Medicare Medical Policy

New and Emerging Technologies and Other Non-Covered Services

MEDICARE MEDICAL POLICY NUMBER: 220

Effective Date: 5/1/2024

Last Review Date: 5/2024

Next Annual Review: 8/2024

INSTRUCTIONS FOR USE: Company Medicare Medical Policies serve as guidance for the administration of plan benefits and do not constitute medical advice nor a guarantee of coverage. Company Medicare Medical Policies are reviewed annually to guide the coverage or non-coverage decision-making process for services or procedures in accordance with member benefit contracts (otherwise known as Evidence of Coverage or EOCs) and Centers of Medicare and Medicaid Services (CMS) policies, manuals, and other CMS rules and regulations. In the absence of a CMS coverage determination or specific regulation for a requested service, item or procedure, Company policy criteria or applicable utilization management vendor criteria may be applied. These are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

The Company reserves the right to determine the application of Medicare Medical Policies and make revisions to these policies at any time. Any conflict or variance between the EOC and Company Medical Policy will be resolved in favor of the EOC.

SCOPE: Providence Health Plan, Providence Health Assurance, and Providence Plan Partners as applicable (referred to individually as “Company” and collectively as “Companies”).

☒ Medicare Only

MEDICARE COVERAGE CRITERIA

IMPORTANT NOTE: More than one Centers for Medicare and Medicaid Services (CMS) reference may apply to the same health care service, such as when more than one coverage policy is available (e.g., both an NCD and LCD exist). All references listed should be considered for coverage decision-making. The Company uses the most current version of a Medicare reference available at the time of publication; however, these websites are not maintained by the Company, so Medicare references and their corresponding hyperlinks may change at any time. If there is a conflict between the Company Medicare Medical Policy and CMS guidance, the CMS guidance will govern.

NOTE: This policy is not an all-inclusive list of services or items not covered or not paid separately by Medicare or by the Company for Medicare Advantage members.

Service	Medicare Guidelines
NOTE: All services in this medical policy are considered **not medically necessary** for Medicare Plan members.	
Services or devices **subject to** an available Medicare coverage policy, guidance, or regulation	I. Rationale for non-coverage of the services listed in Table 1 is Medicare-based policy or regulation. Sources for non-coverage may include, but are not limited to, any of the following (A-E): A. Medicare statutory exclusion; B. Lack of U.S. Food and Drug Administration (FDA) approval (when applicable); i. To be considered for coverage under Medicare, devices must be either FDA- or Institutional Review Board (IRB)-approved. Any device that has not received the appropriate and necessary regulatory approval would not be considered medically reasonable or necessary.[1] C. A Medicare policy (i.e., coverage manual, national coverage determination [NCD], local coverage determination [LCD], or article [LCA], etc.) indicates non-coverage; or D. Service or technology does not meet Medicare's medical and reasonable threshold requirements under *Title XVIII of the Social Security Act, Section 1862(a)(1)(A)* (i.e., the service or technology does not "treat or diagnose an illness or injury"); or E. The service is not anticipated to be a service intended for use by the Medicare population (e.g., services intended for use in the pediatric population)

Services or devices **without** a Medicare coverage policy	II.	For services listed in Table 2, in the absence of specific Medicare policy, non-coverage is due to a lack of sufficient evidence to support the clinical utility, diagnostic efficacy, and/or safety of these technologies following a review of relevant clinical practice guidelines, as well as the ECRI, Hayes, Cochrane, and PubMed databases. Additional high-quality studies are needed to establish the long-term efficacy, durability, and safety of these technologies for any condition. The Company position of non-coverage for these services can be found in the medical policy for New and Emerging Technologies and Other Non-Covered Services, **unless a different policy is otherwise noted**. *"Investigational" services are considered not medically necessary for Medicare Plan members. See Policy Guidelines below for more information. Services which use Company non-coverage outcomes have had a peer-reviewed evidence analysis performed.*

IMPORTANT NOTICE: While some services or items may appear medically indicated for an individual, they may also be a direct exclusion of Medicare or the member's benefit plan. Such excluded services or items by Medicare and member EOCs include, but are not limited to, services or procedures considered to be cosmetic, not medical in nature, or those considered not medically reasonable or necessary under *Title XVIII of the Social Security Act, §1862(a)(1)(A).* If there is uncertainty regarding coverage of a service or item, please review the member EOC or submit a pre-service organization determination request. Note that the Medicare Advance Beneficiary Notice of Noncoverage (ABN) form **cannot** be used for Medicare Advantage members. *(Medicare Advance Written Notices of Non-coverage. MLN006266 May 2021)*

POLICY CROSS REFERENCES

None

The full Company portfolio of Medicare Medical Policies is available online and can be accessed here.

POLICY GUIDELINES

MEDICARE AND MEDICAL NECESSITY

> "MA organizations may create publicly accessible internal coverage criteria that are based on current evidence in widely used treatment guidelines or clinical literature when coverage criteria are not fully established in applicable Medicare statutes, regulations, NCDs or LCDs. Current, widely-used treatment guidelines are those developed by organizations representing clinical medical specialties, and refers to guidelines for the treatment of specific diseases or conditions. Acceptable clinical literature includes large, randomized controlled trials or prospective cohort studies with clear results, published in a peer-reviewed journal, and specifically designed to answer the relevant clinical question, or large systematic reviews or meta-analyses summarizing the literature of the specific clinical question."[2] *(CFR § 422.101(b)(6))*

The Company policy for *PHA Medicare Medical Policy Development and Application* (MP50) provides details regarding Medicare's definition of medical necessity and the hierarchy of Medicare references

and resources during the development of medical policies, as well as the Plan's use of evidence-based processes for policy development. In the absence of Medicare coverage policies (e.g., manual, national coverage determination [NCD], local coverage determination [LCD], article [LCA], etc.), Medicare regulatory guidelines do allow Medicare Advantage Organizations (MAOs) to make their own coverage determinations, as long as the MAO applies an objective, evidence-based process, based on authoritative evidence. *(Medicare Managed Care Manual, Ch. 4, §90.5)*

Following an evidence-based assessment of current peer-reviewed medical literature, the Company may consider certain medical services or technologies to be "investigational." The term "investigational" is not limited to devices or technologies which have not received the appropriate governmental regulatory approval (e.g., U.S. Food and Drug Administration [FDA]), but rather may also mean the procedure, device, or technology does not meet all of the Company's technology assessment criteria, as detailed within the Company policy for *Definition: Experimental/Investigational* (MP5).

Only medically reasonable and necessary services or items which treat illness or injury are eligible for Medicare coverage, as outlined in *Title XVIII of the Social Security Act, §1862(a)(1)(A)*. Thus, services which lack scientific evidence regarding safety and efficacy because they are investigational are "not medically reasonable or necessary" for Medicare Plan members. *(Medicare Claims Processing Manual, Ch. 23, §30 A)*

INVESTIGATIONAL DEVICE EXEMPTION (IDE) STUDIES

Some services may be listed as not medically necessary in this policy, but if rendered in the context of a **Medicare-approved** IDE study, the Company non-coverage position can be reconsidered. Documentation must support participation in the IDE study, as well as identify the study in question, including the national clinical trial (NCT) number. To view Medicare-approved IDE studies, see the CMS website for IDEs.

REGULATORY STATUS

U.S. FOOD & DRUG ADMINISTRATION (FDA)

While clearance by the Food and Drug Administration (FDA) is a prerequisite for Medicare coverage, the 510(k) premarket clearance process does not in itself establish medical necessity. Medicare payment policy is determined by the interaction of numerous requirements, including but not limited to, the availability of a Medicare benefit category and other statutory requirements, coding and pricing guidelines, as well as national and local coverage determinations and clinical evidence.

BILLING GUIDELINES AND CODING

GENERAL

Claims for these services will always be reviewed when they are billed with an unlisted procedure code.

CODES*		
CPT		See Tables below

HCPCS		See Tables below

NOTE: This is not an all-inclusive list of services or items not covered or not paid separately by Medicare or by the Company for Medicare Advantage members. Exclusion, removal, or omission from this list does **not** necessarily imply a service or technology is covered.

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
Code	Description	Medicare Rationale, Product, and Manufacturer (when available or applicable, may not be an all-inclusive list or may be examples only)
77089	Trabecular bone score (TBS), structural condition of the bone microarchitecture; using dual X-ray absorptiometry (DXA) or other imaging data on gray-scale variogram, calculation, with interpretation and report on fracture-risk	TBS iNsight™ Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
77090	Trabecular bone score (TBS), structural condition of the bone microarchitecture; technical preparation and transmission of data for analysis to be performed elsewhere	TBS iNsight™ Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
77091	Trabecular bone score (TBS), structural condition of the bone microarchitecture; technical calculation only	TBS iNsight™ Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
77092	Trabecular bone score (TBS), structural condition of the bone microarchitecture; interpretation and report on fracture-risk only by other qualified health care professional	TBS iNsight™ Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
81506	Endocrinology (type 2 diabetes), biochemical assays of seven analytes (glucose, HbA1c, insulin, hs-CRP, adiponectin, ferritin, interleukin 2-receptor alpha), utilizing serum or plasma, algorithm reporting a risk score	LCA: MolDX: PreDx (A55599)
97026	Application of a modality to 1 or more areas; infrared	• Medicare Status "R" code • NCD for Infrared Therapy Devices (270.6) • LCA: Billing and Coding: Wound Care (A55909)

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97545	Work hardening/conditioning; initial 2 hours	• Medicare Status "R" code • Not medically reasonable or necessary under *Title XVIII of the Social Security Act, Section 1862(a)(1)(A)* (performed for the purpose of conditioning for a return to work and not to diagnose or treat a medical condition).
97546	Work hardening/conditioning; each additional hour (List separately in addition to code for primary procedure)	• Medicare Status "R" code • Not medically reasonable or necessary under *Title XVIII of the Social Security Act, Section 1862(a)(1)(A)* (performed for the purpose of conditioning for a return to work and not to diagnose or treat a medical condition).
0219T	Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; cervical	• LCD Facet Joint Interventions for Pain Management (L38803) • LCA: Billing and Coding: Facet Joint Interventions for Pain Management (A58405)
0220T	Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; thoracic	• LCD Facet Joint Interventions for Pain Management (L38803) • LCA: Billing and Coding: Facet Joint Interventions for Pain Management (A58405)
0221T	Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; lumbar	• LCD Facet Joint Interventions for Pain Management (L38803) • LCA: Billing and Coding: Facet Joint Interventions for Pain Management (A58405)
0222T	Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; each additional vertebral segment (List separately in addition to code for primary procedure)	• LCD Facet Joint Interventions for Pain Management (L38803) • LCA: Billing and Coding: Facet Joint Interventions for Pain Management (A58405)
0333T	Visual evoked potential, screening of visual acuity, automated, with report	For *asymptomatic* individuals, this testing would be considered non-covered as a screening test per Medicare statute.[2] Coverage may be allowed on appeal if this test is used for *diagnostic* purposes for **symptomatic** individuals when the ordering physician will use these test results to make a diagnosis or make treatment decisions for a relevant illness or condition.
0335T	Insertion of sinus tarsi implant	If used for flat foot, not covered per *Medicare Benefit Policy Manual, Chapter 15 – Covered Medical and Other Health*

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		Services, §–90 – Foot Care, B. Exclusions from Coverage, 1. Treatment of Flat Foot. If used for any other indication, non-coverage is based on the Company policy position.
0338T	Transcatheter renal sympathetic denervation, percutaneous approach including arterial puncture, selective catheter placement(s) renal artery(ies), fluoroscopy, contrast injection(s), intraprocedural roadmapping and radiological supervision and interpretation, including pressure gradient measurements, flush aortogram and diagnostic renal angiography when performed; unilateral	As of the most recent review, devices designed specifically for ablation of the renal sympathetic nerves have not received FDA-approval.
0339T	; bilateral	As of the most recent review, devices designed specifically for ablation of the renal sympathetic nerves have not received FDA-approval.
0444T	Initial placement of a drug-eluting ocular insert under one or more eyelids, including fitting, training, and insertion, unilateral or bilateral	As of the most recent review, the technology represented by this code has not received FDA approval.
0445T	Subsequent placement of a drug-eluting ocular insert under one or more eyelids, including re-training, and removal of existing insert, unilateral or bilateral	As of the most recent review, the technology represented by this code has not received FDA approval.
0469T	Retinal polarization scan, ocular screening with on-site automated results, bilateral	Medicare Status "N" code. As a non-covered Traditional Medicare service, this would be covered for Medicare Advantage plans if there is a Supplemental Benefit available.
0510T	Removal of sinus tarsi implant	If used for flat foot, not covered per *Medicare Benefit Policy Manual, Chapter 15 – Covered Medical and Other Health Services, §–90 – Foot Care, B. Exclusions from Coverage, 1. Treatment of Flat Foot*. If used for any other indication, non-coverage is based on the Company policy position.
0511T	Removal and reinsertion of sinus tarsi implant	If used for flat foot, not covered per *Medicare Benefit Policy Manual, Chapter 15 – Covered Medical and Other Health Services, §–90 – Foot Care, B. Exclusions from Coverage, 1. Treatment of Flat Foot*.

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		If used for any other indication, non-coverage is based on the Company policy position.
0544T	Transcatheter mitral valve annulus reconstruction, with implantation of adjustable annulus reconstruction device, percutaneous approach including transseptal puncture	Cardioband™ Mitral Valve Reconstruction System (Edwards Lifesciences) According to the *Medicare Benefit Policy Manual, Chapter 14*, while FDA approval does not automatically guarantee coverage under Medicare, in order to be considered for coverage under Medicare, devices must be either FDA- or Institutional Review Board (IRB)-approved. Any device that has not received FDA-approval would not be considered medically reasonable or necessary because it would lack the scientific evidence regarding safety and efficacy and would be considered investigational or experimental. An exception to this would be devices used in the context of a Medicare-approved investigational device exemption (IDE) study. Therefore, unless provided within the context of a Medicare-approved IDE study, TMVAR is not considered medically reasonable or necessary for Medicare under §1862(a)(1)(A).
0545T	Transcatheter tricuspid valve annulus reconstruction with implantation of adjustable annulus reconstruction device, percutaneous approach	Cardioband™ Tricuspid Valve Reconstruction System (Edwards Lifesciences) According to the *Medicare Benefit Policy Manual, Chapter 14*, while FDA approval does not automatically guarantee coverage under Medicare, in order to be considered for coverage under Medicare, devices must be either FDA- or Institutional Review Board (IRB)-approved. Any device that has not received FDA-approval would not be considered medically reasonable or necessary because it would lack the scientific evidence regarding safety and efficacy and would be considered investigational or experimental. An exception to this would be devices used in the context of a Medicare-approved investigational device exemption (IDE) study. At present, the only transcatheter tricuspid valve annuloplasty reconstruction

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		device approved for patient use anywhere in world is the Edwards Cardioband Tricuspid Valve Reconstruction System, which has received the European CE mark approval. However, this device has not yet received U.S. FDA approval, nor does it have Medicare-approval under an investigational device exception (IDE) study. Therefore, TTVAR is not considered medically reasonable or necessary for Medicare under §1862(a)(1)(A).
0554T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; retrieval and transmission of the scan data, assessment of bone strength and fracture risk and bone mineral density, interpretation and report	Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
0555T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; retrieval and transmission of the scan data	Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
0556T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; assessment of bone strength and fracture risk and bone mineral density	Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
0557T	Bone strength and fracture risk using finite element analysis of functional data, and bone-mineral density, utilizing data from a computed tomography scan; interpretation and report	Medicare determines preventive benefit coverage and this testing would be considered non-covered as a screening test per Medicare statute.[3]
0559T	Anatomic model 3D-printed from image data set(s); first individually prepared and processed component of an anatomic structure	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is to plan a surgery, it does not "treat or diagnosis" an illness or injury. Codes 0559T-0562T are for services which provide a printed physical multidimensional model of a patient's anatomy to aid in the planning of surgical procedures.
0560T	Anatomic model 3D-printed from image data set(s); each additional individually prepared and processed component of an anatomic structure (List separately in addition to code for primary procedure)	(See 0559T above)

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0561T	Anatomic guide 3D-printed and designed from image data set(s); first anatomic guide	(See 0559T above)
0562T	Anatomic guide 3D-printed and designed from image data set(s); each additional anatomic guide (List separately in addition to code for primary procedure)	(See 0559T above)
0582T	Transurethral ablation of malignant prostate tissue by high-energy water vapor thermotherapy, including intraoperative imaging and needle guidance	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0602T	Glomerular filtration rate (GFR) measurement(s), transdermal, including sensor placement and administration of a single dose of fluorescent pyrazine agent	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0603T	Glomerular filtration rate (GFR) monitoring, transdermal, including sensor placement and administration of more than one dose of fluorescent pyrazine agent, each 24 hours	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0604T	Optical coherence tomography (OCT) of retina, remote, patient-initiated image capture and transmission to a remote surveillance center unilateral or bilateral; initial device provision, set-up and patient education on use of equipment	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0605T	Optical coherence tomography (OCT) of retina, remote, patient-initiated image capture and transmission to a remote surveillance center unilateral or bilateral; remote surveillance center technical support, data analyses and reports, with a minimum of 8 daily recordings, each 30 days	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0606T	Optical coherence tomography (OCT) of retina, remote, patient-initiated image capture and transmission to a remote surveillance center unilateral or bilateral; review, interpretation and report by the prescribing physician or other qualified health care professional of remote surveillance center data analyses, each 30 days	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0613T	Percutaneous transcatheter implantation of interatrial septal shunt device, including right and left heart catheterization, intracardiac echocardiography, and imaging guidance by the proceduralist, when performed	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.

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0621T	Trabeculostomy ab interno by laser	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0622T	; with use of ophthalmic endoscope	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0623T	Automated quantification and characterization of coronary atherosclerotic plaque to assess severity of coronary disease, using data from coronary computed tomographic angiography; data preparation and transmission, computerized analysis of data, with review of computerized analysis output to reconcile discordant data, interpretation and report	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This quantifies and characterizes arterial plaque buildup. It does not "treat or diagnosis" an illness or injury.
0624T	Automated quantification and characterization of coronary atherosclerotic plaque to assess severity of coronary disease, using data from coronary computed tomographic angiography; data preparation and transmission	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This quantifies and characterizes arterial plaque buildup. It does not "treat or diagnosis" an illness or injury.
0625T	Automated quantification and characterization of coronary atherosclerotic plaque to assess severity of coronary disease, using data from coronary computed tomographic angiography; computerized analysis of data from coronary computed tomographic angiography	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This quantifies and characterizes arterial plaque buildup. It does not "treat or diagnosis" an illness or injury.
0626T	Automated quantification and characterization of coronary atherosclerotic plaque to assess severity of coronary disease, using data from coronary computed tomographic angiography; review of computerized analysis output to reconcile discordant data, interpretation and report	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This quantifies and characterizes arterial plaque buildup. It does not "treat or diagnosis" an illness or injury.
0631T	Transcutaneous visible light hyperspectral imaging measurement of oxyhemoglobin, deoxyhemoglobin, and tissue oxygenation, with interpretation and report, per extremity	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is used to determine oxygenation levels in superficial tissues for patients with potential circulatory compromise, but it does not "treat or diagnosis" an illness or injury.
0632T	Percutaneous transcatheter ultrasound ablation of nerves innervating the pulmonary arteries, including right heart catheterization, pulmonary artery angiography, and all imaging guidance	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
0639T	Wireless skin sensor thermal anisotropy measurement(s) and assessment of flow in cerebrospinal fluid shunt, including ultrasound guidance, when performed	As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0640T	Noncontact near-infrared spectroscopy (eg, for measurement of deoxyhemoglobin, oxyhemoglobin, and ratio of tissue oxygenation) , other than for screening for peripheral arterial disease, image acquisition, interpretation, and report; first anatomic site	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is used to determine oxygenation levels in superficial tissues for patients with potential circulatory compromise, but it does not "treat or diagnosis" an illness or injury.
~~**0641T**~~	**TERMED 12/31/2023** ~~Noncontact near-infrared spectroscopy studies of flap or wound (eg, for measurement of deoxyhemoglobin, oxyhemoglobin, and ratio of tissue oxygenation [StO2]); image acquisition only, each flap or wound~~	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is used to determine oxygenation levels in superficial tissues for patients with potential circulatory compromise, but it does not "treat or diagnosis" an illness or injury.
~~**0642T**~~	**TERMED 12/31/2023** ~~Noncontact near-infrared spectroscopy studies of flap or wound (eg, for measurement of deoxyhemoglobin, oxyhemoglobin, and ratio of tissue oxygenation [StO2]); interpretation and report only, each flap or wound~~	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is used to determine oxygenation levels in superficial tissues for patients with potential circulatory compromise, but it does not "treat or diagnosis" an illness or injury.
0646T	Transcatheter tricuspid valve implantation/replacement (TTVI) with prosthetic valve, percutaneous approach, including right heart catheterization, temporary pacemaker insertion, and selective right ventricular or right atrial angiography, when performed	Intrepid Transcatheter Mitral Valve Replacement System (Medtronic) See notes related to 0570T above.
22836	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments	See 0656T below
22837	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments	See 0656T below
22838	Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed	
0656T	Anterior lumbar or thoracolumbar vertebral body tethering, anterior; up to 7 vertebral segments	Tether Vertebral Body Tethering System (Zimmer Biomet) This system received FDA humanitarian device exemption (HDE) approval in August, 2019 as a treatment of skeletally immature

Table 1: CPT/HCPCS codes that are <u>not medically necessary</u> based on *Medicare policy, guideline, or regulation*.		
		patients. The majority of the Medicare population would not be "skeletally immature," making the use of this system on these individuals outside of the HUD intended use.
0657T	Anterior lumbar or thoracolumbar vertebral body tethering, anterior; 8 or more vertebral segments	Tether Vertebral Body Tethering System (Zimmer Biomet) This system received FDA humanitarian device exemption (HDE) approval in August, 2019 as a treatment of skeletally immature patients. The majority of the Medicare population would not be "skeletally immature," making the use of this system on these individuals outside of the HUD intended use.
0790T	Revision (eg, augmentation, division of tether), replacement, or removal of thoracolumbar or lumbar vertebral body tethering, including thoracoscopy, when performed	See 0656T above
0660T	Implantation of anterior segment intraocular nonbiodegradable drug-eluting system, internal approach	iDose (Glaukos) As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0661T	Removal and reimplantation of anterior segment intraocular nonbiodegradable drug-eluting implant	iDose (Glaukos) As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0687T	Treatment of amblyopia using an online digital program; device supply, educational set-up, and initial session	CureSight™: As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval. While this system has been studied for use in the pediatric population, there is no study regarding the application to Medicare population.
0688T	Treatment of amblyopia using an online digital program; assessment of patient performance and program data by physician or other qualified health care professional, with report, per calendar month	CureSight™: As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.

Table 1: CPT/HCPCS codes that are <u>not medically necessary</u> based on *Medicare policy, guideline, or regulation*.		
		While this system has been studied for use in the pediatric population, there is no study regarding the application to Medicare population.
A9292	Prescription digital visual therapy, software-only, FDA cleared, per course of treatment	Luminopia (Luminopia Inc.) This product is indicated for use in patients aged 4-7 years old. It is not expected there will be clinical utility studies applicable to the Medicare population as this product is not meant to be used in older individuals.
0689T	Quantitative ultrasound tissue characterization (non-elastographic), including interpretation and report, obtained without diagnostic ultrasound examination of the same anatomy (eg, organ, gland, tissue, target structure)	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This does not "treat or diagnosis" an illness or injury.
0690T	Quantitative ultrasound tissue characterization (non-elastographic), including interpretation and report, obtained with diagnostic ultrasound examination of the same anatomy (eg, organ, gland, tissue, target structure) (List separately in addition to code for primary procedure)	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This does not "treat or diagnosis" an illness or injury.
0691T	Automated analysis of an existing computed tomography study for vertebral fracture(s), including assessment of bone density when performed, data preparation, interpretation, and report	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This is artificial intelligence for the detection of vertebral fractures, reading what has already been read by the treating physician or radiologist. This does not "treat or diagnosis" an illness or injury and thus does not meet Medi'are's medical necessity threshold.
0693T	Comprehensive full body computer-based markerless 3D kinematic and kinetic motion analysis and report	OpenPose-based markerless motion capture Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This does not "treat or diagnosis" an illness or injury. This system has been studied for use in relation to sports medicine.
0697T	Quantitative magnetic resonance for analysis of tissue composition (eg, fat, iron, water content), including multiparametric data acquisition, data preparation and transmission, interpretation and report, obtained without diagnostic MRI examination of the same anatomy (eg,	This is not a magnetic resonance procedure covered under the Medicare NCD 220.2. Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This analyzes body composition to determine if more invasive procedures (i.e., biopsies) are

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	organ, gland, tissue, target structure) during the same session; multiple organs	needed, it does not "treat or diagnosis" an illness or injury.
0698T	Quantitative magnetic resonance for analysis of tissue composition (eg, fat, iron, water content), including multiparametric data acquisition, data preparation and transmission, interpretation and report, obtained with diagnostic MRI examination of the same anatomy (eg, organ, gland, tissue, target structure); multiple organs (List separately in addition to code for primary procedure)	This is not a magnetic resonance procedure covered under the Medicare NCD 220.2. Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). This analyzes body composition to determine if more invasive procedures (i.e., biopsies) are needed, it does not "treat or diagnosis" an illness or injury.
0700T	Molecular fluorescent imaging of suspicious nevus; first lesion	Orlucent™ handheld fluorescent molecular imaging system As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0701T	Molecular fluorescent imaging of suspicious nevus; each additional lesion (List separately in addition to code for primary procedure)	Orlucent™ handheld fluorescent molecular imaging system As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval.
0704T	Remote treatment of amblyopia using an eye tracking device; device supply with initial set-up and patient education on use of equipment	CureSight™ As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval. While this system has been studied for use in the pediatric population, there is no study regarding the application to Medicare population.
0705T	Remote treatment of amblyopia using an eye tracking device; surveillance center technical support including data transmission with analysis, with a minimum of 18 training hours, each 30 days	CureSight™ As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval. While this system has been studied for use in the pediatric population, there is no study regarding the application to Medicare population.
0706T	Remote treatment of amblyopia using an eye tracking device; interpretation and report by physician or other qualified health care professional, per calendar month	CureSight™:

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
		As of the most recent review, the technology/device/procedure represented by this code has not received FDA approval. While this system has been studied for use in the pediatric population, there is no study regarding the application to Medicare population.
0716T	Cardiac acoustic waveform recording with automated analysis and generation of coronary artery disease risk score	This test determines risk of coronary artery disease (CAD). Under Medicare, testing to determine risk of a condition or illness is considered screening. Therefore, this procedure is **not medically necessary** as a screening procedure per Medicare statute.[2]
0725T	Vestibular device implantation, unilateral	Examples include, but may not be limited to, the following: • Cochlear Vestibular Implant (CVI) • Labyrinth Devices MVI™ Multichannel Vestibular Implant The Multichannel Vestibular Implant Early Feasibility Study (NCT02725463; G150198), which is evaluating the Labyrinth device, is a Medicare-approved Category B IDE study as of 8/2021. The VertiGO! trial (NCT04918745) is **not** a Medicare approved IDE study. Therefore, unless provided within the context of a Medicare-approved IDE study, a vestibular implant is **not medically necessary** for Medicare under §1862(a)(1)(A). *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)* Note: According to the *Medicare Benefit Policy Manual, Chapter 16, §–80 – Services Related to and Required as a Result of Services Which Are Not Covered Under Medicare*, removal **without** replacement (0726T) may be considered medically reasonable and necessary for unrelated reasons (e.g., pain, infection, etc.).
0727T	Removal and replacement of implanted vestibular device, unilateral	(See 0725T above)

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
0728T	Diagnostic analysis of vestibular implant, unilateral; with initial programming	(See 0725T above)
0729T	Diagnostic analysis of vestibular implant, unilateral; with subsequent programming	(See 0725T above)
0731T	Augmentative AI-based facial phenotype analysis with report	Not medically reasonable or necessary under Medicare and §1862(a)(1)(A). Code 0731T is for facial recognition based on artificial intelligence (AI) to detect underlying facial patterns thought to be beneficial for diagnosis or screening.
0795T	Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; complete system (ie, right atrial and right ventricular pacemaker components)	Aveir™ DR Dual-Chamber Pacemaker (Abbott) See the Medicare NCD for Leadless Pacemakers (20.8.4). According to NCD 20.8.4, leadless pacemakers are eligible for coverage under the Medicare coverage with evidence development (CED) provision. Unless provided within the context of a Medicare-approved study, a leadless pacemaker is **not medically necessary** for Medicare under §1862(a)(1)(A). *(To confirm participation in a Medicare-approved study, the NCT number must be provided and be verified as a Medicare-approved study on the CMS CED website for leadless pacemakers.)* Note: According to the *Medicare Benefit Policy Manual, Chapter 16, §–80 – Services Related to and Required as a Result of Services Which Are Not Covered Under Medicare*, removal **without** replacement (0798T-0800T) may be considered medically reasonable and necessary for unrelated reasons (e.g., pain, infection, etc.).
0796T	Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right atrial pacemaker component (when an existing right ventricular single leadless pacemaker	(See 0795T above)

Table 1: CPT/HCPCS codes that are <u>not medically necessary</u> based on *Medicare policy, guideline, or regulation*.		
	exists to create a dual-chamber leadless pacemaker system)	
0797T	Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right ventricular pacemaker component (when part of a dual-chamber leadless pacemaker system)	(See 0795T above)
0801T	Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; dual-chamber system (ie, right atrial and right ventricular pacemaker components)	(See 0795T above)
0802T	Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right atrial pacemaker component	(See 0795T above)
0803T	Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right ventricular pacemaker component (when part of a dual-chamber leadless pacemaker system)	(See 0795T above)
0804T	Programming device evaluation (in person) with iterative adjustment of implantable device to test the function of device and to select optimal permanent programmed values, with analysis, review, and report, by a physician or other qualified health care	(See 0795T above)

Table 1: CPT/HCPCS codes that are <u>not medically necessary</u> based on *Medicare policy, guideline, or regulation*.		
	professional, leadless pacemaker system in dual cardiac chambers	
0823T	Transcatheter insertion of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography) and device evaluation (eg, interrogation or programming), when performed	(See 0795T above)
0824T	Transcatheter removal of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography), when performed	(See 0795T above)
0825T	Transcatheter removal and replacement of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography) and device evaluation (eg, interrogation or programming), when performed	(See 0795T above)
0826T	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional, leadless pacemaker system in single-cardiac chamber	(See 0795T above)
0805T	Transcatheter superior and inferior vena cava prosthetic valve implantation (ie, caval valve implantation [CAVI]); percutaneous femoral vein approach	19recardiac The Superior Vena Caval Occlusion in Subjects With Acute Decompensated Heart Failure or VENUS-HF study (NCT03836079; G180213), which is evaluating the 19recardiac device, is a Medicare-approved Category B IDE study as of 3/2020. Unless provided within the context of a Medicare-approved IDE study, the 19recardiac system is not medically necessary for Medicare under §1862(a)(1)(A). (To confirm participation in a Medicare-approved IDE study, the NCT

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
		number must be provided and be verified as a Medicare-approved study on the CMS website for IDEs.)
0806T	Transcatheter superior and inferior vena cava prosthetic valve implantation (ie, caval valve implantation [CAVI]); open femoral vein approach	(See 0805T above)
0860T	Noncontact near-infrared spectroscopy (eg, for measurement of deoxyhemoglobin, oxyhemoglobin, and ratio of tissue oxygenation), **for screening** for peripheral arterial disease, including provocative maneuvers, image acquisition, interpretation, and report, one or both lower extremities	This code is specific to when performed as a ***screening*** test.
0096U	Human papillomavirus (HPV), high-risk types (ie, 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68), male urine	HPV, High-Risk, Male Urine This test is a screening test, and HPV screening testing used outside of NCD 210.2.1 is non-covered under Medicare. In addition, diagnostic tests that are not ordered by a physician for diagnostic or clinical decision-making are also non-covered under Medicare. Therefore, this test is non-covered under Medicare. Coverage exceptions may be made on appeal if this test is used for diagnostic purposes if a patient has signs/symptoms, and ordering physician will use test results for diagnosis or treatment decisions.
0105U	Nephrology (chronic kidney disease), multiplex electrochemiluminescent immunoassay (ECLIA) of tumor necrosis factor receptor 1A, receptor superfamily 2 (TNFR1, TNFR2), and kidney injury molecule-1 (KIM-1) combined with longitudinal clinical data, including APOL1 genotype if available, and plasma (isolated fresh or frozen), algorithm reported as probability score for rapid kidney function decline (RKFD)	KidneyIntelX™ The KidneyIntelX™ test is used to identify individuals most likely to experience fast-progressing kidney disease. The results are not used to diagnose or make direct treatment decisions for an illness or injury, as required for Medicare under the Social Security Act, §1862(a)(1)(A). Therefore, this test is considered not medically necessary.
0114U	Gastroenterology (Barrett's esophagus), VIM and CCNA1 methylation analysis, esophageal cells, algorithm reported as likelihood for Barrett's esophagus	EsoGuard™ (Lucid Diagnostics) Lucid Diagnostics has locations in NY, CA, and MA. The Noridian J-E LCD L39262 and LCA A59032 is applied for testing performed in any of these locations.
0117U	Pain management, analysis of 11 endogenous analytes (methylmalonic acid,	Foundation PISM, Ethos Laboratories

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
	xanthurenic acid, homocysteine, pyroglutamic acid, vanilmandelate, 5-hydroxyindoleacetic acid, hydroxymethylglutarate, ethylmalonate, 3-hydroxypropyl mercapturic acid (3-HPMA), quinolinic acid, kynurenic acid), LCMS/MS, urine, algorithm reported as a pain-index score with likelihood of atypical biochemical function associated with pain	While this test may provide information during workup, the test results do not provide data used to diagnose a condition or make treatment decisions. Decisions are not made based on this testing that would not otherwise have been made without this test. Therefore, this test is considered not medically reasonable or necessary under SSA §1862(a)(1)(A).
0152U	Infectious disease (bacteria, fungi, parasites, and DNA viruses), DNA, PCR and next-generation sequencing, plasma, detection of >1,000 potential microbial organisms for significant positive pathogens	Karius® (Karius; California) This test is considered not medically reasonable or necessary. The LCD L35160 requires molecular diagnostic testing to undergo a technical assessment (TA) to determine Medicare coverage. The LCD L39001 includes this same requirement for tests which do not have FDA-approval or clearance. This test is not FDA-approved. It has been reviewed by the MolDX Contractor and determined to be "not covered."
0156U	Copy number (eg, intellectual disability, dysmorphology), sequence analysis	SMASH™ (Marvel Genomics™ (New York) This test is not considered medically reasonable or necessary. For Medicare members, tests for diseases or conditions that manifest signs or symptoms in childhood are considered not medically reasonable or necessary as they are not usually relevant to the Medicare population. Under Medicare, testing is only considered reasonable and necessary when the test results directly impact treatment or management of the beneficiary. Confirming a known diagnosis is also not considered reasonable or necessary under Medicare, and also many pharmacogenomic applications of molecular pathology testing do not meet Medicare's requirements to be considered medically reasonable or necessary. *(LCD L35000; Published by National Government Services)*
0312U	Autoimmune diseases (eg, systemic lupus erythematosus [SLE]), analysis of 8 IgG autoantibodies and 2 cell-bound complement activation products using enzyme-linked immunosorbent immunoassay (ELISA), flow cytometry and	Avise® Lupus, Exagen Inc. (Vista, California) This test is considered not medically reasonable or necessary. The LCA A59641 requires proteomic testing to undergo a technical assessment (TA) to determine

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
	indirect immunofluorescence, serum, or plasma and whole blood, individual components reported along with an algorithmic SLE-likelihood assessment *(Effective 4/1/2022)*	Medicare coverage. This test has not yet undergone the required TA review by the MolDX Contractor and therefore does not meet the LCA requirements for coverage.
0352U	Infectious disease (bacterial vaginosis and vaginitis), multiplex amplified probe technique, for detection of bacterial vaginosis–associated bacteria (BVAB-2, Atopobium vaginae, and Megasphera type 1), algorithm reported as detected or not detected and separate detection of Candida species (C. albicans, C. tropicalis, C. parapsilosis, C. dubliniensis), Candida glabrata/Candida krusei, and trichomonas vaginalis, vaginal-fluid specimen, each result reported as detected or not detected	Xpert® Xpress MPV (Cepheid®) This test is non-covered as a screening test under Medicare. Coverage exceptions may be made on appeal if not used as a screening tool when coverage criteria from LCD L39003 are met **and** if the test is included as a covered test in the companion LCA (A58726).
~~**0354U**~~	**TERMED 3/31/2024** ~~Human papilloma virus (HPV), high-risk types (ie, 16, 18, 31, 33, 45, 52 and 58) qualitative mRNA expression of E6/E7 by quantitative polymerase chain reaction (qPCR)~~	PreTect HPV-Proofer' 7 (GenePace Laboratories, LLC & PreTech) This test is used as a screening test. HPV screening used outside of NCD 210.2.1 is not covered under Medicare.
0369U	Infectious agent detection by nucleic acid (DNA and RNA), gastrointestinal pathogens, 31 bacterial, viral, and parasitic organisms and identification of 21 associated antibiotic-resistance genes, multiplex amplified probe technique	GI assay (Gastrointestinal Pathogen with ABR) (Lab Genomics LLC, Thermo Fisher Scientific; California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).
0370U	Infectious agent detection by nucleic acid (DNA and RNA), surgical wound pathogens, 34 microorganisms and identification of 21 associated antibiotic-resistance genes, multiplex amplified probe technique, wound swab	Lesion Infection (Wound) (Lab Genomics LLC, Thermo Fisher Scientific; California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).
0371U	Infectious agent detection by nucleic acid (DNA or RNA), genitourinary pathogen, semiquantitative identification, DNA from 16 bacterial organisms and 1 fungal organism, multiplex amplified probe technique via quantitative polymerase chain reaction (qPCR), urine	Qlear UTI (Lifescan Labs of Illinois and Thermo Fisher Scientific, California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
0372U	Infectious disease (genitourinary pathogens), antibiotic-resistance gene detection, multiplex amplified probe technique, urine, reported as an antimicrobial stewardship risk score	Qlear UTI – Reflex ABR (Lifescan Labs of Illinois and Thermo Fisher Scientific, California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).
0373U	Infectious agent detection by nucleic acid (DNA and RNA), respiratory tract infection, 17 bacteria, 8 fungus, 13 virus, and 16 antibiotic-resistance genes, multiplex amplified probe technique, upper or lower respiratory specimen	Respiratory Pathogen with ABR (RPX) (Lab Genomics LLC and Thermo Fisher Scientific, California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).
0374U	Infectious agent detection by nucleic acid (DNA or RNA), genitourinary pathogens, identification of 21 bacterial and fungal organisms and identification of 21 associated antibiotic-resistance genes, multiplex amplified probe technique, urine	Urogenital Pathogen with Rx Panel (UPX) (Lab Genomics LLC and Thermo Fisher Scientific, California) LCD L39001 requires TA review in the absence of FDA approval. This test does not have the required TA review nor is it included as a covered test in the companion LCA (A58720).
0387U	Oncology (melanoma), autophagy and beclin 1 regulator 1 (AMBRA1) and loricrin (AMLo) by immunohistochemistry, formalinfixed paraffin-embedded (FFPE) tissue, report for risk of progression	AMBLor® Melanoma Prognostic test, Avero® Diagnostics (UK based company, with locations in Washington and Texas) LCD L37748 requires TA review. This test does not have the required TA review.
0394U	Perfluoroalkyl substances (PFAS) (eg, perfluorooctanoic acid, perfluorooctane sulfonic acid), 16 PFAS compounds by liquid chromatography with tandem mass spectrometry (LC-MS/MS), plasma or serum, quantitative	PFAS Testing & PFASure™, National Medical Services, NMS Labs, Inc. (Pennsylvania) This test looks for exposure-based substances in the workplace. This would not be medically reasonable or necessary, but rather, would be the responsibility of an employer.
0399U	Neurology (cerebral folate deficiency), serum, detection of anti-human folate receptor IgGbinding antibody and blocking autoantibodies by enzyme-linked immunoassay (ELISA), qualitative, and blocking autoantibodies, using a functional	FRAT® (Folate Receptor Antibody Test), Religen Inc. (Pennsylvania) This test is only likely to be used for conditions generally associated with pediatrics (children). It is not expected it will

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
	blocking assay for IgG or IgM, quantitative, reported as positive or not detected	have clinical utility for a Medicare Advantage plan member.
0429U	Human papillomavirus (HPV), oropharyngeal swab, 14 high-risk types (ie, 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68)	Omnipathology Oropharyngeal HPV PCR Test, OmniPathology Solutions, Medical Corporation This test is used as a screening test. HPV screening used outside of NCD 210.2.1 is not covered under Medicare.
A6000	Non-contact wound warming wound cover for use with the non-contact wound warming device and warming card	• Medicare Status "N" code • Noridian "Noncovered Items" list[4] • NCD for Noncontact Normothermic Wound Therapy (270.2)
A9268	Programmer for transient, orally ingested capsule	VIBRANT® System (Vibrant Gastro System) While CMS developed a HCPCS code for this product, CMS also stated this product has no Benefit Category under Medicare.
A9269	Programable, transient, orally ingested capsule, for use with external programmer, per month	See A9268 above
A9293	Fertility cycle (contraception & conception) tracking software application, FDA cleared, per month, includes accessories (e.g., thermometer)	Natural Cycles While CMS developed a HCPCS code for this product, CMS also stated this product has no Benefit Category under Medicare. In addition, following an evidence based review, it was determined that "[e]vidence is currently insufficient to support the use of this service. The evidence base lacks comparison to other birth control methods. Despite data on more than 60,000 people, all studies provide very-low-quality evidence. Available studies are at high risk of bias because of lack of control groups. Studies included convenience samples of individuals subscribing to the service and willing to be included in the studies and may not be representative of the general population who may use the app. Studies also had high attrition. For people who provide data through 12-month follow-up, Natural Cycles' effectiveness is reported at ≥92%; 70% is considered typical for the conventional fertility awareness method. Randomized controlled trials comparing Natural Cycles with other birth control

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
		methods are needed to assess comparative effectiveness, but none are ongoing."
C9780	Insertion of central venous catheter through central venous occlusion via inferior and superior approaches (e.g., inside-out technique), including imaging guidance *(Surfacer® Inside-Out® Access Catheter System)*	The Surfacer® Inside-Out® Access Catheter system is currently undergoing trials and evaluation and there is an associated Medicare-approved investigational device exemption (IDE) study for this product (*Evaluation of the Surfacer System Approach to Central Venous Access;* NCT03209050); however, it is classified as a ***Category A*** device. According to the *Medicare Managed Care Manual, Chapter 4 – Benefits and Beneficiary Protections, §10.7.2 – Payment for Investigational Device Exemption (IDE) Studies*, "MAOs are responsible for payment of claims related to enrollees' participation in both Category A and B IDE studies that are covered by the MAC with jurisdiction over the MA plan's service area. The MAO is responsible for payment of routine care items and services in CMS-approved Category A… studies… **CMS will not approve Category A devices because they are statutorily excluded from coverage."** Therefore, while routine care and services are eligible for coverage, including unrelated care, Category A devices are not.
C9790	Histotripsy (ie, non-thermal ablation via acoustic energy delivery) of malignant renal tissue, including image guidance	As of the date of this policy update, there are no FDA-approved devices to deliver histotripsy.
E0231	Non-contact wound warming device (temperature control unit, ac adapter and power cord) for use with warming card and wound cover.	• Noridian "Noncovered Items" list[4] • NCD for Noncontact Normothermic Wound Therapy (270.2)
E0232	Warming card for use with the non contact wound warming device and non contact wound warming wound cover	• Noridian "Noncovered Items" list[4] • NCD for Noncontact Normothermic Wound Therapy (270.2)
E0711	Upper extremity medical tubing/lines enclosure or covering device, restricts elbow range of motion	Exersides™ Refraint™ System While CMS developed a HCPCS code for this product, CMS also stated this product has no Benefit Category under Medicare.
K1004	Low frequency ultrasonic diathermy treatment device for home use	The PainShield MD NCD 280.1 indicates diathermy machines are not appropriate for home use. In addition, while CMS developed a HCPCS code for this product, CMS also stated this

Table 1: CPT/HCPCS codes that are not medically necessary based on *Medicare policy, guideline, or regulation*.		
		product has no Benefit Category under Medicare.
K1035	Molecular diagnostic test reader, nonprescription self-administered and self-collected use, FDA approved, authorized or cleared	Cue Reader While CMS developed a HCPCS code for this product, CMS also stated this product has no Benefit Category under Medicare.
K1036	Supplies and accessories (e.g., transducer) for low frequency ultrasonic diathermy treatment device, per month	(See K1004 above for the PainShield MD)
M0300	IV chelation therapy (chemical endarterectomy)	• NCD: Chelation Therapy for Treatment of Atherosclerosis (20.21) • NCD: Ethylenediamine-Tera-acetic (EDTA) Chelation Therapy for Treatment of Atherosclerosis (20.22)

Table 2 Set: CPT/HCPCS codes which are considered not medically necessary based on Criterion II of "Medicare Coverage Criteria" above are listed in the following tables.

NOTES: *Specific devices and products listed in the following tables may not be an all-inclusive list, but rather may only represent examples of the relevant technology. The "Effective Date" listed is the date the code was effective, which may or may not be the same date the Company's non-coverage position was effective.*

Table 2.1

Cardiac Contractility Modulation System		
Device/Product, and Manufacturer Information (when applicable)		Cardiac Contractility Modulation (CCM) System by Optimizer Dynamic
Code(s)	0408T	Insertion or replacement of permanent cardiac contractility modulation system, including contractility evaluation when performed, and programming of sensing and therapeutic parameters; pulse generator with transvenous electrodes *(Effective 1/1/2016)*
	0409T	; pulse generator only *(Effective 1/1/2016)*
	0410T	; atrial electrode only *(Effective 1/1/2016)*
	0411T	; ventricular electrode only *(Effective 1/1/2016)*
	0414T	Removal and replacement of permanent cardiac contractility modulation system pulse generator only *(Effective 1/1/2016)*
	0415T	Repositioning of previously implanted cardiac contractility modulation transvenous electrode (atrial or ventricular lead) *(Effective 1/1/2016)*
	0416T	Relocation of skin pocket for implanted cardiac contractility modulation pulse generator *(Effective 1/1/2016)*
	0417T	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, including review and report, implantable cardiac contractility modulation system *(Effective 1/1/2016)*
	0418T	Interrogation device evaluation (in person) with analysis, review and report, includes connection, recording and disconnection per patient encounter, implantable cardiac contractility modulation system *(Effective 1/1/2016)*
	C1824	Generator, cardiac contractility modulation (implantable) *(Effective 1/1/2020)*
	K1030	External recharging system for battery (internal) for use with implanted cardiac contractility modulation generator, replacement only *(Effective 4/1/2022)*
Medicare and Coverage Notes (when applicable)		The Assessment of Implantable CCM in the Heart Failure Group With Higher Ejection Fraction, or AIM HIGHer study (NCT05064709; G200042), which is evaluating the use of Cardiac Contractility Modulation Therapy via OPTIMIZER™ Smart Mini System, is a Medicare-approved Category B IDE study as of 1/2022. Coverage may be approved for members enrolled in the Medicare-approved study. Otherwise, coverage is not available for this procedure/service. *(To confirm participation in a Medicare-approved IDE study, the NCT number*

	must be provided and be verified as a Medicare-approved study on the CMS website for IDEs.) Note: While placement of the system or device will be non-covered, removal **without** replacement (0412T and 0413T) in some situations may be considered medically reasonable and necessary for unrelated reasons (e.g., pain, infection, etc.). See the *Medicare Benefit Policy Manual, Chapter 16, §180 – Services Related to and Required as a Result of Services Which Are Not Covered Under Medicare* for more information.
Date of Most Recent Evidence Review	7/14/2023
Evidence Summary	Evidence remains insufficient to support the use of CCM therapy with the OPTIMIZER Smart System for the treatment of heart failure. The generalizability of results published to date is limited by studies' lack of control groups, short follow-up duration, and mixed findings. Controlled studies with longer follow-up times are needed to confirm longer-term effects of CCM therapy for the management of heart failure. Therefore, the use of CCM therapy with the OPTIMIZER Smart System is considered **not medically necessary**.
Sources/Citations	• Impulse Dynamics: Cardiac Contractility Modulation. Link. • Providence Health Plan Medical Policy. Definition: Experimental/Investigational

Table 2.2

Nerve Repair with Synthetic Conduit or Vein Allograft		
Device/Product, and Manufacturer Information (when applicable)		N/A
Code(s)	64910	Nerve repair; with synthetic conduit or vein allograft (eg, nerve tube), each nerve *(Effective 1/1/2007)*
	C9352	Microporous collagen implantable tube (neuragen nerve guide), per centimeter length *(Effective 1/1/2008)*
	C9353	Microporous collagen implantable slit tube (neurawrap nerve protector), per centimeter length *(Effective 1/1/2008)*
	C9355	Collagen nerve cuff (neuromatrix), per 0. 5 centimeter length *(Effective 1/1/2008)*
	C9361	Collagen matrix nerve wrap (neuromend collagen nerve wrap), per 0.5 centimeter length *(Effective 7/1/2009)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/12/2024
Evidence Summary		There is insufficient scientific evidence to support the efficacy of conduits and nerve allografts for bridging the defects resulting from peripheral nerve injuries. The evidence base consists only of very small case series and case reports. Limitations of the case series include non-standardized assessment of outcomes, lack of comparator groups, lack of statistical analysis of

	findings, and heterogeneity in patient populations. In addition, the type and severity of the nerve injury varied substantially between studies. While one clinical practice guideline endorsed the use of processed nerve allografts in digital nerves, this conclusion was made on the basis of low -quality evidence with design limitations that undermine results' validity and generalizability (e.g., small sample sizes, lack of long-term follow-up, non-randomized groups, retrospective case series.) Additional studies are needed to determine whether or not the use of synthetic conduits or nerve allografts provide an improvement in health outcomes when used to repair peripheral nerve injuries. Therefore, the use of conduits and nerve allografts is considered **not medically necessary** as a treatment any indication, including peripheral nerve injuries and neuromas.
Sources/Citations	• Boston Medical Center. Health Net Plan. Medical Policy. Nerve Repairs for Peripheral Nerve Injuries Using Allografts, Autografts, and Conduits. Policy Number: OCA 3.701 Version Number: 11 Version Effective Date: 05/01/16. • Hayes, Inc. Processed Nerve Allografts with the Avance Nerve Graft (Axogen Corporation) for Peripheral Nerve Discontinuities. Updated May 11, 2023. Accessed Feb 12, 2024. https://evidence.hayesinc.com/report/htb.avance4778 • Salomon D, Miloro M, Kolokythas A. Outcomes of Immediate Allograft Reconstruction of Long-Span Defects of the Inferior Alveolar Nerve. J Oral Maxillofac Surg. 2016 Jun 14. • Papatheodorou LK, Williams BG, Sotereanos DG. Preliminary results of recurrent cubital tunnel syndrome treated with neurolysis and porcine extracellular matrix nerve wrap. J Hand Surg Am. 2015 May;40(5):987-92. • Rbia N, Bulstra LF, Saffari TM, Hovius SER, Shin AY. Collagen Nerve Conduits and Processed Nerve Allografts for the Reconstruction of Digital Nerve Gaps: A Single-Institution Case Series and Review of the Literature. World Neurosurg. 2019 Jul;127:e1176-e1184. Doi: 10.1016/j.wneu.2019.04.087. Epub 2019 Apr 16. PMID: 31003028. • Isaacs J, Safa B. A Preliminary Assessment of the Utility of Large-Caliber Processed Nerve Allografts for the Repair of Upper Extremity Nerve Injuries. Hand (N Y). 2017 Jan;12(1):55-59. PMID: 28082844 • Yampolsky A, Ziccardi V, Chuang SK. Efficacy of Acellular Nerve Allografts in Trigeminal Nerve Reconstruction. J Oral Maxillofac Surg. 2017 Oct;75(10):2230-2234. PMID: 28336306. • National Institute for Health and Care Excellence. Processed nerve allografts to repair peripheral nerve discontinuities. Published Nov 22, 2017. https://www.nice.org.uk/guidance/ipg597/chapter/1-Recommendations.

Table 2.3

Percutaneous Transluminal Coronary Lithotripsy	
Device/Product, and Manufacturer Information (when applicable)	Shockwave Coronary Rx Lithoplasty System and Shockwave Medical Peripheral IVL System, both by Shockwave Medical Inc.

Code(s)	~~0715T~~	**TERMED 12/31/2023** ~~Percutaneous transluminal coronary lithotripsy (List separately in addition to code for primary procedure) *(Effective 7/1/2022)*~~
	92972	Percutaneous transluminal coronary lithotripsy (List separately in addition to code for primary procedure) *(Effective 1/1/2024)*
	C1761	Catheter, transluminal intravascular lithotripsy, coronary *(Effective 7/1/2021)*
	C9764	Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy, includes angioplasty within the same vessel(s), when performed *(Effective 7/1/2020)*
	C9765	Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed *(Effective 7/1/2020)*
	C9766	Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel(s), when performed *(Effective 7/1/2020)*
	C9767	Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibeal/peroneal; with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel(s), when performed *(Effective 7/1/2020)*
	C9772	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies), with intravascular lithotripsy, includes angioplasty within the same vessel (s), when performed *(Effective 1/1/2021)*
	C9773	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed *(Effective 1/1/2021)*
	C9774	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel (s), when performed *(Effective 1/1/2021)*
	C9775	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel (s), when performed *(Effective 1/1/2021)*
Medicare and Coverage Notes (when applicable)		As of the most recent review of this policy, Medicare-approved Category B IDE studies for this Shockwave include the following: • As of 12/13/2018: The Disrupt CAD III With the Shockwave Coronary IVL System study (NCT03595176; G180146), is evaluating the use of the Shockwave Coronary Rx Lithoplasty System with the Shockwave C2 Coronary IVL Catheter in Calcified Coronary Arteries. • As of 6/15/2023: Shockwave Intravascular Lithotripsy System with the Shockwave Mini S Peripheral IVL Catheter study (NCT05858905; G220300), is evaluating the use of the Shockwave Mini S Peripheral IVL Catheter.

	• As of 11/9/2023: The Disrupt CAD Duo study (NCT05966662; G230172), is evaluating the use of the Shockwave C2+ 2Hz Coronary IVL Catheter in Calcified Coronary Arteries. Coverage may be approved for members enrolled in the Medicare-approved study. Otherwise, coverage is not available for this procedure/service. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)*
Date of Most Recent Evidence Review	1/16/2024
Evidence Summary	There is insufficient evidence to support the use of the Shockwave Intravascular Lithotripsy for treating any indication, including coronary artery disease and peripheral artery disease. Current evidence is of poor quality and does not compare the addition of IVL to standard of care alone. Furthermore, no clinical guidelines were identified that support the use of IVL. Therefore, the Shockwave Intravascular Lithotripsy System (Shockwave Medical, Inc.) is considered **not medically necessary** for the treatment of any indication, including but not limited to coronary artery disease and peripheral artery disease.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Shockwave Coronary Intravascular Lithotripsy System (Shockwave Medical, Inc.) for Treating Coronary Artery Disease. ECRI (2021). • Sattar et al. Coronary intravascular lithotripsy for coronary artery calcifications- systematic review of cases. PMID: 33889320. • Sheikh et al. Intravascular lithotripsy for severe coronary calcification: a systematic review. PMID: 34713678. • Shockwave Peripheral Intravascular Lithotripsy System for Treating Peripheral Artery Disease. ECRI (2023). • National Institutes for Health and Care Excellence (NICE). Intravascular lithotripsy for calcified coronary arteries during percutaneous coronary intervention. June 2020.

Table 2.4

Percutaneous Transcatheter Closure of Paravalvular Leak		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	93590	Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, mitral valve *(Effective 1/1/2017)*
	93591	Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve *(Effective 1/1/2017)*
	93592	Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (List separately in addition to code for primary procedure) *(Effective 1/1/2017)*
Medicare and Coverage Notes (when applicable)		While transcatheter repair of paravalvular leaks has been performed, there are currently no FDA-approved devices for this indication. Devices such as the Amplatzer Vascular Plug are commonly used off-label for this purpose.

	The PARADIGM trial (NCT0448982; G200097) is a Medicare-approved Category B IDE study as of 1/15/2021. Coverage may be approved for members enrolled in the Medicare-approved study. Otherwise, coverage is not available for this procedure/service. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)*
Date of Most Recent Evidence Review	6/1/2023
Evidence Summary	There are currently no FDA approved devices that are indicated for percutaneous transcatheter closure of paravalvular leak. Using devices such as the Amplatzer Vascular Plug is considered an off-label use. Therefore, percutaneous transcatheter closure of paravalvular leak is considered **not medically necessary**.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • National Institutes for Health and Care Excellence (NICE)

Table 2.5

Near-Infrared Dual Imaging of Meibomian Glands		
Device/Product, and Manufacturer Information (when applicable)		LipiScan Dynamic Meibomian Imager
Code(s)	0507T	Near-infrared dual imaging (ie, simultaneous reflective and trans- illuminated light) of meibomian glands, unilateral or bilateral, with interpretation and report *(Effective 7/1/2018)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/14/2024
Evidence Summary		For individuals who have dry eye symptoms who receive near infrared dual imaging (e.g., LipiScan Dynamic Meibomian Imager) there are no randomized controlled trials (RCTs) to support the use of this technology on health outcomes. Additional RCTs with large sample sizes are needed to determine the effects of this technology on health outcomes. Furthermore, no clinical guidelines were identified recommending LipiScan. Therefore, use of the LipiScan device is considered **not medically necessary** for all indications.
Sources/Citations		• Tear Science Website • Nichols JJ, Berntsen DA, Mitchell GL, Nichols KK. An assessment of grading scales for meibography images. Cornea. 2005 May;24(4):382-8. Doi: 10.1097/01.ico.0000148291.38076.59. PMID: 15829792. • UpToDate. Blepharitis. Last updated No 6, 2023. Accessed Feb 12, 2024. https://www.uptodate.com/contents/blepharitis

Table 2.6

Iris Prosthesis Insertion	
Device/Product, and Manufacturer Information (when applicable)	CustomFlex Artificial Iris, Human Optics

Code(s)	0616T	Insertion of iris prosthesis, including suture fixation and repair or removal of iris, when performed; without removal of crystalline lens or intraocular lens, without insertion of intraocular lens *(Effective 7/1/2020)*
	0617T	Insertion of iris prosthesis, including suture fixation and repair or removal of iris, when performed; with removal of crystalline lens and insertion of intraocular lens *(Effective 7/1/2020)*
	0618T	Insertion of iris prosthesis, including suture fixation and repair or removal of iris, when performed; with secondary intraocular lens placement or intraocular lens exchange *(Effective 7/1/2020)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		1/16/2024
Evidence Summary		There is insufficient evidence to support the use of the CustomFlex Artificial Iris for treating any indication, including congenital or traumatic aniridia. In general, sample populations are small, follow-up periods are short, studies are retrospective, study populations are heterogeneous, and surgical techniques vary precluding generalization of overall safety and efficacy. Large, prospective, multicenter studies are required In order to confirm findings and validate CustomFlex for individuals with congenital and acquired aniridia. Furthermore, no clinical guidelines were identified that support the use of this device. Therefore, the use of implanted artificial iris devices is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases • Hayes. CustomFlex ArtificialIris (HumanOptics AG, Clinical Research Consultants Inc.) for Aniridia. • CustomFlex Artificial Iris Prosthesis (HumanOptics AG) for Repairing Iris Defects. ECRI (2021). • Romano et al. Artificial iris implantation in congenital aniridia: A systematic review. PMID: 3637930. • Ayers et al. Results of the United States Food and Drug Administration Clinical Trial of the CustomFlex Artificial Iris. PMID: 35131359. • National Institutes for Health and Care Excellence (NICE). Intravascular lithotripsy for calcified coronary arteries during percutaneous coronary intervention. June 2020.

Table 2.7

Transcatheter Left Ventricular Restoration Device		
Device/Product, and Manufacturer Information (when applicable)		AccuCinch Ventricular Restoration System and Revivent TC System – BioVentrix
Code(s)	0643T	Transcatheter left ventricular restoration device implantation including right and left heart catheterization and left ventriculography when performed, arterial approach *(Effective 7/1/2021)*

Medicare and Coverage Notes (when applicable)	The AccuCinch Ventricular Restoration System has been granted Breakthrough Device Designation by the FDA. The Clinical Study of the BioVentrix Revivent TC™ System for Treatment of Left Ventricular Aneurysms ALIVE-EA (American Less Invasive Ventricular Enhancement-Expanded Access study (NCT05710042; G160013), which is evaluating the use of the ReviventTC™ system, is a Medicare-approved Category B IDE study as of 5/2023. In addition, the Clinical Study of the BioVentrix Revivent TC™ System for Treatment of Left Ventricular Aneurysms study (NCT02931240; G160013), also evaluating this system, is a Medicare-approved Category B IDE study as of 3/2017. Coverage may be considered for members enrolled in one of these Medicare-approved studies. Otherwise, coverage is not available for this procedure/service. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)*
Date of Most Recent Evidence Review	1/22/2024
Evidence Summary	There is insufficient evidence to support ventricular restorative devices (e.g., AccuCinch and BioVentrix Revivent TC™ System) for any indication, including heart failure. Additionally, while the FDA has granted the AccuCinch device the "Breakthrough Device Designation", it has yet to receive FDA approval. Coverage may be considered for members enrolled in one of these Medicare-approved studies. Otherwise, ventricular restorative devices such as AccuCinch and the BioVentrix Revivent TC™ System are considered **not medically necessary** for the treatment of any indication..
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Clinical evidence assessment on the AccuCinch Restoration System. ECRI (2022).

Table 2.8

Subchondral Calcium Phosphate (SCP) Injection (Subchondroplasty)		
Device/Product, and Manufacturer Information (when applicable)		N/A
Code(s)	0707T	Injection(s), bone-substitute material (eg, calcium phosphate) into subchondral bone defect (ie, bone marrow lesion, bone bruise, stress injury, microtrabecular fracture), including imaging guidance and arthroscopic assistance for joint visualization *(Effective 1/1/2022)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/12/2024

Evidence Summary	There is not enough evidence to support the use of subchondral calcium phosphate injections for knee bone marrow lesions. The current evidence is very poor. Long term, randomized studies are needed to determine efficacy and safety of the injections. Furthermore, no guidelines were identified recommending subchondroplasty for bone osteoarthritis or any other indication. Therefore, subchondral calcium phosphate injections (subchondroplasty) are considered **not medically necessary** for all indications, including the treatment of bone osteoarthritis
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Hayes. Subchondral Calcium Phosphate Injections for Knee Bone Marrow Lesions. (2023). Hayes reviewed studies by the following: ○ Farr and Cohen (2013) ○ Cohen and Sharkey (2016) ○ Levy and Cousins (2020) ○ Krebs et al. (2020) ○ Chua et al. (2021) ○ Pasqualotto et al. (2021) ○ Chatterjee et al. (2015) • No relevant clinical practice guidelines were identified

Table 2.9

MyoPro™ Myoelectric Upper Limb Orthotic		
Device/Product, and Manufacturer Information (when applicable)		MyoPro™ myoelectric upper limb orthotics
Code(s)	L8701	Powered upper extremity range of motion assist device, elbow, wrist, hand with single or double upright(s), includes microprocessor, sensors, all components and accessories, custom fabricated *(Effective 1/1/2019)*
	L8702	Powered upper extremity range of motion assist device, elbow, wrist, hand, finger, single or double upright(s), includes microprocessor, sensors, all components and accessories, custom fabricated *(Effective 1/1/2019)*
Medicare and Coverage Notes (when applicable)		According to *Social Security Act §1861(s)(9),* while orthoses may be covered under the Medicare Braces Benefit, all durable medical equipment, prosthetics, orthotics and supplies (DMEPOS) need to be **both** medically reasonable and medically necessary to meet the functional needs of the individual patient. Under Medicare, only medically reasonable and necessary services are covered *(Title XVIII of the Social Security Act, §1862(a)(1)(A)).* Coverage of DMEPOS includes determining if there is a "less costly alternative" which can provide the needed and appropriate therapeutic benefit for the individual. Items which provide features beyond what is necessary to support the body member would fall under the category of an""upgrade"" Upgrades include "excess components" to an orthotic device (e.g., a feature, an accessory, or a service) that are in addition to, or more extensive and/or more expensive than what is reasonable and necessary under Medicare's coverage requirements. While there is coding instruction provided by the Medicare Pricing, Data Analysis and Coding (PDAC) contractor, no specific Medicare coverage policy or guidance (e.g., manual, national coverage determination [NCD], local

	coverage determination [LCD] article [LCA], etc.) was identified specific to the MyoPro device or technology. In the absence of a NCD, LCD, or other Medicare policy, Medicare guidelines allow a Medicare Advantage Organization (MAO) to make coverage determinations, applying an objective, evidence-based process, based on authoritative evidence. *(Medicare IOM Pub. No. 100-16, Ch. 4, §90.5)* Therefore, Company coverage criteria are applied for medical necessity decision-making.
Date of Most Recent Evidence Review	1/16/2024
Evidence Summary	Evidence is insufficient to recommend the use of the MyoPro orthosis for any indication. No other payors are covering this device at this time, just the myoelectric upper limb prostheses with stand body-powered prosthetic devices that meet criteria. Recent Hayes reviews and an ECRI review identified too few published articles to consider evidence sufficient to support this technology. Therefore, the MyoPro orthosis is considered **not medically necessary** for any indication.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • No relevant clinical practice guidelines were identified • Medicare Claims Processing Manual, Pub. #100-04, Chapter 20— Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS), §10.1.3— Prosthetics and Orthotics (Leg, Arm, Back, and Neck Braces, Trusses, and Artificial Legs, Arms, and Eyes)—- Coverage Definition • Medicare Claims Processing Manual, Pub. #100-04, Chapter 20— Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS), §120— DME MACs— Billing Procedures Related To Advanced Beneficiary Notice (ABN) Upgrades • Medicare Benefit Policy Manual, Pub. #100-02, Chapter 15— Covered Medical and Other Health Services, §110.1—- Definition of Durable Medical Equipment, C. Necessary and Reasonable, 2. Reasonableness of the Equipment • Palmetto PDAC website for MyoPro® coding; Available at: MyoPro® (Myomo, Inc.) Assist Device—- Correct Coding – Revised

Table 2.10

MicroGenDX qPCR & NGS		
Device/Product, and Manufacturer Information (when applicable)		MicroGenDX qPCR & NGS
Code(s)	0112U	Infectious agent detection and identification, targeted sequence analysis (16S and 18S rRNA genes) with drug-resistance gene *(Effective 10/1/2019)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act
Date of Most Recent Evidence Review		2/12/2024
Evidence Summary		There is not enough evidence to show that the MicroGen DX Next-Gen DNA Sequencing test has established clinical utility. Furthermore, there is no evidence to show that it can be used to manage treatment decisions and/or

	improve health outcomes for any indication. In addition, no clinical practice guidelines recommend the use of this test. Therefore, the MicroGen DX Next-Gen DNA Sequencing test is considered **not medically necessary** for the diagnosis of infectious diseases.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Hayes molecular test assessment for Karius Test to diagnose Infections in immunocompromised or vulnerable hospitalized patients (2022, updated 2023) • McDonald M, Kameh D, Johnson ME, Johansen TEB, Albala D, Mouraviev V. A Head-to-Head Comparative Phase II Study of Standard Urine Culture and Sensitivity Versus DNA Next-generation Sequencing Testing for Urinary Tract Infections. Rev Urol. 2017;19(4):213-220. doi: 10.3909/riu0780. PMID: 29472825; PMCID: PMC5811878. • Tarabichi M, Shohat N, Goswami K, Parvizi J. Can next generation sequencing play a role in detecting pathogens in synovial fluid? Bone Joint J. 2018 Feb;100-B(2):127-133. doi: 10.1302/0301-620X.100B2.BJJ-2017-0531.R2. PMID: 29437053.

Table 2.11

Avise® Lupus		
Device/Product, and Manufacturer Information (when applicable)		aisle® DX Disease Activity Index (Progentec Diagnostics, Inc.; Oklahoma) and aisle® DX Flare Risk Index (Progentec Diagnostics, Inc.; Oklahoma)
Code(s)	0446U	Autoimmune diseases (systemic lupus erythematosus [SLE]), analysis of 10 cytokine soluble mediator biomarkers by immunoassay, plasma, individual components reported with an algorithmic risk score for current disease activity *(Effective 4/1/2024)*
	0447U	Autoimmune diseases (systemic lupus erythematosus [SLE]), analysis of 11 cytokine soluble mediator biomarkers by immunoassay, plasma, individual components reported with an algorithmic prognostic risk score for developing a clinical flare *(Effective 4/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. The Part B Medicare Contractor (MAC) for this laboratory location of Oklahoma is Novitas Solutions. While this MAC provides an LCD for biomarkers in general (LCD L35062), they do not provide specific coverage policy criteria for proteomic testing. The LCD L35062 states coverage is predicated on an underlying performance of acceptable, high-quality analytical validity for such testing, as well as recognized decision impact by the clinical community. The Company review of available evidence will apply to determine if these tests meet the LCD coverage requirements.
Date of Most Recent Evidence Review		1/16/2024
Evidence Summary		Evidence is currently insufficient to support the use of the Avise Lupus Test. No evidence-based clinical practice guidelines were identified that address this service. Prospective diagnostic cohort studies that assess the test's clinical validity are needed, and comparative studies of patients whose diagnosis is guided by Avise Lupus and standard laboratory testing are needed to assess the test's clinical utility. The diagnosis of SLE remains

	complex and no single test or combination of tests are completely accurate. Therefore, serum biomarker panel testing for lupus and other connective tissue diseases (e.g. Avise Lupus Test) is considered **not medically necessary** for the treatment of any indication, including diagnosing systemic lupus erythematosus.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • ECRI published genetic test assessment about the Avise Lupus Test. (2023). • Alexander et al. A multianalyte assay panel with cellbound complement activation products demonstrates clinical utility in systemic lupus erythematosus. PMID: 34253650. • O'Malley et al. Complement activation products vs standard ANA testing: Treatment outcomes, diagnosis, and economic impact (CAPSTONE) in systemic lupus erythematosus. PMID: 35775579. Wallce et al. Randomised prospective trial to assess the clinical utility of multianalyte assay panel with complement activation products for the diagnosis of SLE. PMID: 31592328. • American College of Rheumatology (ACR). 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Systemic Lupus Erythematosus. 2019.

Table 2.12

Virtual Reality Cognitive Behavioral Therapy Device		
Device/Product, and Manufacturer Information (when applicable)		RelieVRx (E1905)
Code(s)	0770T	Virtual reality technology to assist therapy (List separately in addition to code for primary procedure) *(Effective 1/1/2023)*
	0771T	Virtual reality (VR) procedural dissociation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the VR procedural dissociation supports, requiring the presence of an independent, trained observer to assist in the monitoring of the patien''s level of dissociation or consciousness and physiological status; initial 15 minutes of intraservice time, patient age 5 years or older *(Effective 1/1/2023)*
	0772T	Virtual reality (VR) procedural dissociation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the VR procedural dissociation supports, requiring the presence of an independent, trained observer to assist in the monitoring of the patien''s level of dissociation or consciousness and physiological status; each additional 15 minutes intraservice time (List separately in addition to code for primary service) *(Effective 1/1/2023)*
	0773T	Virtual reality (VR) procedural dissociation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the VR procedural dissociation supports; initial 15 minutes of intraservice time, patient age 5 years or older *(Effective 1/1/2023)*

	0774T	Virtual reality (VR) procedural dissociation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the VR procedural dissociation supports; each additional 15 minutes intraservice time (List separately in addition to code for primary service) *(Effective 1/1/2023)*
	E1905	Virtual reality cognitive behavioral therapy device (CBT), including pre-programmed therapy software *(Effective 4/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. Note, any CMS classification of associated devices as "DME" or provision of fee amounts do **not** establish medical necessity.
Date of Most Recent Evidence Review		2/14/2024
Evidence Summary		Evidence is currently insufficient to support the use of virtual reality therapy systems for any indication. There is currently a lack of high-quality studies that show efficacy of these devices beyond standard treatments. Furthermore, there are no evidence-based clinical practice guidelines recommending virtual therapy systems. Therefore, virtual reality-assisted therapy systems used for screening, diagnosing, or treating a health condition are considered **not medically necessary** for all indications.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases • ECRI. Virtual Reality-based Psychological and Behavioral Interventions for Treating Chronic Back Pain. Published Jan 28, 2024. Accessed Feb 2, 2024. https://www.ecri.org/components/Hotline/Pages/211288.aspx • Fouks Y, Kern G, Cohen A, et al. A virtual reality system for pain and anxiety management during outpatient hysteroscopy-A randomized control trial. Eur J Pain. 2022; 26(3):600-609. • Hendricks TM, Gutierrez CN, Stulak JM, et al. The use of virtual reality to reduce preoperative anxiety in first-time sternotomy patients: a randomized controlled pilot trial. Mayo Clin Proc. 2020; 95(6):1148-1157.

Table 2.13

ArteraAI Prostate Test		
Device/Product, and Manufacturer Information (when applicable)		ArteraAI Prostate Test (Artera Inc.; Florida)
Code(s)	0376U	Oncology (prostate cancer), image analysis of at least 128 histologic features and clinical factors, prognostic algorithm determining the risk of distant metastases, and prostate cancer-specific mortality, includes predictive algorithm to androgen deprivation therapy response, if appropriate *(Effective 4/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/14/2024

Evidence Summary	There is currently not enough evidence to establish the clinical utility of these types of testing. That is, it is not known whether use of system pathology or multimodal artificial intelligence (AI) models would result in medical or surgical management changes leading to improved health outcomes for individuals with prostate cancer. Additional studies are also needed to determine which individuals may benefit from these types of testing, when in the course of diagnosis and treatment the systems pathology testing or multimodal artificial intelligence testing should be performed, and what outcomes should be used in developing models. Therefore, AI models of testing prostate cancer, including ArteraAI, are considered **not medically necessary**.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • ArteraAI. ArteraAI Prostate test. Accessed Feb 14, 2024. https://artera.ai/arteraai-prostate-cancer-test • Esteva A, Feng J, van der Wal D, et al. Prostate cancer therapy personalization via multi-modal deep learning on randomized phase III clinical trials. NPJ Digit Med. 2022; 5(1):71. • National Comprehensive Cancer Network. Prostate Cancer. Version 4.2023. Published Sep 7, 2023. https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf

Table 2.14

NaviDKD™ Predictive Diagnostic Screening and PromarkerD		
Device/Product, and Manufacturer Information (when applicable)		NaviDKD™ Predictive Diagnostic Screening for Kidney Health test kits (Journey Biosciences, Inc.) and PromarkerD (Sonic Reference Laboratory; Texas)
Code(s)	0384U	Nephrology (chronic kidney disease), carboxymethyllysine, methylglyoxal hydroimidazolone, and carboxyethyl lysine by liquid chromatography with tandem mass spectrometry (LCMS/MS) and HbA1c and estimated glomerular filtration rate (GFR), with risk score reported for predictive progression to high-stage kidney disease *(Effective 4/1/2023)*
	0385U	Nephrology (chronic kidney disease), apolipoprotein A4 (ApoA4), CD5 antigen-like (CD5L), and insulin-like growth factor binding protein 3 (IGFBP3) by enzyme-linked immunoassay (ELISA), plasma, algorithm combining results with HDL, estimated glomerular filtration rate (GFR) and clinical data reported as a risk score for developing diabetic kidney disease *(Effective 4/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		Evidence is currently insufficient to support the use of the tests for the prediction of renal decline in people with diabetes. There is currently a lack of high-quality studies and clinical practice guidelines that assess the PromarkerD Test System and no studies were identified on NaviDKD. Large studies with long-term follow-up that demonstrate clinical utility are necessary to definitively determine medical necessity. NICE guidelines

	recommend against the use of PromarkerD. Patients with diabetes should be tested annually for diabetic kidney disease; testing for patients' risk profile for DKD among this population is not considered standard of care. Tests for the prediction of renal decline (E.g., NaviDKD, PromarkerD) are considered **not medically necessary** for the treatment of any indication, including but not limited to assessing the risk of diabetic kidney disease (DKD) in patients with diabetes.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Peters, et al. Canagliflozin Attenuates PromarkerD Diabetic Kidney Disease Risk Prediction Scores. PMID: 37176686. • Peters, et. al. PromarkerD Predicts Renal Function Decline in Type 2 Diabetes in the Canagliflozin Cardiovascular Assessment Study (CANVAS). PMID: 33036174. • Fusfeld, et. al. Evaluation of the clinical utility of the PromarkerD in-vitro test in predicting diabetic kidney disease and rapid renal decline through a conjoint analysis. PMID: 35913946. • Bringans, et. al. The New and the Old: Platform Cross-Vlaidation of Immunoaffinity MASS Spectrometry versus ELISA for PromarkerD, a Predictive Testfor Diabetic Kidney Disease. PMID: 33126588. • Bringans, et. al. A robust multiplex immunoaffinity mass spectrometry assay (PromarkerD) for clinical prediction of diabetic kidney disease. PMID: 33093819. • Bringans, et. al. Immunoaffinity Mass Spectrometry Diagnostic Tests for Multi-Biomarker Assays. PMID: 36781787. • Drinkwater, et. al. Assessment of biomarkers associated with rapid renal decline in the detection of retinopathy and its progression in type 2 diabetes: The Fremantle Diabetes Study Phase II. PMID: 33495038. • Peters, et. al. Validation of a protein biomarker test for predicting renal decline in type 2 diabetes: The Fremantle Diabetes Study Phase II. PMID: 31669066. • National Institute for Health and Care Excellence. PromarkerD for predicting the risk of diabetic kidney disease in people with type 2 diabetes. Published December 2022. https://www.nice.org.uk/advice/mib312/chapter/summary. Accessed 3/26/2024.

Table 2.15

Virtual Reality Gait Training		
Device/Product, and Manufacturer Information (when applicable)		N/A
Code(s)	0791T	Motor-cognitive, semi-immersive virtual reality–facilitated gait training, each 15 minutes (List separately in addition to code for primary procedure) *(Effective 7/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.

Date of Most Recent Evidence Review	7/5/2023
Evidence Summary	Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, virtual reality gait training is considered **not medically necessary** for the treatment of any indication.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • Keersmaecker et al. Virtual reality during gait training: does it improve gait function in persons with central nervous system movement disorders? A systematic review and meta-analysis. PMID: 30814368. 2019.

Table 2.16

Thermal Pulmonary Artery Denervation		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0793T	Percutaneous transcatheter thermal ablation of nerves innervating the pulmonary arteries, including right heart catheterization, pulmonary artery angiography, and all imaging guidance *(Effective 7/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		7/5/2023
Evidence Summary		Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, pulmonary artery denervation, including thermal pulmonary artery denervation, is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases • Davies et al. Current status of pulmonary artery denervation. PMID: 36262207. 2022.

Table 2.17

CureMatch Therapy Matching and Scoring Service		
Device/Product, and Manufacturer Information (when applicable)		CureMatch, Inc. (California)
Code(s)	0794T	Patient-specific, assistive, rules-based algorithm for ranking pharmaco-oncologic treatment options based on the patien''s tumor-specific cancer marker information obtained from prior molecular pathology, immunohistochemical, or other pathology results which have been previously interpreted and reported separately *(Effective 7/1/2023)*

Medicare and Coverage Notes (when applicable)	Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review	7/5/2023
Evidence Summary	Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, CureMatch is considered **not medically necessary** for the treatment of any indication.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.18

XV Lung Ventilation Analysis Software (XV LVAS)		
Device/Product, and Manufacturer Information (when applicable)		XV Lung Ventilation Analysis Software (XV LVAS)
Code(s)	0807T	Pulmonary tissue ventilation analysis using software-based processing of data from separately captured cinefluorograph images; in combination with previously acquired computed tomography (CT) images, including data preparation and transmission, quantification of pulmonary tissue ventilation, data review, interpretation and report *(Effective 7/1/2023)*
	0808T	Pulmonary tissue ventilation analysis using software-based processing of data from separately captured cinefluorograph images; in combination with computed tomography (CT) images taken for the purpose of pulmonary tissue ventilation analysis, including data preparation and transmission, quantification of pulmonary tissue ventilation, data review, interpretation and report *(Effective 7/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/5/2024
Evidence Summary		Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that assess the XV LVAS® System. Large studies with long-term follow-up that demonstrate clinical utility are necessary to definitively determine medical necessity. Therefore, the XV LVAS® System is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.19

SYNTap® Biomarker Test		
Device/Product, and Manufacturer Information (when applicable)		SYNTap® Biomarker Test (Amprion Clinical Laboratory)
Code(s)	0393U	Neurology (eg, Parkinson disease, dementia with Lewy bodies), cerebrospinal fluid (CSF), detection of misfolded Î±-synuclein protein by seed amplification assay, qualitative *(Effective 7/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		7/5/2023
Evidence Summary		Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, the SYNTap biomarker test is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.20

Gastric Electrophysiology Mapping with Simultaneous (GEMS) patient symptom profiling		
Device/Product, and Manufacturer Information (when applicable)		Gastric Electrophysiology Mapping with Simultaneous (GEMS) patient symptom profiling
Code(s)	C9787	Gastric electrophysiology mapping with simultaneous patient symptom profiling *(Effective 7/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		7/7/2023
Evidence Summary		Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, gastric electrophysiology mapping is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.21

PrecivityAD® Blood Test

Device/Product, and Manufacturer Information (when applicable)		PrecivityAD® blood test (C2N Diagnostics LLC; Missouri)
Code(s)	0412U	Beta amyloid, Aβ42/40 ratio, immunoprecipitation with quantitation by liquid chromatography with tandem mass spectrometry (LC-MS/MS) and qualitative ApoE isoform-specific proteotyping, plasma combined with age, algorithm reported as presence or absence of brain amyloid pathology *(Effective 10/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/12/2024
Evidence Summary		There is insufficient evidence to support beta amyloid immunoprecipitation with quantitation by liquid chromatography with tandem mass spectrometry (LC-MS/MS) and qualitative ApoE isoform-specific proteotyping. There is also a lack of comparison to standard of care testing. Therefore, beta amyloid immunoprecipitation with quantitation by liquid chromatography with tandem mass spectrometry (LC-MS/MS) and qualitative ApoE isoform-specific proteotyping is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • Iino et al. Quantification of Amyloid-β in Plasma by Simple and Highly Sensitive Immunoaffinity Enrichment and LC-MS/MS Assay. PMID: 33462584. 2021. • No relevant clinical guidelines were identified.

Table 2.22

Augmentative Algorithmic Analysis of Digitized Whole Slide Imaging For Oncology		
Device/Product, and Manufacturer Information (when applicable)		LungOI (Imagene; Pennsylvania) and PreciseDx Breast Biopsy Test (PreciseDx, Inc.; New York)
Code(s)	0414U	Oncology (lung), augmentative algorithmic analysis of digitized whole slide imaging for 8 genes (ALK, BRAF, EGFR, ERBB2, MET, NTRK1-3, RET, ROS1), and KRAS G12C and PD-L1, if performed, formalin-fixed paraffin-embedded (FFPE) tissue, reported as positive or negative for each biomarker *(Effective 10/1/2023)*
	0418U	Oncology (breast), augmentative algorithmic analysis of digitized whole slide imaging of 8 histologic and immunohistochemical features, reported as a recurrence score *(Effective 10/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		2/12/2024

Evidence Summary	There is insufficient evidence to support the use of augmentative algorithmic analysis of digitized whole slide imaging of genes for oncology diagnosis assistance or any other indication. There was no mention of algorithmic assistance including any genes from the digital pathology association white paper. No other evidence was identified. Therefore, whole slide imaging of genes is considered **not medically necessary** for the any indication, including but not limited to breast or lung cancer diagnosis.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. • Aeffner et al. Introduction to Digital Image Analysis in Whole-slide Imaging: A White Paper from the Digital Pathology Association. PMID: 30984469. 2019. • No relevant clinical guidelines were identified.

Table 2.23

In-Person Monitoring & Intervention During Psychedelic Medication Therapy		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0820T	Continuous in-person monitoring and intervention (eg, psychotherapy, crisis intervention), as needed, during psychedelic medication therapy; first physician or other qualified health care professional, each hour *(Effective 1/1/2024)*
	0821T	Continuous in-person monitoring and intervention (eg, psychotherapy, crisis intervention), as needed, during psychedelic medication therapy; second physician or other qualified health care professional, concurrent with first physician or other qualified health care professional, each hour (List separately in addition to code for primary procedure) *(Effective 1/1/2024)*
	0822T	Continuous in-person monitoring and intervention (eg, psychotherapy, crisis intervention), as needed, during psychedelic medication therapy; clinical staff under the direction of a physician or other qualified health care professional, concurrent with first physician or other qualified health care professional, each hour (List separately in addition to code for primary procedure) *(Effective 1/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/5/2024
Evidence Summary		Evidence is currently insufficient to support the use of this psychedelic medication (e.g. ketamine) for the treatment of any indication. There is currently a lack of high-quality studies and clinical practice guidelines that assess these services. Large studies with long-term follow-up that demonstrate clinical utility are necessary to definitively determine medical necessity. Therefore, In-Person Monitoring and Intervention During Psychedelic Medication Therapy (e.g. ketamine) is considered **not medically necessary** for the treatment of any indication, including but not limited to psychiatric disorders (e.g. depression), chronic pain or chronic daily headache.

Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • ECRI published genetic test assessment about the Avise Lupus Test. (2023). • Schoevers et al (2016). Oral ketamine for the treatment of pain and treatment-resistant depression. PMID: 26834167. • Lauritsen et al (2016). Intravenous ketamine for subacute treatment of refractory chronic migraine: a case series. PMID: 27878523. • Pomeroy et al (2018). Ketamine Infusions for Treatment Refractory Headache. PMID: 28025837. • American Society of Regional Anesthesia and Pain Medicine (ASRA), The American Academy of Pain (AAP) and The American Society of Anesthesiologists (ASA). Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Acute Pain Management From the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists. PMID: 29870457. • American Psychiatric Association (APA). A Consensus Statement on the Use of Ketamine in the Treatment of Mood Disorders. PMID: 28249076.

Table 2.24

Breast Opto-Acoustic Imaging		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0857T	Opto-acoustic imaging, breast, unilateral, including axilla when performed, real-time with image documentation, augmentative analysis and report (List separately in addition to code for primary procedure) *(Effective 1/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/27/2024
Evidence Summary		There is insufficient evidence to support opto-acoustic imaging of the breast. Evidence is minimal and does not show this technology results in an improvement in the net health outcomes. No evidence-based clinical practice guidelines exist as well. Therefore, optoacoustic imaging of the breast is considered **not medically necessary** for the treatment of any indication, including but not limited to breast cancer.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Dogan et al. Optoacoustic Imaging and Gray-Scale US Features of Breast Cancers: Correlation with Molecular Subtypes. Radiology. 2019;292(3):564-572. • Menezes et al. Optoacoustic imaging of the breast: correlation with histopathology and histopathologic biomarkers. Eur Radiol. 2019;29(12):6728-6740. • No relevant clinical guidelines were identified, and NCCN breast cancer guidelines do not mention this technology.

Table 2.25

Near-Infrared Spectroscopy		
Device/Product, and Manufacturer Information (when applicable)		InfraReDx LipiScan NIR Catheter Imaging System
Code(s)	0859T	Noncontact near-infrared spectroscopy (eg, for measurement of deoxyhemoglobin, oxyhemoglobin, and ratio of tissue oxygenation), **other than for screening** for peripheral arterial disease, image acquisition, interpretation, and report; each additional anatomic site (List separately in addition to code for primary procedure) *(Effective 1/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		There is insufficient evidence to support the efficacy of near-infrared spectroscopy to assess coronary artery plaque vulnerability, behavioral disorders, or for the prediction of wound healing. Additional studies of good methodological quality are required to support the clinical utility and medical necessity of this technology. Furthermore, no clinical practice guidelines assessed the use of near-infrared spectroscopy for any indication. Therefore near-infrared spectrometry is considered **not medically necessary** for assessing coronary artery plaque vulnerability.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. Hayes News Release: FDA Approves New Device to Measure the Fat Composition of Coronary Plaque. Published 2008. Accessed 1/1/2018. • Waxman S, Dixon SR, ''Allier P, et al. In vivo validation of a catheter-based near-infrared spectroscopy system for detection of lipid core coronary plaques: initial results of the SPECTACL study. JACC Cardiovascular imaging. 2009;2(7):858-868. • Kawashima C, Tanaka Y, Inoue A, et al. Hyperfunction of left lateral prefrontal cortex and automatic thoughts in social anxiety disorder: A near-infrared spectroscopy study. J Affect Disord. 2016;206:256-260. • U.S. Food and Drug Administration 510(k) Premarket Notification Letter: LipiScan Cornary Imaging System. https://www.accessdata.fda.gov/cdrh_docs/pdf7/K072932.pdf. Published 2008. Accessed 1/1/1018. • No relevant clinical guidelines were identified.

Table 2.26

Corpus Cavernosum Low-intensity Extracorporeal Shock Wave Therapy	
Device/Product, and Manufacturer Information (when applicable)	

Code(s)	0864T	Low-intensity extracorporeal shock wave therapy involving corpus cavernosum, low energy *(Effective 1/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. Low-intensity extracorporeal shockwave therapy (Li-ESWT) is a novel treatment for erectile dysfunction (ED), thought to stimulate neovascularization and nerve regeneration, and as such, has gained interest in treatment of ED related to radical prostatectomy or radiation therapy.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		Evidence is currently insufficient to support the use of low-intensity extracorporeal shockwave therapy (Li-ESWT). The shockwave generator types and protocols (energy settings, dosing, frequency of use, probe locations, and duration of therapy) were inconsistent between studies and consequently difficult to compare. Two clinical practice guidelines that address Li-ESWT currently recommend **against** the procedure for the treatment of erectile dysfunction due to a lack of high-quality evidence. Large, randomized controlled trials with uniform treatment parameters are needed to determine clinical utility. Therefore, low-intensity extracorporeal shockwave therapy is considered **not medically necessary** for the treatment of erectile dysfunction.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Matthew et. al. The use of low-intensity extracorporeal shockwave therapy in management of erectile dysfunction following prostate cancer treatment: a review of the current literature. PMID: 37426598. 2023. • Campbell et. al. Meta-analysis of randomized controlled trials that assess the efficacy of low-intensity shockwave therapy for the treatment of erectile dysfunction. PMID: 30956690. 2019. Brunckhorst et. al. A systematic review of the long-term efficacy of low-intensity shockwave therapy for vasculogenic erectile dysfunction. PMID: 2019. • Bakr andEl-Sakka. Extracorporeal Shockwave Therapy in Peyronie's Disease: Systematic Review and Meta-Analysis. PMID. 34511369. 2021. • American Urology Association (AUA). • Sexual Medicine Society of North America (SMSNA)

Table 2.27

Focal Ablative Therapy and Magnetic Field Induction Ablation (Prostate)		
Device/Product, and Manufacturer Information (when applicable)		Visualase Laser Ablation System (Medtronic) and Visualase® Thermal Therapy System (Bio Tex, Inc., Houston, TX)
Code(s)	0655T	Transperineal focal laser ablation of malignant prostate tissue, including transrectal imaging guidance, with MR-fused images or other enhanced ultrasound imaging *(Effective 7/1/2021)*
	0738T	Treatment planning for magnetic field induction ablation of malignant prostate tissue, using data from previously performed magnetic resonance imaging (MRI) examination *(Effective 1/1/2023)*
	0739T	Ablation of malignant prostate tissue by magnetic field induction, including all intraprocedural, transperineal needle/catheter placement for

		nanoparticle installation and intraprocedural temperature monitoring, thermal dosimetry, bladder irrigation, and magnetic field nanoparticle activation *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		Evidence supporting the use of this service is limited to case studies and small phase I or phase II clinical trials with limited follow-up. There have been some small published studies with longer-term results, however, these studies have been limited by small size, single institution and non-standard protocols, limiting the quality and generalizability of the results. No randomized controlled trials (RCTs) regarding focal laser ablation have been published. Studies evaluating the long-term oncologic control associated with focal laser ablation using standardized surveillance protocols are lacking. Therefore, the use of focal laser therapy for localized prostate cancer and magnetic field induction ablation of malignant prostate tissue is considered **not medically necessary**.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Review of laser interstitial thermal therapy for localized prostate cancer. ECRI (2019). • American Urological Association (AUA). • American Society for Radiation Oncology (ASTRO). • Society of Urologic Oncology (SUO). • National Comprehensive Cancer Network (NCCN).

Table 2.28

Analysis of Bone Strength and Fracture Risk		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0743T	Bone strength and fracture risk using finite element analysis of functional data and bone mineral density (BMD), with concurrent vertebral fracture assessment, utilizing data from a computed tomography scan, retrieval and transmission of the scan data, measurement of bone strength and BMD and classification of any vertebral fractures, with overall fracture-risk assessment, interpretation and report *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. This code is used when the service is performed as a screening service. This would be non-covered under Medicare statute.[2]
Date of Most Recent Evidence Review		03/26/2024
Evidence Summary		Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, bone strength and fracture risk using finite element analysis

	of functional data and bone mineral density is considered **not medically necessary** for the treatment of any indication. In addition, because this code is used when the service is performed as a screening service, it would be non-covered under Medicare statute until such time that it is added to the Medicare list of designated preventive services.[3]
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases • ECRI published genetic test assessment about the Avise Lupus Test. (2023). • Johannesdottir and associates (2018) reviewed the ability of CT-based methods. • Groenen and colleagues (2018). • Rajapakse and Chang (2018). • Allaire and co-workers (2019).

Table 2.29

Quantitative Pupillometry		
Device/Product, and Manufacturer Information (when applicable)		nPi® 200 Pupillometer System and VIP® 300
Code(s)	95919	Quantitative pupillometry with physician or other qualified health care professional interpretation and report, unilateral or bilateral *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		Evidence is currently insufficient to support the use of quantitative pupillometry. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. Therefore, quantitative pupillometry (e.g. nPi® 200 Pupillometer System and VIP® 300) is considered **not medically necessary** for the treatment of any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Chen et al (2005). • Taylor et al (2003). • Bertinotti et al (2002). • No relevant clinical guidelines were identified.

Table 2.30

Insertion of Bioprosthetic Valve		
Device/Product, and Manufacturer Information (when applicable)		VenoValve procedure
Code(s)	0744T	Insertion of bioprosthetic valve, open, femoral vein, including duplex ultrasound imaging guidance, when performed, including autogenous or

		nonautogenous patch graft (eg, polyester, ePTFE, bovine pericardium), when performed *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. The device/procedure is still in an experimental phase with active trials to determine its efficacy in patients with chronic venous insufficiency.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		There is not enough evidence to support the use of VenoValve for treating venous insufficiency or any other indication. Only feasibility studies exist with short term data and small sample sizes. Larger, randomized, comparative studies are needed. Furthermore, no clinical guidelines recommend VenoValve. Therefore, VenoValve is considered **not medically necessary** for any indication, including treating venous insufficiency.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Ulloa JH, Glickman M. One-Year First-in-Human Success for VenoValve in Treating Patients With Severe Deep Venous Insufficiency. Vascular and Endovascular Surgery. 2022;56(3):277-283. • No relevant clinical guidelines were identified.

Table 2.31

Stem Cell Therapy for Crohn's Fistula		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0748T	Injections of stem cell product into perianal perifistular soft tissue, including fistula preparation (eg, removal of setons, fistula curettage, closure of internal openings) *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		There is not enough evidence to support the use of stem cell therapy for treating Crohn's Disease fistulas. Larger, long term comparative studies are needed to determine safety and efficacy of the treatment. Furthermore, no evidence-based clinical practice guidelines were identified that support stem cell therapy for Crohn's fistulas. Therefore, stem cell therapy for Crohn's fistulas is considered **not medically necessary**.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Cao Y, Su Q, Zhang B, Shen F, Li S. Efficacy of stem cells therapy for Croh''s fistula: a meta-analysis and systematic review. Stem Cell Res Ther. 2021;12(1):32. • Wang H, Jiang HY, Zhang YX, Jin HY, Fei BY, Jiang JL. Mesenchymal stem cells transplantation for perianal fistulas: a systematic review and meta-analysis of clinical trials. Stem Cell Res Ther. 2023;14(1):103. • National Institute for Health and Care Excellence. Darvadstrocel for treating complex perianal fistulas in Crohn's disease. Published Jan 9,

	2019. https://www.nice.org.uk/guidance/ta556/chapter/1-Recommendations. Accessed 3/26/2024. • No relevant clinical guidelines were identified.

Table 2.32

Anumana Artificial Intelligence (AI)-based Electrocardiography		
Device/Product, and Manufacturer Information (when applicable)		Anumana artificial intelligence (AI)-based electrocardiography (ECG) algorithm
Code(s)	0764T	Assistive algorithmic electrocardiogram risk-based assessment for cardiac dysfunction (eg, low-ejection fraction, pulmonary hypertension, hypertrophic cardiomyopathy); related to concurrently performed electrocardiogram (List separately in addition to code for primary procedure) *(Effective 1/1/2023)*
	0765T	Assistive algorithmic electrocardiogram risk-based assessment for cardiac dysfunction (eg, low-ejection fraction, pulmonary hypertension, hypertrophic cardiomyopathy); related to previously performed electrocardiogram *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		Evidence is currently insufficient to support the use of AI-based algorithms for use in detection of cardiac dysfunction. AI-based algorithms are not widely used or accepted in clinical guidelines, evidence is limited to low-level retrospective studies, and the technology in general is new to the medical world. Therefore, artificial intelligence (AI)- based electrocardiography is considered **not medically necessary** for any indication.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. • Chen HY, Lin CS, Fang WH, et al. Artificial intelligence-enabled electrocardiography predicts left ventricular dysfunction and future cardiovascular outcomes: a retrospective analysis. J Per Med. 2022 Mar; 12(3):455-480. PMID 35330455.

Table 2.33

Therapeutic Hypothermia for Chemotherapy-Related Hair Loss		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0776T	Therapeutic induction of intra-brain hypothermia, including placement of a mechanical temperature-controlled cooling device to the neck over carotids and head, including monitoring (eg, vital signs and sport concussion assessment tool 5 [SCAT5]), 30 minutes of treatment *(Effective 1/1/2023)*

Medicare and Coverage Notes (when applicable)	Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review	12/30/2022
Evidence Summary	Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies and clinical practice guidelines that address this service. No evidence-based clinical practice guidelines exist as well. Therefore, therapeutic hypothermia is considered **not medically necessary** for the treatment or prevention of chemotherapy-related hair loss.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.34

Pressure Sensing Epidural Guidance System		
Device/Product, and Manufacturer Information (when applicable)		Accuro (RIVANNA®)
Code(s)	0777T	Real-time pressure-sensing epidural guidance system (List separately in addition to code for primary procedure) *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		1/9/2023
Evidence Summary		Insufficient evidence or clinical practice guidelines to support at this time. Therefore, Pressure Sensing Epidural Guidance System is considered **not medically necessary** for the treatment of any indication, including but not limited to assistance with epidural placement.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.35

Surface Mechanomyography (sMMG)		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0778T	Surface mechanomyography (sMMG) with concurrent application of inertial measurement unit (IMU) sensors for measurement of multi-joint range of motion, posture, gait, and muscle function *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.

Date of Most Recent Evidence Review	1/9/2023
Evidence Summary	Evidence is currently insufficient to support the use of this service. Surface Mechanomyography (sMMG) is considered **not medically necessary** for the treatment of any indication, including but not limited to physical therapy/rehabilitation. In addition, it is not medically necessary in addition to standard SEMG.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. • Talib et al. A systematic review of muscle activity assessment of the biceps brachii muscle using mechanomyography. PMID: 30511949. (2018). • Formstone et. al. Quantification of Motor Function Post-Stroke Using Novel Combination of Wearable Inertial and Mechanomyographic Sensors. PMID: 34129501. (2021). • Islam et al. Mechanomyogram for Muscle Function Assessment: A Review. PMID: 23536834. (2013).

Table 2.36

Gastrointestinal Myoelectrical Activity Study		
Device/Product, and Manufacturer Information (when applicable)		
Code(s)	0779T	Gastrointestinal myoelectrical activity study, stomach through colon, with interpretation and report *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		1/9/2023
Evidence Summary		Evidence is currently insufficient to support the use of this service. Therefore, castrointestinal myoelectrical activity monitoring is considered **not medically necessary** for the treatment of any indication, including but not limited post operative gastrointestinal surgeries, ulcerative colitis, Crohn's.
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.37

Targed Lung Denervation		
Device/Product, and Manufacturer Information (when applicable)		dNerva® Lung Denervation or Nuvaira™ Lung Denervation Systems, used in a procedure called Targeted Lung Denervation
Code(s)	0781T	Bronchoscopy, rigid or flexible, with insertion of esophageal protection device and circumferential radiofrequency destruction of the pulmonary

		nerves, including fluoroscopic guidance when performed; bilateral mainstem bronchi *(Effective 1/1/2023)*
	0782T	Bronchoscopy, rigid or flexible, with insertion of esophageal protection device and circumferential radiofrequency destruction of the pulmonary nerves, including fluoroscopic guidance when performed; unilateral mainstem bronchus *(Effective 1/1/2023)*
Medicare and Coverage Notes (when applicable)		The trial (NCT03639051; G180199) is a Medicare-approved Category B IDE study as of 4/2/2020. Coverage may be considered for members enrolled in the Medicare-approved study. If not, no coverage is available for this procedure/service. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)*
Date of Most Recent Evidence Review		1/9/2023
Evidence Summary		Evidence is currently insufficient to support the use of this service. Targeted Nerve Denervation (TND) is considered **not medically necessary** for the treatment of any indication, including but not limited to chronic lung conditions such as Chronic Obstructive Pulmonary Disease (COPD).
Sources/Citations		• ECRI, Hayes, Cochrane, and PubMed databases. No studies were identified. • No relevant clinical guidelines were identified.

Table 2.38

Lumipulse® G β-Amyloid Ratio (1-42/1-40) Test		
Device/Product, and Manufacturer Information (when applicable)		Lumipulse® G β-Amyloid Ratio (1-42/1-40) Test (Fujirebio Diagnostics, Inc.; Pennsylvania) and Elecsys® PhosphoTau (181P) CSF (pTau181) and βAmyloid (1-42) CSF II (Abeta 42) Ratio (Roche Diagnostics Operations, Inc.; Indiana)
Code(s)	0358U	Neurology (mild cognitive impairment), analysis of β-amyloid 1-42 and 1-40, chemiluminescence enzyme immunoassay, cerebral spinal fluid, reported as positive, likely positive, or negative *(Effective 1/1/2023)*
	0445U	β-amyloid (Abeta42) and 56hosphor tau (181P) (pTau181), electrochemiluminescent immunoassay (ECLIA), cerebral spinal fluid, ratio reported as positive or negative for amyloid pathology *(Effective 4/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act. Currently the diagnosis of Alzheime''s disease (AD) is a clinical diagnosis, focusing on the exclusion of other causes of dementia. In 1984 the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the Alzheime''s and Related Disorders Association (ADRDA) published clinical criteria for the diagnosis of AD. These organizations defined three categories: possible, probable, and definite AD. The only difference between probable and definite AD is that the definite category requires a brain biopsy confirming the presence of characteristic neurofibrillary tangles.
Date of Most Recent Evidence Review		3/26/2024

Evidence Summary	Evidence is currently insufficient to support the use of this service. There is currently a lack of high-quality studies that demonstrate that testing for Alzheimer disease (AD)-related biomarkers improves health outcomes for people who have AD, dementia, or mild cognitive impairment (MCI). Moreover, no clinical guidelines based on research recommend the use of AD biomarker. Therefore, beta amyloid testing (e.g. Lumipulse, Elecsys Beta Amyloid) is considered **not medically necessary** for the diagnosis of Alzheimer's disease and other forms of cognitive impairment (e.g. dementia).
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. • ECRI. Genetic Test Assessment cerebrospinal fluid-based assays for aiding diagnosis of Alzheimer's disease. 2022. • International Working Group. • Alzheimer's Association. • National Institute on Aging/Alzheimer's Association Diagnostic Guidelines for Alzheimer's Disease.

Table 2.39

Neurofilament Light Chain (NfL)		
Device/Product, and Manufacturer Information (when applicable)		Neurofilament Light Chain (NfL) (Mayo Clinic) and Neurofilament Light Chain (NfL) (Neuromuscular Clinical Laboratory at Washington University in St. Louis School of Medicine; Missouri)
Code(s)	0361U	Neurofilament light chain, digital immunoassay, plasma, quantitative *(Effective 1/1/2023)*
	0443U	Neurofilament light chain (NfL), ultra-sensitive immunoassay, serum or cerebrospinal fluid *(Effective 4/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		1/24/2024
Evidence Summary		There is insufficient evidence in the published literature to support the efficacy and clinical utility of blood-based biomarker tests to either expedite the diagnosis of MS or measure the risk for rapid progression of disability in individuals with RRMS, CIS, or any other condition. Therefore, Neurofilament Light Chain (NfL) testing is considered **not medically necessary** for the testing of any condition, including but not limited to Alzheimer's Disease, other forms of dementia, and multiple sclerosis.
Sources/Citations		• Seiberl and colleagues (2023) • Williams and colleagues (2022)

Table 2.40

IpsiHand™ Upper Extremity Rehabilitation System	
Device/Product, and Manufacturer Information (when applicable)	IpsiHand™ Upper Extremity Rehabilitation System (Neurolutions)

Code(s)	E0738	Upper extremity rehabilitation system providing active assistance to facilitate muscle re-education, include microprocessor, all components and accessories *(Effective 4/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/26/2024
Evidence Summary		There is not enough evidence to support the use of the IpsiHand System for treating chronic stroke patients. The technology is new and has only had preliminary research publications. Larger randomized trials are needed to determine efficacy. Furthermore, no clinical guidelines address the new technology. Therefore, IpsiHand is considered not medically necessary for treating patients with stroke. Therefore, the IpsiHand System is considered **not medically necessary** for treating stroke patients.
Sources/Citations		• Rustamov N, Souders L, Sheehan L, Carter A, Leuthardt EC. IpsiHand Brain-Computer Interface Therapy Induces Broad Upper Extremity Motor Recovery in Chronic Stroke. medRxiv. 2023:2023.2008.2026.23294320. • No clinical practice guidelines identified.

Table 2.41

Motus Hand and Foot		
Device/Product, and Manufacturer Information (when applicable)		Motus Hand and Motus Foot
Code(s)	E0739	Rehab system with interactive interface providing active assistance in rehabilitation therapy, includes all components and accessories, motors, microprocessors, sensors *(Effective 4/1/2024)*
Medicare and Coverage Notes (when applicable)		Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review		3/27/2024
Evidence Summary		There is not enough evidence to support the use of Motus Hand or Motus Foot for the rehabilitation of stroke patients. No studies were identifying comparing this robotic therapy to standard care and no studies were identified measuring patient-centered outcomes. Furthermore, no clinical guidelines were identified that mention these devices or support robotic rehabilitation over standard of care. Therefore, Motus Hand and Motus Foot are considered **not medically necessary** as a rehabilitation tool for any indication.
Sources/Citations		• Kabir R, Sunny MSH, Ahmed HU, Rahman MH. Hand Rehabilitation Devices: A Comprehensive Systematic Review. Micromachines. 2022;13(7):1033. • Greenfied R, Jeter, Russell, Housley, Stephen N., Igot, Belykh. Robotics-Assisted Stroke Rehabilitation with Machine Learning-Based Residual Severity Classification Georgia State University.

	https://math.gsu.edu/ibelykh/neuroengineering_and_rehabilitation_submitted.pdf. Published 2022. Accessed 3/27/2024. • No clinical practice guidelines identified.

Table 2.42

Device/Product, and Manufacturer Information (when applicable)		TriClip™ Transcatheter Tricuspid Valve Repair System (Abbott)
Code(s)	0569T	Transcatheter tricuspid valve repair, percutaneous approach; initial prosthesis
	0570T	Transcatheter tricuspid valve repair, percutaneous approach; each additional prosthesis during same session (List separately in addition to code for primary procedure)
Medicare and Coverage Notes (when applicable)		***Prior to April 1, 2024***, the TriClip™ device did not have FDA approval, and therefore, was not covered and not medically reasonable or necessary because it lacked the scientific evidence regarding safety and efficacy and would be considered investigational or experimental. Exceptions were made only when used in the context of a Medicare-approved investigational device exemption (IDE) study. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)* ***As of April 1, 2024***, the TriClip™ Transcatheter Tricuspid Valve Repair System received FDA-approval of the premarket approval application (PMA) and the TRILUMINATE pivotal trial is no longer recruiting; however, FDA approval does not demonstrate medical necessity as defined by Medicare, nor does it automatically indicate Medicare coverage. An evidence review was performed and detailed below. In addition, there is a potential conflict of interest noted with voting members of the FDA Committee. "The government database, called "Open Payments," records financial relationships between doctors and certain other health care providers and the makers of drugs and medical devices. KFF Health News found records of Abbott payments associated with 10 of the 14 voting members of the FDA advisory panel, which was weighing clinical evidence for a heart device called TriClip G4 System. The money, paid from 2016 through 2022 — the most recent year for which the database shows payments — adds up to about $650,000." According to the *Medicare Benefit Policy Manual, Chapter 16, §–80 – Services Related to and Required as a Result of Services Which Are Not Covered Under Medicare*, removal **without** replacement (**0580T**) may be considered medically reasonable and necessary for unrelated reasons (e.g., pain, infection, etc.).
Date of Most Recent Evidence Review		4/9/2024
Evidence Summary		There remains insufficient evidence to support the use of transcatheter tricuspid valve repair (TTVR), sometimes referred to as percutaneous

	tricuspid valve repair, for the treatment of tricuspid regurgitation. While less invasive than open surgery, there remains too little data to conclude that TTVR improves functional status and quality of life when compared to current standards of care. Additionally, what evidence exists contains very small sample populations, are at a high risk of bias, contain a lack of control groups, and do not contain sufficient long-term data (most being at or <12 months, at most 2 years). Therefore, transcatheter tricuspid valve repair (TTVR) for the treatment of tricuspid regurgitation (i.e., TriClip) is considered **not medically necessary**.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. • Bardeleben et al. Two-Year Outcomes for Tricuspid Repair With a Transcatheter Edge-to-Edge Valve Repair From the Transatlantic TRILUMINATE Trial. Published: August 2023. PMID: 37582170. • ECRI Clinical Evidence Assessment. 2022. • No clinical practice guidelines identified. Potential conflict of interest noted with voting members of the FDA Committee. https://www.govexec.com/oversight/2024/04/10-doctors-fda-panel-reviewing-abbott-heart-device-financial-ties-company/395547/. 2024.

Table 2.43

Extravascular (Substernal) ICD Therapy		
Device/Product, and Manufacturer Information (when applicable)		Aurora EV-ICD™ System (Extravascular Implantable Cardioverter Defibrillator) (Medtronic) The Medtronic EV ICD system is intended to provide the benefits of traditional, transvenous (TV) ICDs, including lifesaving defibrillation therapy, anti-tachycardia pacing to terminate arrhythmias, post-shock pacing to protect from sudden cardiac death, and temporary, back-up, bradycardia pacing to address abnormally slow heart rates. It is the same size (33 cc) and shape, and is expected to have similar longevity as traditional ICDs, but without any leads in the veins or heart. The EV ICD device is implanted in the left mid-axillary region below the left armpit, and the lead is placed under the sternum (breastbone), hence "substernal."
Code(s)	0571T	Insertion or replacement of implantable cardioverter-defibrillator system with substernal electrode(s), including all imaging guidance and electrophysiological evaluation (includes defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters), when performed
	0572T	Insertion of substernal implantable defibrillator electrode
	0573T	Removal of substernal implantable defibrillator electrode
	0574T	Repositioning of previously implanted substernal implantable defibrillator-pacing electrode
	0575T	Programming device evaluation (in person) of implantable cardioverter-defibrillator system with substernal electrode, with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional

	0576T	Interrogation device evaluation (in person) of implantable cardioverter-defibrillator system with substernal electrode, with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter
	0577T	Electrophysiological evaluation of implantable cardioverter-defibrillator system with substernal electrode (includes defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters)
	0578T	Interrogation device evaluation(s) (remote), up to 90 days, substernal lead implantable cardioverter-defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	0579T	Interrogation device evaluation(s) (remote), up to 90 days, substernal lead implantable cardioverter-defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
	0614T	Removal and replacement of substernal implantable defibrillator pulse generator
Medicare and Coverage Notes (when applicable)		***Prior to October 20, 2023***, the Aurora EV-ICD device did not have FDA approval, and therefore, was not covered and not medically reasonable or necessary because it lacked the scientific evidence regarding safety and efficacy and would be considered investigational or experimental. Exceptions were made only when used in the context of a Medicare-approved investigational device exemption (IDE) study. *(To confirm participation in a Medicare-approved IDE study, the NCT number must be provided and be verified as a Medicare-approved study on the* CMS website for IDEs*.)* ***As of October 20, 2023***, the Aurora EV-ICD received FDA-approval of the premarket approval application (PMA) and is "indicated for the automated treatment of patients who have experienced, or are at significant risk of developing, life-threatening ventricular tachyarrhythmias through the delivery of antitachycardia pacing, cardioversion, and defibrillation therapies. Medical conditions that may indicate a patient for an EV-ICD for primary or secondary prevention of sudden cardiac death due to life-threatening ventricular tachyarrhythmias include: • Previous ventricular tachyarrhythmias • Coronary disease with left ventricular dysfunction • Cardiomyopathy • Inherited primary arrhythmia syndromes • Congenital heart disease" **FDA approval alone does not demonstrate medical necessity as defined by Medicare, nor does it automatically indicate Medicare coverage.** CMS issued an NCD in 1986 providing limited coverage of implantable defibrillators. The policy has expanded over the years with revisions in 1991, 1999, 2003, 2004, and 2005. As a recently approved system, the evidence of long-tern safety and efficacy of the Aurora EV-ICD™ System, including how it compares to more traditional, transvenous ICDs, would not be included in

	the most recent national coverage analysis (NCA) regarding implantable cardioverter defibrillators (ICDs). Finally, claims for the Aurora EV-ICD would not be paid under NCD claim processing guidelines, which means non-coverage of this system is **not** more restrictive than Original Medicare. The Medicare Change Request 13390 provides ICD-10 coding information related to NCDs, including the ICD NCD. Specifically, this NCD is configured to apply to CPT codes 33223, 33230, 33231, 33240, 33241, 33243, 33244, 33249, 33262, 33263, 33264, 33270, 33271, 33272, 33273, G0448 (Group 1) and 33202, 33203, 33215, 33216, 33217, 33218, 33220, 33224, 33225, C7537, C7538, C7539, C7540 (Group 2). Category III codes represent new and emerging medical technologies, and Medicare is **not** set up to pay for this technology by way of these codes under this NCD. An evidence review was performed and is detailed below.
Date of Most Recent Evidence Review	4/24/2024
Evidence Summary	Evidence is insufficient to support the use of the EV ICD system as part of the treatment of any condition. Studies have not compared Aurora with other ICDs and outcomes are not reported at more than three-year follow-up. As Aurora's expected lifetime is 11 years, longer follow-up durations and AEs relevant to the impetus for developing an EV-ICD are needed to warrant conclusions. Therefore, the Extravascular Implantable Cardioverter Defibrillator (EV ICD) system is considered **not medically necessary** for the treatment of any indication.
Sources/Citations	• ECRI, Hayes, Cochrane, and PubMed databases. • Bardeleben et al. Two-Year Outcomes for Tricuspid Repair With a Transcatheter Edge-to-Edge Valve Repair From the Transatlantic TRILUMINATE Trial. Published: August 2023. PMID: 37582170. • ECRI Clinical Evidence Assessment. 2022. • No clinical practice guidelines identified.

Table 2.XX

Device/Product, and Manufacturer Information (when applicable)	**Placeholder for future services/technologies**
Code(s)	
Medicare and Coverage Notes (when applicable)	Not medically necessary under Section 1862(a)(1) of the Social Security Act.
Date of Most Recent Evidence Review	
Evidence Summary	
Sources/Citations	•

***Coding Notes:**

- The code list above is provided as a courtesy and may not be all-inclusive. Inclusion or omission of a code from this policy neither implies nor guarantees reimbursement or coverage. Some codes may not require routine review for medical necessity, but they are subject to provider contracts, as well as member benefits, eligibility and potential utilization audit. According to Medicare, "presence of a payment amount in the MPFS and the Medicare physician fee schedule database (MPFSDB) does not imply that CMS has determined that the service may be covered by Medicare." The issuance of a CPT or HCPCS code or the provision of a payment or fee amount by Medicare does **not** make a procedure medically reasonable or necessary or a covered benefit by Medicare. *(Medicare Claims Processing Manual, Chapter 23 - Fee Schedule Administration and Coding Requirements, §30 - Services Paid Under the Medicare Physician's Fee Schedule, A. Physician's Services)*
- All unlisted codes are reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is submitted for non-covered services addressed in this policy then it will be **denied as not covered**. If an unlisted code is submitted for potentially covered services addressed in this policy, to avoid post-service denial, **prior authorization is recommended**.
- **See the non-covered and prior authorization lists on the Company Medical Policy, Reimbursement Policy, Pharmacy Policy and Provider Information website for additional information.**
- HCPCS/CPT code(s) may be subject to National Correct Coding Initiative (NCCI) procedure-to-procedure (PTP) bundling edits and daily maximum edits known as "medically unlikely edits" (MUEs) published by the Centers for Medicare and Medicaid Services (CMS). This policy does not take precedence over NCCI edits or MUEs. Please refer to the CMS website for coding guidelines and applicable code combinations.

REFERENCES

1. Medicare Benefit Policy Manual, Chapter 14 – Medical Devices, 10 - Coverage of Medical Devices; Last Updated 11/2014; Available at: https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/bp102c14.pdf [Cited 2/8/2024]
2. US Government Publishing Office. Electronic code of federal regulations: part 422 – 42 CFR § 422.101 - Requirements relating to basic benefits
3. Medicare Preventive Services; Last Updated 2023; Available at: https://www.cms.gov/Medicare/Prevention/PrevntionGenInfo/medicare-preventive-services/MPS-QuickReferenceChart-1.html [Cited 2/8/2024]
4. Noridian Jurisdiction D (J-D) *Noncovered Items*; Last Updated 12/9/2023; Available at: https://med.noridianmedicare.com/web/jddme/topics/noncovered-items [Cited 2/8/2024]

POLICY REVISION HISTORY

DATE	REVISION SUMMARY
2/2023	Interim update (moved codes for Intracept to another policy)
3/2023	Interim update (added M0300 to policy)
4/2023	Interim update (added L8701, L8702, K1024, K1025, K1031, K1032, K1033 to policy). Removed select codes from policy (note that removal from this policy does not automatically warrant or guarantee coverage). Q2 2023 code updates.
6/2023	Interim update (moved 0228U from this policy to a different policy and moved 0114U from Table 1 to Table 2)
7/2023	Q3 2023 code updates
10/2023	Annual review and Q4 2023 code updates; reformatted tables and updated devices/systems which may be considered medically necessary only if performed in the context of a Medicare-approved study
1/2024	Interim update (moved code for colonic lavage to another policy) and Q1 2024 code updates

4/2024	Interim update; align with CMS Final Rule Requirements regarding published policy criteria & evidence sources when there is no Medicare coverage policy or guidance; Q2 2024 code updates
5/2024	Interim update; update non-coverage rationale for TriClip™, the Aurora EV-ICD™ System, and for the Avise® Lupus test