

Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Essential Tremor

Guideline Number: MPG374.04

Approval Date: April 14, 2021

↳ [Terms and Conditions](#)

Table of Contents	Page
Policy Summary	1
Applicable Codes	2
References	2
Guideline History/Revision Information	3
Purpose	4
Terms and Conditions	4

Related Medicare Advantage Policy Guideline
• Category III CPT Codes
Related Medicare Advantage Coverage Summary
• Radiologic Therapeutic Procedures

Policy Summary

↳ See [Purpose](#)

Overview

Historically, ultrasound has largely been performed as an extracranial diagnostic tool. However, more recently, intracranial therapeutic uses have been explored. One such use has been in the treatment of essential tremor (ET) that is refractory to more traditional treatment (e.g. medical therapy, deep brain stimulation [DBS]) through the use of focused ultrasound techniques. Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) is a non-invasive thermal ablation treatment that delivers a spherical array of converging beams using a cranial ultrasound unit that targets specific areas in the brain and heats and ablates the areas that are felt to be responsible for the ET.

Guidelines

Coverage is based upon the existing Local Coverage Determination (LCD) for the jurisdiction in which the procedure is performed.

MRgFUS unilateral thalamotomy is considered medically reasonable and necessary in patients with ALL of the following:

- Medication refractory ET (defined as refractory to at least two trials of medical therapy, including at least one first-line agent)
- Moderate to severe postural or intention tremor of the dominant hand (defined by a score of ≥ 2 on the Clinical Rating Scale for Tremor (CRST))
- Disabling ET (defined by a score of ≥ 2 on any of the eight items in the disability subsection of the CRST)
- Not a surgical candidate for Deep Brain Stimulation (DBS) (e.g., advanced age, anticoagulant therapy, or surgical comorbidities)

Limitations (not covered):

- Treatment of head or voice tremor
- Bilateral thalamotomy
- Conditions:
 - Unstable cardiac disease
 - Severe depression (defined by a score ≥ 20 on Patient Health Questionnaire 9 (PHQ-9))

- Cognitive impairment (defined by a score of <24 on the Mini-Mental State Examination)
- A skull density ratio (the ratio of cortical to cancellous bone) <0.45
- MRI contraindicated

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
0398T	Magnetic resonance image guided high intensity focused ultrasound (MRgFUS), stereotactic ablation lesion, intracranial for movement disorder including stereotactic navigation and frame placement when performed

CPT® is a registered trademark of the American Medical Association

Coding Clarification: For Diagnosis Codes see the related Local Coverage Determinations.

References

CMS Local Coverage Determinations (LCDs) and Articles – Provisional

LCD	Article	Contractor	Medicare Part A	Medicare Part B
L35490 Category III Codes	A56902 Billing and Coding: Category III Codes	WPS	AK, AL, AR, AZ, CA, CO, CT, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, WY	IA, IN, KS, MI, MO, NE
L37790 Magnetic Resonance Guided Focused Ultrasound Surgery System (MRgFUS) for the treatment of neurologic conditions	A58323 Billing and Coding: Magnetic Resonance Guided Focused Ultrasound Surgery System (MRgFUS) for the treatment of neurologic conditions	CGS	KY, OH	KY, OH
	A56470 Billing and Coding: Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Essential Tremor Retired 03/07/2021			
L38506 Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	A57884 Billing and Coding: Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	First Coast	FL, PR, VI	FL, PR, VI

LCD	Article	Contractor	Medicare Part A	Medicare Part B
L37421 Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Tremor	A57435 Billing and Coding: Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Tremor	NGS	CT, IL, MA, ME, MN, NH, NY, RI, VT, WI	CT, IL, MA, ME, MN, NH, NY, RI, VT, WI
L38495 Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	A57839 Billing and Coding: Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	Novitas	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX
L37761 Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Essential Tremor	A56690 Billing and Coding: Magnetic Resonance Image Guided High Intensity Focused Ultrasound (MRgFUS) for Essential Tremor	Palmetto	AL, GA, TN, NC, SC, VA, WV	AL, GA, TN, NC, SC, VA, WV
L37729 Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	A57512 Billing and Coding: Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	Noridian	AS, CA, GU, HI, MP, NV	AS, CA, GU, HI, MP, NV
L37738 Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	A57513 Billing and Coding: Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) for Essential Tremor	Noridian	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY

CMS Local Coverage Determinations (LCDs) and Articles – Noncovered

LCD	Article	Contractor	Medicare Part A	Medicare Part B
L33777 Noncovered Services Retired 07/01/2020	A57743 Billing and Coding: Noncovered Services Retired 07/01/2020	First Coast	FL, PR, VI	FL, PR, VI
L35094 Services That Are Not Reasonable and Necessary Retired 07/01/2020	A56967 Billing and Coding: Services That Are Not Reasonable and Necessary Retired 07/01/2020	Novitas	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX

UnitedHealthcare Commercial Policy

[Omnibus Codes](#)

Guideline History/Revision Information

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

Date	Summary of Changes
04/14/2021	<p>Policy Summary Overview</p> <ul style="list-style-type: none"> • Revised language to indicate: <ul style="list-style-type: none"> ◦ Historically, ultrasound has largely been performed as an extracranial diagnostic tool, however, more recently, intracranial therapeutic uses have been explored; one such use has been in the treatment of essential tremor (ET) that is refractory to more traditional treatment (e.g., medical therapy, deep brain stimulation [DBS]) through the use of focused ultrasound techniques

Date	Summary of Changes
	<ul style="list-style-type: none"> ○ Magnetic-Resonance-Guided Focused Ultrasound Surgery (MRgFUS) is a non-invasive thermal ablation treatment that delivers a spherical array of converging beams using a cranial ultrasound unit that targets specific areas in the brain and heats and ablates the areas that are felt to be responsible for the ET <p>Guidelines</p> <ul style="list-style-type: none"> ● Removed language indicating this policy guideline addresses the use of Magnetic Resonance Guided Focused Ultrasound Surgery System (MRgFUS) for the treatment of idiopathic essential tremor (ET) patients with medication-refractory tremor <p>Limitations (Not Covered)</p> <ul style="list-style-type: none"> ● Revised list of non-covered conditions; removed: <ul style="list-style-type: none"> ○ Coagulopathy ○ Risk factors for deep-vein thrombosis ○ Previous brain procedure (transcranial magnetic stimulation, DBS, stereotactic lesioning, or electroconvulsive therapy) <p>Supporting Information</p> <ul style="list-style-type: none"> ● Updated <i>References</i> section to reflect the most current information ● Archived previous policy version MPG374.03

Purpose

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers' submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or
- Medical necessity coverage guidelines; including documentation requirements.

UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the [References](#) section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

Terms and Conditions

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

Benefit coverage for health services is determined by the member specific benefit plan document* and applicable laws that may require coverage for a specific service. The member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing

Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT®), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT® or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

Medicare Advantage Policy Guidelines are the property of UnitedHealthcare. Unauthorized copying, use, and distribution of this information are strictly prohibited.

*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the [Administrative Guide](#).