

Clinical Policy: Skin Substitutes for Chronic Wounds

Reference Number: LA.CP.MP.185c <u>Date of Last Revisionew Date</u>: 08/20201/12/23 Coding Implications Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Patients receiving skin replacement surgery with a skin substitute graft should be under the care of a wound care physician or surgeon. It is imperative that systemic disease be monitored/treated in order to einsure adequate healing of the wound site. This policy addresses the medical necessity criteria for skin substitutes in the treatment of chronic wounds.

Note: For skin substitutes for burns, refer to LA.CP.MP.186 Burn Surgery.

Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that skin substitutes are medically necessary for diabetic foot ulcers, (for members/enrollees with either type 1 or type 2 diabetes) venous stasis ulcers, or venous leg ulcers when all of the following <u>criteria</u> are met:

 A. Age ≥ 18 years, or type 1 or 2 diabetic;
 - B.A. Wound is chronic, defined as a wound that does not respond to at least 4 weeks of standard wound treatment as a component of organized, comprehensive conservative therapy;
 - C.B. Wound characteristics and treatment plan are documented;
 - D.C. Standard wound care has failed, evidenced by all of the following:
 - 1. The ulcer or skin deficit has been treated with appropriate wound-care measures, including debridement, standard dressings (including silver dressings), compression, off-loading;
 - 2. Wound has increased in size or depth; or has not changed in baseline size or depth and there is no indication that improvement is likely (such as granulation, epithelialization or progress towards closing);
 - E.D. Documentation of effort to cease nicotine use, including from sources other than cigarettes but excluding nicotine replacement therapy, for at least 4 weeks during conservative wound care and prior to planned bioengineered skin replacement therapy, or no nicotine use;
 - F.E. Wound characteristics, all of the following:
 - 1. Partial- or full-thickness ulcer with a clean, granular base;
 - 2. No involvement of tendon, muscle, joint capsule, or exposed bone or sinus tracts;
 - 3. No wound infection; wound must be clean and free of necrotic debris or exudate;
 - 4. Member/enrollee has adequate circulation/oxygenation to support tissue growth/wound healing, as evidenced by physical examination (e.g., Ankle-Brachial Index [ABI] of no less than 0.7 or TCOM pressure greater than 30 millimeters of mercury [mmHg]); Toe-brachial index (TBI) of at least 0.5; Triphasic or biphasic Doppler arterial waveforms at the ankle of the affected leg.
 - G.F. For lower extremity chronic wounds (diabetic foot ulcer or venous leg ulcer), one of the following:
 - 1. Diabetic foot ulcer (DFU), and all of the following:



- a. Hgb A11 of $\leq \frac{8}{9}$ or documentation of improving control;
- b. Documented conservative wound care for \geq than 4 weeks;
- c. Wound is without evidence of osteomyelitis or nidus of infection;
- d. Is at least 1.0 square centimeter (cm) in size
- 2. -Venous stasis ulcer (VSU) or venous leg ulcers (VSU or VLU), all of the following:
 - a. A chronic, non-infected ulcer VSU or VLU has failed to respond to documented conservative wound-care measures for ≥ 4 weeks with documented compliance;
 - b. Completed assessment includes:
 - i. History (prior ulcers, thrombosis risks);
 - ii. Physical exam (edema, skin changes);
 - iii. ABI (Ankle-Brachial Index) and duplex scan to confirm Clinical-Etiology-Anatomy-Pathophysiology (*CEAP);
 - c. If VLU is present, a venous duplex ultrasound has <u>been completed to</u>
 <u>assessevaluated for</u> saphenous vein incompetency/venous reflux and contributory
 superficial ulcer bed perforators;
- 3. Full thickness skin-loss ulcer is the result of abscess, injury or trauma and has failed to respond to appropriate control of infection, foreign body, tumor resection, or other disease process for ≥ 4 weeks;
- H.G. Requested applications comply with FDA guidelines for the specific product, not to exceed 10 applications or treatments;
- LH. Only one skin substitute will be simultaneously in place per wound episode. Product change within the wound episode is allowed, not to exceed the 10 application limit per wound per 12 week episodeperiod of care;
- **J.I.** None of the following contraindications:
 - 1. Inadequate control of underlying conditions or exacerbating factors (e.g., uncontrolled diabetes with Hgb A1c > 8%, 9% or no documented improvement of glucose levels in the last 4 weeks, active infection, and active Charcot arthropathy of the ulcer surface, vasculitis or continued tobacco smoking without physician attempt to affect smoking cessation);
 - 2. Known hypersensitivity to any component of the specific skin substitute graft (e.g., allergy to avian, bovine, porcine, equine products);
 - 3. Concurrent treatment with hyperbaric oxygen therapy;
 - 4. Partial thickness loss with the retention of epithelial appendages (epithelium will repopulate the deficit).
 - 5. Active and untreated autoimmune connective tissue disease;
 - 6. Known or suspected malignancy of the ulcer;
 - 7. Member/enrollee is receiving radiation therapy or chemotherapy
 - 4.8.Re-treatment of the same ulcer within one year

Note: Treatment of any chronic skin wound will typically last no more than 12 weeks.

- **II.** It is the policy of Louisiana Healthcare Connections that skin substitutes are not medically necessary for the following indications or scenarios:
 - A. All indications not noted in Policy/criteriasection I;
 - B. Decubitus (pressure) ulcer treatment;



- C. Continued skin substitute use after treatment failure, which is defined as the repeat or alternative application course (of up to 12 weeks) of skin substitute grafts within one year of any given course of skin substitute treatment for a venous stasis ulcer or diabetic foot ulcer:
- D. Retreatment of healed ulcers (those showing greater than 75% size reduction and smaller than 1 square cm).

Background

According to the Centers for Medicare & Medicaid Services (CMS), chronic wounds of the lower extremities, including venous stasis ulcers (VSU), venous leg ulcers (VLU), dDiabetic foot ulcers (DFU) and pressure sores, are a major public health problem. While lower extremity ulcers have numerous causes such as burns, trauma, mixed venous-arterial disease, immobility and vasculitis, nutritional or other neuropathy, over 90% of the lesions in the United States are related to venous stasis disease and diabetic neuropathy. These wounds frequently require detailed interventions to start the healing process again; furthermore, patients experience significant functional loss, wound recurrence, and increased morbidity.

Standard care for lower extremity wounds and ulcers includes infection control-and management of edema, mechanical offloading of the affected limb, mechanical compression, limb elevation, debridement of necrotic tissue, management of systemic disease and counseling on the risk of continued tobacco use. Additionally, maintenance of a therapeutic wound environment with appropriate dressings can facilitate development of healthy granulation tissue and reepithelialization. Dressings are essential to an important part of wound management because the appropriate dressing by not only maintains the moisture balance within the wound, maintaining a moist environment but the dressing also controls by stopping contamination, absorbing exudate, which protects the would from additional and helping to prevent further trauma. 1,2

A wound that has not healed within one to three months may be considered a chronic wound and can be a challenge to treat effectively. Even with advancements in standard wound care and synthetic occlusive dressings, some ulcers fail to heal and may benefit from a skin substitute. Skin substitutes promote wound healing by replacing extracellular matrix. Skin substitutes are categorized based on the composition of epidermal, dermal, and composite skin present. They are heterogeneous and can be largely separated into two primary categories: cellular (comprised of living cells); or acellular (composed of synthetic materials or tissue from which living cells have been removed). The categories are further split based on composition and source of material, including xenograft, acellular allograft, cellular allograft, autograft and synthetic skin substitute choices.

For venous leg ulcers (VLU), an evaluation it is essential to evaluate for the presence of saphenous vein reflux is essential prior to consideration of skin substitutes. If there is significant saphenous vein incompetency and reflux (valve closure time defined as > 500 milliseconds), or if ulcer bed veins are identified as contributory on ultrasound, a referral to a vascular surgeon or interventional radiologist is required. For significant saphenous vein reflux, eEndovascular laser or radiofrequency ablation can have enhanced rates of healing compared to other treatments for



<u>significant saphenous vein reflux.</u> Without significant reflux, sclerotherapy may also be more beneficial.³

According to a 2016 Cochrane review, the overall therapeutic outcome of skin grafts and tissue replacements used with standard wound care demonstrated an increase in the healing rate of foot ulcers and slightly fewer amputations in patients with diabetes compared with standard wound care alone. The Wound Healing Society updated their guidelines in 2016, indicating that cellular and acellular skin equivalents positively affect healing in diabetic ulcers by "releasing therapeutic amounts of growth factors, cytokines, and other proteins that stimulate the wound bed."

There are currently a wide variety of bioengineered products available for soft tissue coverage to affect closure. 6

Autologous skin grafts, also referred to as autografts, are permanent covers that use skin from different parts of the individual's body. These grafts consist of the epidermis and a dermal component of variable thickness. A split-thickness skin graft (STSG) includes the entire epidermis and a portion of the dermis. A full thickness skin graft (FTSG) includes all layers of the skin. Although autografts are the optimal choice for full thickness wound coverage, areas for skin harvesting may be limited, particularly in cases of large burns or venous stasis ulceration. Harvesting procedures are painful, disfiguring and require additional wound care.^{2,4}

Allografts which use skin from another human (e.g., cadaver) and Xenografts which use skin from another species (e.g., porcine or bovine) may also be employed as temporary skin replacements. However, but they must later be replaced by an autograft or the ingrowth of the patient's own skin. ^{2,4}

Bioengineered Skin / and Cultured Epidermal Autografts (CEA) are autografts derived from the patient's own skin cells grown or cultured from very small amounts of skin or hair follicle. Production time is prolonged. One such product is grown on a layer of irradiated mouse cells, bestowing displaying some elements components of a xenograft. Wide spread usage has not been available due to limited availability or access to the technology. ^{2,4}

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 2020, 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 and may bot support medical necessity. 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 ®	Description			
Codes				
15271	Application of skin substitute graft to trunk, arms, legs, total wound surface			
	area up to 100 sq cm; first 25 sq cm or less wound surface area			
15272	Application of skin substitute graft to trunk, arms, legs, 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)			
15273	Application of skin substitute graft to trunk, arms, legs, total wound surface			
	area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or			
15074	1% of body area of infants and children			
15274	Application of skin substitute graft to trunk, arms, legs, 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)			
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)			
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%			
15050	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)			
	procedure)			

HCPCS®*	Description
Codes [SS1]	
<u>A2001</u>	InnovaMatrix AC, per sq cm
<u>A2002</u>	Mirragen Advanced Wound Matrix, per sq cm
<u>A2004</u>	XCelliStem, 1 mg
<u>A2005</u>	Microlyte Matrix, per sq cm
<u>A2006</u>	NovoSorb SynPath dermal matrix, per sq cm
<u>A2007</u>	Restrata, per sq cm
<u>A2008</u>	TheraGenesis, per sq cm
<u>A2009</u>	Symphony, per sq cm
<u>A2010</u>	Apis, per sq cm
A2011	Supra SDRM, per sq cm



HCPCS®* Codes [SS1]	Description
A2012	SUPRATHEL, per sq cm
A2013	Innovamatrix FS, per sq cm
A2014	Omeza Collagen Matrix, per 100 mg
A2015	Phoenix Wound Matrix, per sq cm
A2016	PermeaDerm B, per sq cm
A2017	PermeaDerm Glove, each
A2018	PermeaDerm C, per sq cm
A4100	Skin substitute, FDA-cleared as a device, not otherwise specified
Q4100	Skin substitute, nos
Q4101	Apligraf, per sq cm
Q4102	Oasis wound matrix, per sq cm
O4103	Oasis burn matrix, per sq cm
Q4104	Integra bilayer matrix wound dressing (BMWD), per sq cm
Q4105	Integra dermal regeneration template (DRT) or Integra Omnigraft dermal
	regeneration matrix, per sq cm
Q4106	Dermagraft, per sq cm
Q4107	Graftjacket, per square centimeter
Q4108	Integra matrix, per sq cm
Q4110	Primatrix, per square centimeter
Q4111	Gammagraft, per sq cm
Q4112	Cymetra, injectable, 1 cc
Q4113	GRAFTJACKET XPRESS, injectable, 1 cc
Q4114	Integra flowable wound matrix, injectable, 1 cc
Q4115	Alloskin, per sq cm
Q4116	AlloDerm, per sq cm
Q4117	Hyalomatrix, per sq cm
Q4118	Matristem micromatrix, 1mg
Q4121	TheraSkin, per sq cm
Q4122	DermACELL, DermACELL AWM or DermACELL AWM Porous, per sq cmr
Q4123	AlloSkin RT, per sq cm
Q4124	Oasis ultra tri-layer wound matrix, per sq cm
Q4125	ArthroFlex, per sq cm
Q4126	MemoDerm, DermaSpan, TranZgraft or InteguPly, per sq cm
Q4127	Talymed, per sq cm
Q4128	FlexHD, AllopatchHD, or Matrix HD, per sq cm FlexHD, or AllopatchHD, per sq cm
Q4130	Strattice TM, per sq cm
Q4132	Grafix Core and GrafixPL Core, per sq cm
Q4133	Grafix PRIME, GrafixPL PRIME, Stravix and StravixPL, per sq cm
Q4134	Hmatrix, per sq cm
Q4135	Mediskin, per sq cm
Q4136	E-Z Derm, per sq cm
Q4137	Amnioexcel, amnioexcel plus or biodexcel, per square centimeter



HCPCS®*	Description
Codes [SS1]	D'a DE constant de la
Q4138	BioDFence DryFlex, per sq cm
Q4139	AmnioMatrix or BioDMatrix, injectable, 1 cc
Q4140	BioDFence, per square centimeter
Q4141	Alloskin AC, per square centimeter
<u>Q4142</u>	XCM biologic tissue matrix, per sq cm
<u>Q4143</u>	Repriza, per sq cm
<u>Q4145</u>	EpiFix, injectable, 1 mg
Q4146	Tensix, per square centimeter
Q4147	Architect, Architect PX, or Architect FX, extracellular matrix, per square
	centimeter
Q4148	Neox Cord 1K, Neox Cord RT, or Clarix Cord 1K, per square centimeter
Q4150	Allowrap DS or dry, per square centimeter
Q4151	AmnioBand or Guardian, per sq cm
Q4152	DermaPure, per sq cm
Q4153	Dermavest and Plurivest, per sq cm
Q4154	Biovance, per sq cm
Q4155	Neox Flo or Clarix Flo 1 mg
Q4156	Neox 100 or Clarix 100, per sq cm
Q4157	Revitalon, per sq cm
Q4158	Kerecis Omega3, per sq cm
Q4159	Affinity, per sq cm
Q4160	Nushield, per square centimeter
Q4161	bio-ConneKt wound matrix, per sq cm
Q4163	Woundex, bioskin, per sq cm
Q4164	Helicoll, per square cm
Q4165	Keramatrix or Kerasorb, per sq cm
Q4166	Cytal, per square centimeter
Q4167	Truskin, per sq cm
Q4168	AmnioBand, 1 mg
Q4169	Artacent wound, per sq cm
Q4170	Cygnus, per sq cm
Q4171	Interfyl, 1 mg
Q4173	Palingen or Palingen Xplus, per sq cm
Q4174	PalinGen or ProMatrX, 0.36 mg per 0.25 cc
Q4175	Miroderm, per sq cm
Q4176	Neopatch or therion, per square centimeter
Q4177	FlowerAmnioFlo, 0.1 cc
Q4178	FlowerAmnioPatch, per sq cm
Q4179	FlowerDerm, per sq cm
Q4180	Revita, per sq cm
Q4181	Amnio Wound, per sq cm
Q4182	Transcyte, per sq cm
Q4183	Surgigraft, 1 sq cm
KATION	burgigiant, 1 sq cm



HCPCS®* Codes [SS1]	Description
Q4184	Cellesta or Cellesta Duo, per sq cm
Q4185	Cellesta Flowable Amnion (25 mg per cc); per 0.5 cc
Q4186	Epifix, per square centimeter
Q4187	Epicord, per square centimeter
Q4188	AmnioArmor, per sq cm
Q4189	Artacent AC, 1 mg
Q4190	Artacent AC, per sq cm
Q4191	Restorigin, per sq cm
Q4192	Restorigin, 1 cc
Q4193	Coll-e-Derm, per sq cm
Q4194	Novachor, per sq cm
Q4195	PuraPly, per square cm
Q4196	PuraPly AM, per square cm
Q4197	Puraply XT, per square cm
Q4198	Genesis Amniotic Membrane, per sq cm
Q4199	Cygnus matrix, per sq cm
Q4200	SkinTE, per sq cm
Q4201	Matrion, per sq cm
Q4202	Keroxx (2.5 g/cc), 1 cc
Q4203	Derma-Gide, per sq cm
Q4204Q4203	XWRAP, per sq cm Derma-Gide, per sq cm
Q4205	Membrane Graft or Membrane Wrap, per sq cm
Q4206	Fluid Flow or Fluid GF, 1 cc
Q4208	Novafix, per sq cm
Q4209	SurGraft, per sq cm
Q4210	Axolotl Graft or Axolotl DualGraft, per sq cm
Q4211	Amnion Bio or AxoBioMembrane, per sq cm
Q4212	AlloGen, per cc
Q4213	Ascent, 0.5 mg
Q4214	Cellesta Cord, per sq cm
Q4125	Axolotl Ambient or Axolotl Cryo, 0.1 mg
Q4216	Artacent Cord, per sq cm
Q4217	WoundFix, BioWound, WoundFix Plus, BioWound Plus, WoundFix Xplus or
	BioWound Xplus, per sq cm
Q4218	SurgiCORD, per sq cm
Q4219	SurgiGRAFT-DUAL, per sq cm
Q4220	BellaCell HD or Surederm, per sq cm
Q4221	Amnio Wrap2 per sq cm
Q4222	ProgenaMatrix, per sq cm
<u>Q4224</u>	Human Health Factor 10 Amniotic Patch (HHF10-P), per sq cm
<u>Q4225</u>	AmnioBind, per sq cm
Q4226	MyOwn Skin, includes harvesting and preparation procedures, per sq cm
<u>Q4227</u>	AmnioCore TM, per sq cm



HCPCS®*	Description
Q4229	Cogenex Amniotic Membrane, per sq cm
Q4230	Cogenex Flowable Amnion, per 0.5 cc
Q4231	Corplex P, per cc
Q4232	Corplex, per sq cm
Q4233	SurFactor or NuDyn, per 0.5 cc
Q4234	XCellerate, per sq cm
Q4235	AMNIOREPAIR or AltiPly, per sq cm
Q4236	carePATCH, per sq cm
<u>Q4237</u>	Cryo-Cord, per sq cm
<u>Q4238</u>	Derm-Maxx, per sq cm
Q4239	Amnio-Maxx or Amnio-Maxx Lite, per sq cm
Q4242	AmnioCyte Plus, per 0.5 cc
<u>Q4244</u>	Procenta, per 200 mg
<u>Q4245</u>	AmnioText, per cc
<u>Q4246</u>	CoreText or ProText, per cc
<u>Q4247</u>	Amniotext patch, per sq cm
<u>Q4248</u>	Dermacyte Amniotic Membrane Allograft, per sq cm
<u>Q4250</u>	AmnioAmp-MP, per sq cm
<u>Q4251</u>	Vim, per sq cm
<u>Q4252</u>	Vendaje, per sq cm
<u>Q4253</u>	Zenith Amniotic Membrane, per sq cm
<u>Q4254</u>	Novafix DL, per sq cm
<u>Q4256</u>	MLG-Complete, per sq cm
<u>Q4257</u>	Relese, per sq cm
<u>Q4258</u>	Enverse, per sq cm
Q4259	Celera Dual Layer or Celera Dual Membrane, per sq cm
Q4260	Signature APatch, per sq cm
Q4261	TAG, per sq cm
Q4262	<u>Dual Layer Impax Membrane, per sq cm</u>
Q4263	SurGraft TL, per sq cm
<u>Q4264</u>	Cocoon Membrane, per sq cm

Reviews, Revisions, and Approvals	Review Date	Approval Date
Converted corporate to local policy.	08/15/2020	
References reviewed and updated. HCPCS codes removed as they are not included in Medicare Article A56696: Q4150, Q4183, Q4190, Q4208-Q4226. Q4210, Q4217, Q4219, and Q4220 removed. New codes added (from Article A56696): Q4176, Q4237, Q4238, and Q4239. Added LA specific Criteria for Chronic Diabetic Lower Extremity Ulcers	<u>1/22</u>	3/26/22
Updated description for code Q4128.	10/22	



Reviews, Revisions, and Approvals	Review Date	Approval Date
References reviewed and updated. Changed "Review Date" in the	1/23	
header to "Date of Last Revision" and "Date" in the revision log		
header to "Revision Date." Added "type 2 diabetes" to I.A. Reworded		
some extraneous language with no clinical significance.		
Added to I. F. 4.: Toe-brachial index (TBI) of at least 0.5; Triphasic or		
biphasic Doppler arterial waveforms at the ankle of the affected leg.		
Added to I. G.: Is at least 1.0 square centimeter (cm) in size		
Change A1c from 8 to 9		
Added to section I. J.:		
1. Active and untreated autoimmune connective tissue		
disease;		
2. Known or suspected malignancy of the ulcer;		
3. Member/Enrollee is receiving radiation therapy or		
<u>chemotherapy</u>		
4. Re-treatment of the same ulcer within one year		
Background section updated with no additional impact to criteria.		
Coding was reviewed and updated.		
Changed all instances of member to member/enrollee		

References

- 1. Local Coverage Determination: Wound Application Of Cellular And/Or Tissue Based Products (Ctps), Lower Extremities (L36690). Centers for Medicare and Medicaid Services Web site. www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=36690&ver=30&bc=0 Published October 10, 2016 (revised February 3, 2022). Accessed February 23, 2022.
- 2. Local Coverage Determination: Application of Bioengineered Skin Substitutes to Lower Extremity Chronic Non-Healing Wounds (L35041). Centers for Medicare and Medicaid Services Web site. www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=35041&ver=113&bc=0 Published October 1, 2015 (revised September 26, 2019). Accessed February 23, 2022.
- 3. Gohel MS, Heatley F, Liu X, et al. A randomized trial of early endovenous ablation in venous ulceration. *N Engl J Med*. 2018;378(22):2105-2114. doi:10.1056/NEJMoa1801214
- 4. Local Coverage Determination: Application of Skin Substitute Grafts for Treatment of DFU and VLU of Lower Extremities (L36377). Centers for Medicare and Medicaid Services Web site. www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=36377&ver=7&bc=0 Published October 1, 2015 (revised January 8, 2019). Accessed February 23, 2022.
- 5. Armstrong DG, deAsla RJ. Management of diabetic foot ulcers. UpToDate. www.uptodate.com. Updated January 5, 2021. Accessed February 24, 2022.
- 6. Snyder D, Sullivan N, Margolis D, Schoelles K. Skin substitutes for treating chronic wounds. Technology Assessment Program Project ID No.WNDT0818. (Prepared by the ECRI Institute-Penn Medicine Evidence-based Practice Center under Contract No. HHSA 290-



- 2015-0005-I) Rockville, MD: Agency for Healthcare Research and Quality. February 2020. www.ahrq.gov/research/findings/ta/index.html Accessed February 23, 2022.
- 7. Dai C, Shih S, Khachemoune A. Skin substitutes for acute and chronic wound healing: an updated review. *J Dermatolog Treat*. 2020;31(6):639-648. doi:10.1080/09546634.2018.1530443
- 8. Medical Technology Directory. Cellular skin substitutes for chronic foot ulcers in adults with diabetes mellitus. Hayes. www.hayesinc.com. Published March 26, 2020 (annual review March 22, 2021). Accessed February 25, 2022.
- 9. Medical Technology Directory. Cellular skin substitutes for venous leg ulcers in adults. Hayes. www.hayesinc.com. Published July 23, 2020 (annual review September 7, 2021). Accessed February 25, 2022.
- 10. Santema TB, Poyck PPC, Ubbink DT. Skin grafting and tissue replacement for treating foot ulcers in people with diabetes. Cochrane Database of Systematic Reviews 2016, Issue 2. Art. No.: CD011255. DOI: 10.1002/14651858.CD011255.pub2. Accessed February 25, 2022.
- 11. Lavery LA, Davis KE, Berriman SJ, et al. WHS guidelines update: Diabetic foot ulcer treatment guidelines. *Wound Repair Regen.* 2016;24(1):112-126. doi:10.1111/wrr.12391
- 12. Local Coverage Article. Billing and Coding: Wound Application of Cellular and/or Tissue Based Products (CTPs), Lower Extremities (A56696). Centers for Medicare and Medicaid Services Web site: https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=56696&ver=20&. Published July 11, 2019 (revised March 25, 2022). Accessed March 31, 2022.
- 1. Local Coverage Determination Wound Application Of Cellular And/Or Tissue Based Products (Ctps), Lower Extremities (L36690). Centers for Medicare and Medicaid Services Web site. https://www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx. Published October 10, 2016 (revised September 23, 2019). Accessed April 9, 2020.
- 2. Local Coverage Determination Application of Bioengineered SKIN Substitutes to Lower Extremity Chronic Non-Healing Wounds (L35041). Centers for Medicare and Medicaid Services Web site. https://www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx. Published October 1, 2015 (revised September 26, 2019). Accessed April 9, 2020.
- 3. Mangit S. Gohell, MD, Fancine Heatly, B Sc, Xinxue Liu, PhD, Andrew Bradbury, MD et al. for the EVRA Trial Investigators. N Engl J Med 2018; 378:2105-2114
- 4. Local Coverage Determination Application of Skin Substitute Grafts for Treatment of DFU and VLU of Lower Extremities (L36377). Centers for Medicare and Medicaid Services Web site. https://www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx. Published October 1, 2015 (revised January 8, 2019. Accessed April 9, 2020.

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. LHCC 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.

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 LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. 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. LHCC 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/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees 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 LHCC has no control or right of control. Providers are not agents or employees of LHCC.

This clinical policy is the property of LHCC. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees 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/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.

©2020 Louisiana Healthcare Connections. All rights reserved. All materials are exclusively owned by Louisiana Healthcare Connections and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Louisiana Healthcare Connections. You may not alter or remove any trademark, copyright or other notice contained herein. Louisiana Healthcare Connections is a registered trademark exclusively owned by Louisiana Healthcare Connections.

