically incorporates into the wound bed within 2 weeks of application.

The overall quality of evidence evaluating EpiFix is low, however, among diabetic patients with chronic foot ulcers, studies although limited, reported a greater reduction in mean wound size and higher proportion of wound healing among patients treated with EpiFix compared with those treated with standard care.² A systematic review of randomized clinical trials (RCTs) of skin grafts or tissue replacements for treating foot ulcers in people with diabetes, concluded the incidence of completed closure of diabetic foot ulcers was significantly improved for the skin grafts or substitutes compared with standard care. No specific type of skin graft or tissue replacement showed a superior effect on ulcer healing over another type of skin graft or tissue replacement.³

A prospective, randomized, controlled, parallel group, multi-center clinical trial of 60 patients reported that dehydrated human amnion/chorion membrane (i.e., EpiFix) is superior to standard wound care (SWC) and bioengineered skin substitutes (i.e., Apligraf) in achieving complete wound closure within 4–6 weeks.⁴ Rates and time to closure at a longer time interval and factors influencing outcomes remained unassessed; therefore, the study was continued in order to achieve at least 100 patients. With the larger cohort, the authors compared clinical outcomes at 12 weeks in 100 patients with chronic lower extremity diabetic ulcers treated with weekly applications of Apligraf (n = 33), EpiFix (n = 32) or standard wound care (SWC) (n = 35) with collagen-alginate dressing as controls. The proportion of wounds achieving complete closure within the 12-week study period were 73% (24/33), 97% (31/32), and 51% (18/35) for Apligraf, EpiFix and SWC, respectively (adjusted P = 0.00019). Subjects treated with EpiFix had a very significant higher probability of their wounds healing compared to SWC alone. Mean time-to-heal within 12 weeks was 47.9 days with Apligraf, 23.6 days with EpiFix group and 57.4 days with the SWC alone group.¹

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The evidence to assess the effectiveness and safety of EpiFix for the treatment of other types of nonhealing wounds, including venous leg ulcers is very limited. A multicenter, randomized, controlled study of 84 patients evaluating the safety and efficacy of one or two applications of dehydrated human amnion/chorion membrane allograft and multilayer compression therapy vs. multilayer compression therapy alone in the treatment of venous leg ulcers reported at 4 weeks, 62% in the allograft group and 32% in the control group showed a greater than 40% wound closure. After 4 weeks, wounds treated with allograft had reduced in size a mean of 48.1% compared with 19.0% for controls. Venous leg ulcers treated with allograft had a significant improvement in healing at 4 weeks compared with multilayer compression therapy alone.⁵

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2016, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT codes considered medically necessary per policy criteria when billed with Q4131

CPT® Codes	Description
15275	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area
15276	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (List separately in addition to code for primary procedure)

HCPCS codes considered medically necessary per policy criteria

HCPCS Codes	Description
Q4131	EpiFix or Epicord, per sq cm

ICD-10-CM diagnosis codes that support medical necessity

ICD-10-CM Code	Description
E08.621	Diabetes mellitus due to underlying condition with foot ulcer
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer
E10.621	Type 1 diabetes mellitus with foot ulcer
E11.621	Type 2 diabetes mellitus with foot ulcer
E13.621	Other specified diabetes mellitus with foot ulcer

CPT codes NOT medically necessary when billed with Q4131

CPT® Codes	Description
15277	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children
15278	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)

Reviews, Revisions, and Approvals	Date	Approval Date
Policy developed	04/17	04/17

References

1. Zelen CM, Serena TE, Gould L, et al. Treatment of chronic diabetic lower extremity ulcers with advanced therapies: a prospective, randomized, controlled, multi-centre comparative study examining clinical efficacy and cost. *Int Wound J.* 2016 Apr;13(2):272-82. doi: 10.1111/iwj.12566. Epub 2015 Dec 23.
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3. Santema TB, Poyck PP, Ubbink DT. Skin grafting and tissue replacement for treating foot ulcers in people with diabetes. *Cochrane Database Syst Rev.* 2016 Feb;2:CD011255
4. Zelen CM, Gould LI, Serena TE, et al. A prospective, randomised, controlled, multi-centre comparative effectiveness study of healing using dehydrated human amnion/chorion membrane allograft, bioengineered skin substitute or standard of care for treatment of chronic lower extremity diabetic ulcers. *Int Wound J.* 2015 Dec;12(6):724-32
5. Serena TE, Carter MJ, Le LT, et al. A multicenter, randomized, controlled clinical trial evaluating the use of dehydrated human amnion/chorion membrane allografts and multilayer compression therapy vs. multilayer compression therapy alone in the treatment of venous leg ulcers. *Wound Repair Regen.* 2014;22(6):688-693.
6. Serena TE, Yaakov R, DiMarco D, et al. Dehydrated human amnion/chorion membrane treatment of venous leg ulcers: correlation between 4-week and 24-week outcomes. *J Wound Care.* 2015 Nov;24(11):530-4.
7. Zelen CM, Serena TE, Denoziere G, Fetterolf DE. A prospective randomized comparative parallel study of amniotic membrane wound graft in the management of diabetic foot ulcers. *Int Wound J.* 2013 Jun 7.
8. Zelen CM, Serena TE, Snyder RJ. A prospective, randomized comparative study of weekly versus biweekly application of dehydrated human amnion/chorion membrane allograft in the management of diabetic foot ulcers. *Int Wound J.* 2014 Apr;11(2):122-8.
9. Zelen CM. An evaluation of dehydrated human amniotic membrane allografts in patients with DFUs. *J Wound Care.* 2013;22(7):347-348, 350-351.

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Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited.

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Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

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