

02.01.68 Percutaneous Ultrasonic Tenotomy and Fasciotomy

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Related Policies:

- [02.01.18 Prolotherapy](#)
- [02.01.32 Platelet-Rich Plasma and Autologous Protein Solution for Orthopedic Applications](#)
- [02.01.60 Amniotic Membrane and Amniotic Fluid Grafts](#)
- [02.01.67 Extracorporeal Shock Wave Treatment for Plantar Fasciitis and Other Musculoskeletal Conditions](#)

Summary

Description

Percutaneous ultrasonic tenotomy or fasciotomy (PUT) is a minimally invasive surgical procedure that has been investigated for use in the fragmentation, emulsification, and aspiration of soft tissue associated with many conditions, including chronic or degenerative conditions of the musculoskeletal system involving fascia or tendons of the ankle, foot, elbow, hip, knee, shoulder, or wrist.

Summary of Evidence

For individuals who have tendinosis or fasciitis who receive percutaneous ultrasonic tenotomy (PUT) of soft tissue, the evidence includes retrospective or single arm studies. Relevant outcomes are symptoms, functional outcomes, quality of life (QOL), and treatment-related morbidity. Based on review of the current peer reviewed literature there is a lack of randomized controlled trials (RCTs) demonstrating improved net health outcomes of PUT of soft tissue using minimally invasive devices for the treatment of chronic conditions of the musculoskeletal system (for example, fasciitis or tendinopathy). While there are some retrospective or single-arm studies that report positive outcomes in reduction of pain and improvement in physical function, further investigation is needed to determine if PUT can sustain functional improvement and eliminate or reduce pain in individuals with chronic or recalcitrant conditions of the soft tissue. Well-designed prospective, RCTs comparing PUT to standard treatments are needed to determine if spontaneous improvement without the procedure can be excluded and if a durable treatment effect can be established over placebo or established treatments. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Additional Information

Not applicable

OBJECTIVE

The objective of this evidence review is to determine whether percutaneous ultrasonic tenotomy or fasciotomy improves the net health outcome in individuals with degenerative conditions of the musculoskeletal system involving fascia or tendons of the ankle, foot, elbow, hip, knee, shoulder, or wrist.

PRIOR APPROVAL

Not applicable.

POLICY

Percutaneous ultrasonic tenotomy and fasciotomy (e.g., Tenex percutaneous ultrasonic tenotomy procedure [Tenex Health TX® System]) is considered **investigational** for the treatment of all indications including but not limited to the following musculoskeletal conditions because the evidence is insufficient to determine that the technology results in an improvement in the net health outcome:

- Achilles tendinosis
- Lateral or medial elbow tendinosis
- Patellar tendinosis
- Plantar fasciitis
- Rotator cuff or shoulder tendinosis

POLICY GUIDELINES

Definitions (Hall et al 2022)

Fasciitis: Inflammation of fascia.

Fasciotomy: Cutting fascia, either completely or incompletely, using a needle, scalpel, or other device.

Tendinitis (or tendonitis): An acutely inflamed swollen tendon that does not have microscopic tendon damage. Tendinitis results from chronic inflammation of the tendon when it is overloaded with a tensile force that is too heavy and/or too sudden.

Tendinosis: A chronic tendon condition characterized histologically as collagen degeneration with other variable features such as collagen disorganization, fibrocartilaginous metaplasia, calcification, and possible neovascularity. Primarily an overuse and degenerative process.

Tendon: A tough cord or band of dense fibrous tissue that connects a muscle to some part of a bone.

Tenotomy: Cutting tendon tissue, either completely or incompletely, using a needle, scalpel, or other device.

Coding

See the [Codes](#) table for details.

BACKGROUND

Percutaneous ultrasonic ablation is a minimally invasive surgical procedure that has been investigated for use in the fragmentation, emulsification, and aspiration of soft tissue associated with any condition, including chronic or degenerative conditions of the musculoskeletal system involving fascia or tendons of the ankle, foot, elbow, hip, knee, shoulder, or wrist. Soft tissue conditions of the musculoskeletal system include, but are not limited to, acutely inflamed or chronic conditions of the fascia or tendons. Treatment of these conditions, particularly tendinopathies, is dependent on confirmation of the distinct diagnosis of tendinitis versus tendinosis. Tendinitis is described as an acutely inflamed and swollen tendon without microscopic tendon damage. In contrast, tendinosis is a clinically damaged tendon with disorganized fibers and a hard, thickened, scarred and rubbery appearance. The underlying cause of tendinosis is degeneration. Tendinosis is chronic and occurs in the Achilles tendon, extensor tendon of the elbow (tennis elbow), gluteal tendons on the outside of the hip, the patellar tendon, and the rotator cuff tendons of the shoulder. Standard treatment for tendinosis may include rest, non-steroidal anti-inflammatory drugs, braces, splints and straps, physical therapy, or injection therapy.

The plantar fascia is a wide ligament-like structure that covers the bottom of the foot, extending from the heel bone to the base of the toes. This band of thick tissue protects the bottom of the heel bone and acts like a shock absorber for the bottom of the foot. In many individuals, the plantar fascia may become irritated, causing a condition called plantar fasciitis. This is the most common cause of heel pain. The cause of this condition is not entirely clear but is associated with or due to repetitive trauma. It is common in several sub-groups of people, including runners and other athletes, people who have jobs that require a fair amount of walking or standing (especially if it is done on a hard surface), and in some cases it is seen in people who have put on weight, including through pregnancy. Most people who have plantar fasciitis recover with conservative treatments with use of pain relievers (such as, ibuprofen or naproxen to ease pain and inflammation), physical therapy (stretching and strengthening exercises), night splints, and over-the counter orthotics (such as, heel cups, cushions, or custom-fitted arch supports). Approximately 75% of individuals recover after 6 months and up to 98% after 12 months. In cases where plantar fasciitis

is chronic and resistant to conservative treatments, surgical intervention may be indicated to treat the fibrous tissue that develops at the plantar fascia attachment resulting from long-standing inflammation.

Percutaneous ultrasonic surgical devices to include the Tenex Health TX® System are intended to debride and ablate (remove) the degenerative tissue under local anesthetic. A stab incision creates an entry site for the blunt tip of the device. The device is advanced under sonographic guidance into the lesion where it is activated using a foot pedal to irrigate, fragment, emulsify and aspirate the involved soft tissue lesion(s). The device may need to be redirected to cover the entire area of the lesion (as identified by ultrasound) until the degenerative tissue is completely treated. Following the procedure, wound closure is accomplished using a sterile dressing. Postprocedural activity restrictions and the need for a conservative rehabilitation program depend on the site being treated and the extent of the preoperative condition. The procedure is reported as being performed in the physician's office or an ambulatory surgery setting.

Regulatory Status

Several devices have received U.S. Food and Drug Administration (FDA) 510(k) clearance for percutaneous ultrasonic ablation and aspiration.

In March 2013, the TX1 Tissue Removal System (Tenex Health, Inc., Lake Forest, CA, a subsidiary of TRICE Medical) received 510(k) clearance (K123640) as “an ultrasonic surgical aspirator” to emulsify and remove soft tissue. FDA product code: LFL

In March 2016, the Tenex Health TX® System (K153299) (Tenex Health, Inc., Lake Forest, CA) received 510(k) clearance as substantially equivalent to the predicate device, the TX1 Tissue Removal System. Both systems are intended for use with a TX2 MicroTip in “surgical procedures where fragmentation, emulsification, and aspiration of soft tissue are desirable.” The FDA 510(k) clearance regulates these devices as “unclassified”; in addition, the FDA's Indications for Use Statement for each device does not specifically describe their intended use in surgical procedures involving partial or complete surgical cutting (transection) or division of fascia (fasciotomy) or tendons (tenotomy) (FDA, 2016). May 2018 the Tenex Health TX® System with the TXP micro-Tip (Tenex Health, Inc.) received 510(k) clearance. Classification Product Code: LFL

There are a number of ultrasonic aspirator systems that have received FDA clearance under the same product code, but they are not used percutaneously. For example, the Sonopet iQ Ultrasonic Aspirator System® (K190070) (Stryker Instruments, Kalamazoo, MI), received 510(k) clearance on April 11, 2019 (FDA, 2019).

RATIONALE

This evidence review was created in November 2022 and has been updated regularly with searches of the PubMed database. The most recent literature update was performed through November 2025.

Evidence reviews assess the clinical evidence to determine whether the use of technology improves the net health outcome. Broadly defined, health outcomes are length of life, quality of life, and ability to function, including benefits and harms. Every clinical condition has specific outcomes that are important to patients and managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms.

To assess whether the evidence is sufficient to draw conclusions about the net health outcome of technology, 2 domains are examined: the relevance, and quality and credibility. To be relevant, studies must represent 1 or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. RCTs are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

Clinical Context and Therapy Purpose

The purpose of percutaneous ultrasonic surgical devices (e.g., Tenex Health TX® System) is to provide a treatment option that is an alternative to or an improvement on existing therapies, such as surgical tenotomy.

The following PICO was used to select literature to inform this review.

Populations

The relevant population of interest is individuals with tendinosis of the ankle, foot, elbow, hip, knee, shoulder, or wrist or individuals with plantar fasciitis.

Interventions

The therapy being considered is percutaneous ultrasonic tenotomy and fasciotomy PUT (e.g., Tenex Health TX® System). This percutaneous ultrasonic surgical device debrides and ablates (remove) the tissue under local anesthetic. A stab incision creates an entry site for the blunt tip of the device. The TX1 device uses ultrasound imaging to guide a proprietary needle-like device (TX MicroTip™) into the targeted tendon or fascia to remove degenerative or calcific tissue. Ultrasonic energy rapidly oscillates the hollow 18-gauge tip of the TX1 device to emulsify tissue, which is subsequently aspirated. The TX1 technique is performed percutaneously under local anesthesia. The TX1 technology is based on the widely used process of phaco-emulsification that is used to treat cataracts.

Comparators

Comparators of interest include open or endoscopic surgical tenotomy or fasciotomy. Open or endoscopic surgical tenotomy surgically releases tendon to relieve pain. In some cases, the tendon can regrow longer and less tight than it was before.

Outcomes

The general outcomes of interest are pain symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity.

Efficacy of treatment may be determined using the following methods:

(Note - the minimum clinically important difference (MCID) is described when known)

- American Orthopaedic Foot and Ankle (AOFAS) scores
- American Shoulder and Elbow Surgeons (ASES) score
- Disabilities of the Arm Shoulder and Hand (DASH) score MCID = 13.0
- Mayo Elbow Performance (MEPS) score
- Numeric rating scale (NRS)
- Oxford elbow scores (OES)
- Visual analog scale (VAS)
- 12 -Item Short Form Health Survey (SF-12)

Study Selection Criteria

Methodologically credible studies were selected using the following principles:

- To assess efficacy outcomes, comparative controlled prospective trials were sought, with a preference for RCTs.
- In the absence of such trials, comparative observational studies were sought, with a preference for prospective studies.
- To assess long-term outcomes and adverse events, single-arm studies that capture longer periods of follow-up and/or larger populations were sought.
- Studies with duplicative or overlapping populations were excluded

Review of Evidence

Systematic Reviews

In 2024, Maag et. al. the authors reported on the outcomes regarding ultrasound-guided percutaneous needle tenotomy (PNT), Tenex under ultrasound guidance and Tenjet for the treatment of tendinopathy to include pain relief, change in function and patient reported outcomes. The authors searched the literature through September 2023 in Ovid Medline, Ovide Embase, and Cochrane Library and included 20 studies (10 retrospective case series, 3 prospective cohort studies, 5 retrospective cohort studies and 2 double blind RCTs) representing various tendinopathy regions (lateral elbow, medial elbow, gluteal, tensor fascia lata, insertional and midportion Achilles, patella, rotator cuff, hamstring, plantar fascia, iliotibial band, and triceps). Fourteen of these studies used Tenex under ultrasound guidance and 6 used PTN. There were no studies using the Tenjet device that met the inclusion criteria. Both PNT and Tenex improved outcomes for tendinopathy refractory to conservative treatment. However, as the majority of the studies were considered lower-level evidence due to study limitations including heterogeneity of outcome measures, nonrandomized patient selection, small sample sizes and incomplete follow-up information, there is a need for higher quality studies to assess the effectiveness of PTN and Tenex in the treatment of tendinopathy.

In 2021 Vajapey et al. reported a systematic review of studies on PUT in the treatment of tendinopathy. Search terms were *ultrasonic tenotomy*, *ultrasound tenotomy*, *Tenex*, and *ultrasonic percutaneous tenotomy*. Seven reports were identified that were published through February 2019, including 3 prospective single arm studies and 3 retrospective case series (Table 1). Four studies addressed elbow tendinopathies, one study addressed Achilles tendinopathy, and one study addressed plantar fasciitis. The number of participants ranged from 7-34. Efficacy of treatment was assessed using VAS, ASES, DASH, MEPS, SF-12, and AOFAS scores. Of the four studies addressing elbow tendinopathy, the overall VAS and DASH scores improved compared to baseline. In the plantar fasciitis study, 11/12 participants noted complete pain relief 12 months following PUT. In the Achilles tendinopathy study, 4/34 participants reported no pain at long-term follow-up (11-36 months), 13 noted mild pain, 3 had moderate to severe

pain, and the rest of the participants were lost to follow-up. No prospective controlled trials were identified.

Table 1. Studies included in Vajapey et al (2021)

Study	Design	N	Follow-up (mo)	Measure	Baseline	Post-treatment	Comments
Epicondylitis							
Barnes et al. (2015)	Prospective single arm	19	12	VAS Q-DASH MEPS	6.4 44.1 59.1	0.7 8.6 90.5	
Batista et al. (2018)	Retrospective case series	7	24	VAS ASES	7.9 55.6	1.1 93.4	1 of 7 failed
Boden et al (2019)	Retrospective comparative	30	10				Efficacy similar to PRP
Koh et al (2013)	Prospective single arm	20	12	VAS DASH-C DASH-W	5.5 21.7 25.0	0.5 2.5 0.0	Reduction in extensor tendon thickness
Seng et al (2016)	Follow-up from Koh et al (2013)	20	36	DASH		0.0	Reduction in tendon thickness
Ang et al (2021)	Follow-up from Koh et al (2013)	19	90				Results maintained
Plantar Fasciitis							
Patel (2015)	Industry-sponsored single arm	12	3 and 12	AOFAS	30.1	88.1	11 reported complete pain relief
Achilles Tendinopathy							
Chimenti et al (2019)	Retrospective case series	34	11-36	17 patients had no or mild pain at follow-up			14 patients lost to follow-up

AOFAS, American Orthopaedic Foot & Ankle Society; ASES, American Shoulder and Elbow Surgeons; DASH, Disabilities of the Arm, Shoulder and Hand; MEPS, Mayo Elbow Performance Score; PRP, platelet-rich plasma; Q-DASH, Quick-DASH (11-item version of the DASH); SF-12; 12-Item Short Form Health Survey; VAS, visual analogue scale.

Hayes (2025) completed an annual review of the evolving evidence review on PUT for elbow tendinopathy. Reviewers searched PubMed and Elsevier's Embase on January 27, 2025, and evaluation of the literature did not identify any new literature since the prior review in 2024 which identified 4 very poor-quality studies published between 2019 and 2020. None were RCTs. Although improvements in patient-oriented outcomes were reported in 2 of 4 studies, reviewers concluded that this evidence provides minimal support for PUT as a treatment of elbow tendinopathy.

Retrospective Comparative Studies

Updated literature searches identified additional retrospective comparative studies published subsequent to the Vajapey et. al. systematic review (2021).

In 2021, Altahawi et. al. compared the outcomes of individuals who had PUT to individuals who had surgical tenotomy. There were 23 participants who underwent PUT and 10 participants who had surgical

tenotomy who agreed to participate in the retrospective study. Post-procedure outcomes were assessed by the Q-DASH and OES at 2 weeks, 3 to 6 months, and 12 months. Participants in both groups had Q-DASH mean preprocedural score of 56. In the PUT group the mean 2-week score was 49, mean 3-to-6-month score was 21, and mean 12-month score was 12. Participants in the surgical tenotomy group had a mean score at 2 weeks of 58, mean score at 3 to 6 months of 16, and mean score at 12 months of 10. The OES showed no significant differences between the two treatment groups from baseline to 12 months post procedure. This study has limitations which include the retrospective non-randomized design. Prospective trials are necessary to compare efficacy of PUT with surgical techniques and show improved net health outcomes.

Rupe et al (2023) reported a retrospective comparative study of PUT (n=52) and platelet-rich plasma (PRP, n=37) in patients treated for epicondylitis. The range of time from symptom onset to procedure varied from 31 to 4,930 days; the choice of procedure was based on physician and patient preference, with PRP preferred for diffuse tendinopathy. In addition to subjective measures of pain, failure was defined as a subsequent surgical indication within 12 months and success as a lack of a surgical indication within 12 months. Further surgical interventions were not required in 86.5% of patients (87.7% for PUT and 84.6% for PRP). Because of multiple flaws in this retrospective study design and the fact that PRP is not an established treatment method, no conclusions can be made from this study. Prospective controlled trials with randomized treatment and an appropriate control group are needed.

Single Arm Studies

Updated literature searches identified additional single arm studies (Table 2). These are not discussed in detail due to limitations in design.

Table 2. Single Arm Studies

Study	Design	N	Follow-up	Measure	Baseline	Post-treatment	Comments
Elbow							
Chalian et al (2020)	Retrospective	37	10 weeks	PRTEE		-11	Out of 100
Stover et al (2019)	Retrospective	131	12 weeks	Mayo Elbow Performance Score or asking the patient on 10-point numerical rating scale	NR	NR	“USGT decreased pain from moderate/severe at baseline to mild/occasional at short-term follow-up (p<0.01)” No complications reported
Illiotal Band							
Yerra et al (2024)	Retrospective	68	12 mos	NRS	10	2	
Wahezi et al (2023)	Retrospective	48	12 mos	NRS-11	9	4	Patients met std criteria for tx
Various							

Study	Design	N	Follow-up	Measure	Baseline	Post-treatment	Comments
Fick et al (2021)	Retrospective	262	1.7 yrs median	Pain (scale of 0 to 3)	2.0	1.0	0.7% complication rate
Achilles							
Hall et al (2025)	Prospective	56	52 weeks	NRS-11	6.1	3.1	No procedure related complications were reported

NRS-11: 11-point numeric rating scale; NR: not reported; PRTEE: patient-rated tennis elbow evaluation; std: standard; tx: treatment

Section Summary

Based on review of the current peer reviewed literature there is a lack of RCTs demonstrating improved net health outcomes of PUT using minimally invasive devices for the treatment of chronic conditions of the musculoskeletal system (for example, fasciitis or tendinopathy). While there are some retrospective or single-arm studies that report positive outcomes in reduction of pain and improvement in physical function, further investigation is needed to determine if PUT can sustain functional improvement and eliminate or reduce pain in individuals with chronic or recalcitrant conditions of the soft tissue. Well-designed prospective, RCTs comparing PUT to standard treatments are needed to determine if spontaneous improvement without the procedure can be excluded and if a durable treatment effect can be established over placebo or established treatments. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

SUPPLEMENTAL INFORMATION

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the evidence review conclusions.

Practice Guidelines and Position Statements

Guidelines or position statements will be considered for inclusion in 'Supplemental Information' if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

American College of Foot and Ankle Surgeons

In 2018, the American College of Foot and Ankle Surgeons (ACFAS) issued an updated clinical consensus statement regarding the diagnosis and treatment of acquired infracalcaneal heel pain which included the following recommendations: The panel determined that the following statements are appropriate:

1. Plantar fasciitis is diagnosed, in most cases, by the history and physical examination findings alone.
2. Routine use of radiographs is not necessary for the diagnosis of nontraumatic plantar fasciitis.
3. The presence of a calcaneal spur will not generally alter the treatment course.
4. Advanced imaging, such as magnetic resonance imaging and ultrasonography, is not necessary for the diagnosis or guidance of treatment of nontraumatic plantar fasciitis.
5. In most cases, infracalcaneal heel pain is a soft tissue-based disorder and calcaneal spurring is most likely not a causative factor.
6. Appropriate treatment of plantar fasciitis requires sufficient understanding of the patient's chronicity of symptoms.
7. Biomechanical support is safe and effective in the treatment of plantar fasciitis.
8. Stretching is safe and effective in the treatment of plantar fasciitis.
9. Corticosteroid injections are safe and effective in the treatment of plantar fasciitis.
10. Extracorporeal shockwave therapy (ESWT) is safe and effective in the treatment of plantar fasciitis.
11. Plantar fasciotomy (opened and endoscopic) is a safe and effective option for chronic, refractory plantar fasciitis.
12. Gastrocnemius release is a safe and effective option for chronic refractory plantar fasciitis when clinically significant equinus is present.

The panel determined that the following statements were uncertain—neither appropriate nor inappropriate.

1. Nonsteroidal anti-inflammatory drugs (NSAIDs) are safe and effective in the treatment of the pain associated with acute plantar fasciitis.
2. Diagnostic ultrasonography is an important adjuvant tool in the diagnosis and treatment of nontraumatic plantar fasciitis.
3. Other injection techniques (e.g., amniotic tissue, platelet-rich plasma, botulinum toxin, needling, and prolotherapy) are safe and effective in the treatment of plantar fasciitis.
3. Other surgical techniques (e.g., ultrasonic debridement using a microtip device, cryosurgery, and bipolar radiofrequency ablation) are safe and effective options for chronic, refractory plantar fasciitis.

American Medical Society for Sports Medicine (AMSSM)

In 2015, the American Medical Society for Sports Medicine (AMSSM) published a position statement on the use of interventional musculoskeletal ultrasound in sports medicine that included the following:

- Ultrasound-guided surgical techniques, such as percutaneous ultrasonic ablation of soft tissue that use specialized devices, are described as “third-generation techniques” for musculoskeletal conditions and will likely “be adopted” in the near future.

Ongoing and Unpublished Clinical Trials

Some currently ongoing and unpublished trials that might influence this review can be located at clinicaltrials.gov.

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CODES

To report provider services, use appropriate CPT codes, HCPCS codes, Revenue codes, and/or ICD diagnosis codes.

Codes	Number	Description
CPT	17999	Unlisted procedure, skin, mucous membrane, and subcutaneous tissue (may be utilized for percutaneous ultrasound ablation of subcutaneous tissue such as the Tenex procedure)
	20999	Unlisted procedure, musculoskeletal system, general (may be utilized for percutaneous ultrasonic ablation of soft tissue such as the Tenex procedure)
	24357	Tenotomy elbow lateral or medial (e.g., epicondylitis, tennis elbow, golfers' elbow); percutaneous (Tenex procedure)
	27605	Tenotomy, percutaneous, Achilles tendon (separate procedure); local anesthesia
	27606	Tenotomy, percutaneous, Achilles tendon (separate procedure); general anesthesia
	24999	Unlisted procedure humerus or elbow (may be utilized for percutaneous ultrasound ablation of subcutaneous tissue such as the Tenex procedure)
	28899	Unlisted procedure foot or toes (may be utilized for percutaneous ultrasound ablation of subcutaneous tissue such as the Tenex procedure)
HCPCS		

Codes	Number	Description
	None	
Type of Service	Medicine	
Place of Service	Outpatient/Inpatient	

POLICY HISTORY

Date	Action	Action
November 2025	Annual Review	Policy Renewed
November 2024	Annual Review	Policy Renewed
November 2023	Annual Review	Policy Revised
November 2022		New Medical Policy

New information or technology that would be relevant for Wellmark to consider when this policy is next reviewed may be submitted to:

Wellmark Blue Cross and Blue Shield
 Medical Policy Analyst
 PO Box 9232
 Des Moines, IA 50306-9232

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