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Area Medical Policy
Lines Of Business All Lines of Business

Experimental/Investigational Services

MEDICAL POLICY GUIDANCE

Services are defined as experimental/investigational when the treatment, procedure, facility, equipment, drug, service, supply or intervention has not been determined to be medically effective for the condition being treated.

Services considered to be experimental/investigational by this policy are deemed non-covered services.

POLICY POSITION:

Services meeting **ANY** of the following criteria are considered to be experimental/investigational:

- The service does not have Food and Drug Administration (FDA) approval for the specific relevant indication(s); **or**
- Currently available scientific evidence does not permit conclusions to be made concerning the effect of the service on health outcomes; **or**
- The service has not been proven to be as safe or effective in achieving an outcome equal to or exceeding those of alternative services; **or**
- The service has not been proven to improve health outcomes; **or**
- The service has not been proven to be applicable outside the research setting; **or**
- Research is unavailable as the treatment, procedure, equipment, drug, service, supply or intervention has not been adequately studied.

CODES:

| Code | Description |
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| 0014M | Liver disease, analysis of 3 biomarkers (hyaluronic acid [HA], procollagen III amino terminal peptide [PIIINP], tissue inhibitor of metalloproteinase 1 [TIMP-1]), using immunoassays, utilizing serum, prognostic algorithm reported as a risk score and risk of liver fibrosis and liver-related clinical events within 5 years |
| 0111T | Long-chain (C20-22) omega-3 fatty acids in red blood cell (RBC) membranes |
| 0126T | Common carotid intima-media thickness (IMT) study for evaluation of atherosclerotic burden or coronary heart disease risk factor assessment |
| 0174T | Computer-aided detection (CAD) (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation and report, with or without digitization of film radiographic images, chest radiograph(s), performed concurrent with primary interpretation (List separately in addition to code for primary procedure) |
| 0175T | Computer-aided detection (CAD) (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation and report, with or without digitization of film radiographic images, chest radiograph(s), performed remote from primary interpretation |
| 0198T | Measurement of ocular blood flow by repetitive intraocular pressure sampling, with interpretation and report |
| 0200T | Percutaneous sacral augmentation (sacroplasty), unilateral injection(s), including the use of a balloon or mechanical device, when used, 1 or more needles, includes imaging guidance and bone biopsy, when performed |
| 0201T | Percutaneous sacral augmentation (sacroplasty), bilateral injections, including the use of a balloon or mechanical device, when used, 2 or more needles, includes imaging guidance and bone biopsy, when performed |
| 0202T | Posterior vertebral joint(s) arthroplasty (e.g., facet joint[s] replacement), including facetectomy, laminectomy, foraminotomy, and vertebral column fixation, injection of bone cement, when performed, including fluoroscopy, single level, lumbar spine |
| 0207T | Evacuation of meibomian glands, automated, using heat and intermittent pressure, unilateral |
| 0219T | Placement of a posterior intra-facet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; cervical |
| 0220T | Placement of a posterior intra-facet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; thoracic |
| 0221T | Placement of a posterior intra-facet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; lumbar |
| 0222T | Placement of a posterior intra-facet 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) |

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| 0263T | Intramuscular autologous bone marrow cell therapy, with preparation of harvested cells, multiple injections, one leg, including ultrasound guidance, if performed; complete procedure including unilateral or bilateral bone marrow harvest |
| 0264T | Intramuscular autologous bone marrow cell therapy, with preparation of harvested cells, multiple injections, one leg, including ultrasound guidance, if performed; complete procedure excluding bone marrow harvest |
| 0265T | Intramuscular autologous bone marrow cell therapy, with preparation of harvested cells, multiple injections, one leg, including ultrasound guidance, if performed; unilateral or bilateral bone marrow harvest only for intramuscular autologous bone marrow cell therapy |
| 0266T | Implantation or replacement of carotid sinus baroreflex activation device; total system (includes generator placement, unilateral or bilateral lead placement, intra-operative interrogation, programming, and repositioning, when performed) |
| 0267T | Implantation or replacement of carotid sinus baroreflex activation device; lead only, unilateral (includes intra-operative interrogation, programming, and repositioning, when performed) |
| 0268T | Implantation or replacement of carotid sinus baroreflex activation device; pulse generator only (includes intra-operative interrogation, programming, and repositioning, when performed) |
| 0269T | Revision or removal of carotid sinus baroreflex activation device; total system (includes generator placement, unilateral or bilateral lead placement, intra-operative interrogation, programming, and repositioning, when performed) |
| 0270T | Revision or removal of carotid sinus baroreflex activation device; lead only, unilateral (includes intra-operative interrogation, programming, and repositioning, when performed) |
| 0271T | Revision or removal of carotid sinus baroreflex activation device; pulse generator only (includes intra-operative interrogation, programming, and repositioning, when performed) |
| 0272T | Interrogation device evaluation (in person), carotid sinus baroreflex activation system, including telemetric iterative communication with the implantable device to monitor device diagnostics and programmed therapy values, with interpretation and report (e.g., battery status, lead impedance, pulse amplitude, pulse width, therapy frequency, pathway mode, burst mode, therapy start/stop times each day); |
| 0273T | Interrogation device evaluation (in person), carotid sinus baroreflex activation system, including telemetric iterative communication with the implantable device to monitor device diagnostics and programmed therapy values, with interpretation and report (e.g., battery status, lead impedance, pulse amplitude, pulse width, therapy frequency, pathway mode, burst mode, therapy start/stop times each day); with programming |
| 0278T | Transcutaneous electrical modulation pain reprocessing (e.g., scrambler therapy), each treatment session (includes placement of electrodes) |

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| 0329T | Monitoring of intraocular pressure for 24 hours or longer, unilateral or bilateral, with interpretation and report |
| 0330T | Tear film imaging, unilateral or bilateral, with interpretation and report |
| 0333T | Visual evoked potential, screening of visual acuity, automated, with report |
| 0335T | Insertion of sinus tarsi implant |
| 0338T | Transcatheter renal sympathetic denervation, percutaneous approach including arterial puncture, selective catheter placement(s) renal artery(ies), fluoroscopy, contrast injection(s), intra-procedural road-mapping and radiological supervision and interpretation, including pressure gradient measurements, flush aortogram and diagnostic renal angiography when performed; unilateral |
| 0339T | Transcatheter renal sympathetic denervation, percutaneous approach including arterial puncture, selective catheter placement(s) renal artery(ies), fluoroscopy, contrast injection(s), intra-procedural road-mapping and radiological supervision and interpretation, including pressure gradient measurements, flush aortogram and diagnostic renal angiography when performed; bilateral |
| 0342T | Therapeutic apheresis with selective HDL delipidation and plasma reinfusion |
| 0358T | Bioelectrical impedance analysis whole body composition assessment, with interpretation and report |
| 0378T | Visual field assessment, with concurrent real time data analysis and accessible data storage with patient initiated data transmitted to a remote surveillance center for up to 30 days; review and interpretation with report by a physician or other qualified health care professional |
| 0379T | Visual field assessment, with concurrent real time data analysis and accessible data storage with patient initiated data transmitted to a remote surveillance center for up to 30 days; technical support and patient instructions, surveillance, analysis, and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional |
| 0396T | Intra-operative use of kinetic balance sensor for implant stability during knee replacement arthroplasty (List separately in addition to code for primary procedure) |
| 0400T | Multi-spectral digital skin lesion analysis of clinically atypical cutaneous pigmented lesions for detection of melanomas and high risk melanocytic atypia; one to five lesions |
| 0401T | Multi-spectral digital skin lesion analysis of clinically atypical cutaneous pigmented lesions for detection of melanomas and high risk melanocytic atypia; six or more lesions |
| 0405T | Oversight of the care of an extracorporeal liver assist system patient requiring review of status, review of laboratories and other studies, and revision of orders and liver assist care plan (as appropriate), within a calendar month, 30 minutes or more of non-face-to-face time |
| 0422T | Tactile breast imaging by computer-aided tactile sensors, unilateral or bilateral |

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| 0423T | Secretory type II phospholipase A2 (sPLA2-IIA) |
| 0424T | Insertion or replacement of neurostimulator system for treatment of central sleep apnea; complete system (transvenous placement of right or left stimulation lead, sensing lead, implantable pulse generator) |
| 0425T | Insertion or replacement of neurostimulator system for treatment of central sleep apnea; sensing lead only |
| 0426T | Insertion or replacement of neurostimulator system for treatment of central sleep apnea; stimulation lead only |
| 0427T | Insertion or replacement of neurostimulator system for treatment of central sleep apnea; pulse generator only |
| 0428T | Removal of neurostimulator system for treatment of central sleep apnea; pulse generator only |
| 0429T | Removal of neurostimulator system for treatment of central sleep apnea; sensing lead only |
| 0430T | Removal of neurostimulator system for treatment of central sleep apnea; stimulation lead only |
| 0431T | Removal and replacement of neurostimulator system for treatment of central sleep apnea, pulse generator only |
| 0432T | Repositioning of neurostimulator system for treatment of central sleep apnea; stimulation lead only |
| 0433T | Repositioning of neurostimulator system for treatment of central sleep apnea; sensing lead only |
| 0434T | Interrogation device evaluation implanted neurostimulator pulse generator system for central sleep apnea |
| 0435T | Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; single session |
| 0436T | Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; during sleep study |
| 0440T | Ablation, percutaneous, cryoablation, includes imaging guidance; upper extremity distal/peripheral nerve |
| 0441T | Ablation, percutaneous, cryoablation, includes imaging guidance; lower extremity distal/peripheral nerve |
| 0442T | Ablation, percutaneous, cryoablation, includes imaging guidance; nerve plexus or other truncal nerve (e.g., brachial plexus, pudendal nerve) |
| 0444T | Initial placement of a drug-eluting ocular insert under one or more eyelids, including fitting, training, and insertion, unilateral or bilateral |

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| 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 |
| 0469T | Retinal polarization scan, ocular screening with on-site automated results, bilateral |
| 0470T | Optical coherence tomography (OCT) for micro-structural and morphological imaging of skin, image acquisition, interpretation, and report; first lesion |
| 0471T | Optical coherence tomography (OCT) for micro-structural and morphological imaging of skin, image acquisition, interpretation, and report; each additional lesion (List separately in addition to code for primary procedure) |
| 0472T | Device evaluation, interrogation, and initial programming of intraocular retinal electrode array (e.g., retinal prosthesis), in person, with iterative adjustment of the implantable device to test functionality, select optimal permanent programmed values with analysis, including visual training, with review and report by a qualified health care professional |
| 0473T | Device evaluation and interrogation of intraocular retinal electrode array (e.g., retinal prosthesis), in person, including reprogramming and visual training, when performed, with review and report by a qualified health care professional |
| 0484T | Transcatheter mitral valve implantation/replacement (TMVI) with prosthetic valve; transthoracic exposure (e.g., thoracotomy, transapical) |
| 0485T | Optical coherence tomography (OCT) of middle ear, with interpretation and report; unilateral |
| 0486T | Optical coherence tomography (OCT) of middle ear, with interpretation and report; bilateral |
| 0487T | Biomechanical mapping, transvaginal, with report |
| 0488T | Preventive behavior change, online/electronic structured intensive program for prevention of diabetes using a standardized diabetes prevention program curriculum, provided to an individual, per 30 days |
| 0489T | Autologous adipose-derived regenerative cell therapy for scleroderma in the hands; adipose tissue harvesting, isolation and preparation of harvested cells including incubation with cell dissociation enzymes, removal of non-viable cells and debris, determination of concentration and dilution of regenerative cells |
| 0490T | Autologous adipose-derived regenerative cell therapy for scleroderma in the hands; multiple injections in one or both hands |
| 0491T | Ablative laser treatment, non-contact, full field and fractional ablation, open wound, per day, total treatment surface area; first 20 sq cm or less |
| 0492T | Ablative laser treatment, non-contact, full field and fractional ablation, open wound, per day, total treatment surface area; each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure) |
| 0493T | Near-infrared spectroscopy studies of lower extremity wounds (e.g., for oxyhemoglobin measurement) |

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| 0497T | External patient-activated, physician- or other qualified health care professional-prescribed, electrocardiographic rhythm derived event recorder without 24 hour attended monitoring; in-office connection |
| 0498T | External patient-activated, physician- or other qualified health care professional-prescribed, electrocardiographic rhythm derived event recording without 24 hour attended monitoring; review and interpretation by a physician or other qualified health care professional per 30 days with at least one patient-generated triggered event |
| 0505T | Endovenous femoral-popliteal arterial revascularization, with transcatheter placement of intravascular stent graft(s) and closure by any method, including percutaneous or open vascular access, ultrasound guidance for vascular access when performed, all catheterization(s) and intra procedural road-mapping and imaging guidance necessary to complete the intervention, all associated radiological supervision and interpretation, when performed, with crossing of the occlusive lesion in an extraluminal fashion |
| 0506T | Macular pigment optical density measurement by heterochromatic flicker photometry, unilateral or bilateral, with interpretation and report |
| 0507T | Near-infrared dual imaging (i.e., simultaneous reflective and trans-illuminated light) of meibomian glands, unilateral or bilateral, with interpretation and report |
| 0508T | Pulse-echo ultrasound bone density measurement resulting in indicator of axial bone mineral density, tibia |
| 0512T | Extracorporeal shock wave for integumentary wound healing, high energy, including topical application and dressing care; initial wound |
| 0513T | Extracorporeal shock wave for integumentary wound healing, high energy, including topical application and dressing care; each additional wound (List separately in addition to code for primary procedure) |
| 0515T | Insertion of wireless cardiac stimulator for left ventricular pacing, including device interrogation and programming, and imaging supervision and interpretation, when performed; complete system (includes electrode and generator [transmitter and battery]) |
| 0516T | Insertion of wireless cardiac stimulator for left ventricular pacing, including device interrogation and programming, and imaging supervision and interpretation, when performed; electrode only |
| 0517T | Insertion of wireless cardiac stimulator for left ventricular pacing, including device interrogation and programming, and imaging supervision and interpretation, when performed; pulse generator component(s) (battery and/or transmitter) only |
| 0518T | Removal of only pulse generator component(s) (battery and/or transmitter) of wireless cardiac stimulator for left ventricular pacing |
| 0519T | Removal and replacement of wireless cardiac stimulator for left ventricular pacing; pulse generator component(s) (battery and/or transmitter) |

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| 0520T | Removal and replacement of wireless cardiac stimulator for left ventricular pacing; pulse generator component(s) (battery and/or transmitter), including placement of a new electrode |
| 0521T | Interrogation device evaluation (in person) with analysis, review and report, includes connection, recording, and disconnection per patient encounter, wireless cardiac stimulator for left ventricular pacing |
| 0522T | 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, wireless cardiac stimulator for left ventricular pacing |
| 0523T | Intra procedural coronary fractional flow reserve (FFR) with 3D functional mapping of color-coded FFR values for the coronary tree, derived from coronary angiogram data, for real-time review and interpretation of possible atherosclerotic stenosis(es) intervention (List separately in addition to code for primary procedure) |
| 0525T | Insertion or replacement of intracardiac ischemia monitoring system, including testing of the lead and monitor, initial system programming, and imaging supervision and interpretation; complete system (electrode and implantable monitor) |
| 0526T | Insertion or replacement of intracardiac ischemia monitoring system, including testing of the lead and monitor, initial system programming, and imaging supervision and interpretation; electrode only |
| 0527T | Insertion or replacement of intracardiac ischemia monitoring system, including testing of the lead and monitor, initial system programming, and imaging supervision and interpretation; implantable monitor only |
| 0528T | Programming device evaluation (in person) of intracardiac ischemia monitoring system with iterative adjustment of programmed values, with analysis, review, and report |
| 0529T | Interrogation device evaluation (in person) of intracardiac ischemia monitoring system with analysis, review, and report |
| 0530T | Removal of intracardiac ischemia monitoring system, including all imaging supervision and interpretation; complete system (electrode and implantable monitor) |
| 0531T | Removal of intracardiac ischemia monitoring system, including all imaging supervision and interpretation; electrode only |
| 0532T | Removal of intracardiac ischemia monitoring system, including all imaging supervision and interpretation; implantable monitor only |
| 0533T | Continuous recording of movement disorder symptoms, including bradykinesia, dyskinesia, and tremor for 6 days up to 10 days; includes set-up, patient training, configuration of monitor, data upload, analysis and initial report configuration, download review, interpretation and report |

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| 0534T | Continuous recording of movement disorder symptoms, including bradykinesia, dyskinesia, and tremor for 6 days up to 10 days; set-up, patient training, configuration of monitor |
| 0535T | Continuous recording of movement disorder symptoms, including bradykinesia, dyskinesia, and tremor for 6 days up to 10 days; data upload, analysis and initial report configuration |
| 0536T | Continuous recording of movement disorder symptoms, including bradykinesia, dyskinesia, and tremor for 6 days up to 10 days; download review, interpretation and report |
| 0541T | Myocardial imaging by magnetocardiography (MCG) for detection of cardiac ischemia, by signal acquisition using minimum 36 channel grid, generation of magnetic-field time-series images, quantitative analysis of magnetic dipoles, machine learning-derived clinical scoring, and automated report generation, single study; |
| 0542T | Myocardial imaging by magnetocardiography (MCG) for detection of cardiac ischemia, by signal acquisition using minimum 36 channel grid, generation of magnetic-field time-series images, quantitative analysis of magnetic dipoles, machine learning-derived clinical scoring, and automated report generation, single study; interpretation and report |
| 0543T | Trans-apical mitral valve repair, including transthoracic echocardiography, when performed, with placement of artificial chordae tendineae |
| 0544T | Transcatheter mitral valve annulus reconstruction, with implantation of adjustable annulus reconstruction device, percutaneous approach including transseptal puncture |
| 0545T | Transcatheter tricuspid valve annulus reconstruction with implantation of adjustable annulus reconstruction device, percutaneous approach |
| 0547T | Bone-material quality testing by microindentation(s) of the tibia(s), with results reported as a score |
| 0548T | Transperineal periurethral balloon continence device; bilateral placement, including cystoscopy and fluoroscopy |
| 0549T | Transperineal periurethral balloon continence device; unilateral placement, including cystoscopy and fluoroscopy |
| 0550T | Transperineal periurethral balloon continence device; removal, each balloon |
| 0551T | Transperineal periurethral balloon continence device; adjustment of balloon(s) fluid volume |
| 0552T | Low-level laser therapy, dynamic photonic and dynamic thermo-kinetic energies, provided by a physician or other qualified health care professional |
| 0553T | Percutaneous transcatheter placement of iliac arteriovenous anastomosis implant, inclusive of all radiological supervision and interpretation, intra procedural road-mapping, and imaging guidance necessary to complete the intervention |

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| 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 |
| 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 |
| 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 |
| 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 |
| 0559T | Anatomic model 3D-printed from image data set(s); first individually prepared and processed component of an anatomic structure |
| 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) |
| 0561T | Anatomic guide 3D-printed and designed from image data set(s); first anatomic guide |
| 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) |
| 0563T | Evacuation of meibomian glands, using heat delivered through wearable, open-eye eyelid treatment devices and manual gland expression, bilateral |
| 0564T | Oncology, chemotherapeutic drug cytotoxicity assay of cancer stem cells (CSCs), from cultured CSCs and primary tumor cells, categorical drug response reported based on percent of cytotoxicity observed, a minimum of 14 drugs or drug combinations |
| 0565T | Autologous cellular implant derived from adipose tissue for the treatment of osteoarthritis of the knees; tissue harvesting and cellular implant creation |
| 0566T | Autologous cellular implant derived from adipose tissue for the treatment of osteoarthritis of the knees; injection of cellular implant into knee joint including ultrasound guidance, unilateral |
| 0567T | Permanent fallopian tube occlusion with degradable biopolymer implant, transcervical approach, including transvaginal ultrasound (FemBloc) |
| 0568T | Introduction of mixture of saline and air for sonosalpingography to confirm occlusion of fallopian tubes, transcervical approach, including transvaginal ultrasound and pelvic ultrasound |
| 0569T | Transcatheter tricuspid valve repair, percutaneous approach; initial prosthesis |

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| 0570T | Transcatheter tricuspid valve repair, percutaneous approach; each additional prosthesis during same session (List separately in addition to code for primary procedure) |
| 0581T | Ablation, malignant breast tumor(s), percutaneous, cryotherapy, including imaging guidance when performed, unilateral |
| 0582T | Transurethral ablation of malignant prostate tissue by high-energy water vapor thermotherapy, including intraoperative imaging and needle guidance |
| 0583T | Tympanostomy (requiring insertion of ventilating tube), using an automated tube delivery system, iontophoresis local anesthesia |
| 0594T | Osteotomy, humerus, with insertion of an externally controlled intramedullary lengthening device, including intraoperative imaging, initial and subsequent alignment assessments, computations of adjustment schedules, and management of the intramedullary lengthening device |
| 0596T | Temporary female intraurethral valve-pump (i.e., voiding prosthesis); initial insertion, including urethral measurement |
| 0597T | Temporary female intraurethral valve-pump (i.e., voiding prosthesis); replacement |
| 0598T | Non-contact real-time fluorescence wound imaging, for bacterial presence, location, and load, per session; first anatomic site (e.g., lower extremity) |
| 0599T | Non-contact real-time fluorescence wound imaging, for bacterial presence, location, and load, per session; each additional anatomic site (e.g., upper extremity) (List separately in addition to code for primary procedure) |
| 0600T | Ablation, irreversible electroporation; 1 or more tumors per organ, including imaging guidance, when performed, percutaneous |
| 0601T | Ablation, irreversible electroporation; 1 or more tumors, including fluoroscopic and ultrasound guidance, when performed, open |
| 0602T | Glomerular filtration rate (GFR) measurement(s), transdermal, including sensor placement and administration of a single dose of fluorescent pyrazine agent |
| 0603T | Glomerular filtration rate (GFR) monitoring, transdermal, including sensor placement and administration of more than one dose of fluorescent pyrazine agent, each 24 hours |
| 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 |
| 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 |
| 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 |

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| | professional of remote surveillance center data analyses, each 30 days |
| 0607T | Remote monitoring of an external continuous pulmonary fluid monitoring system, including measurement of radiofrequency-derived pulmonary fluid levels, heart rate, respiration rate, activity, posture, and cardiovascular rhythm (e.g., ECG data), transmitted to a remote 24-hour attended surveillance center; set-up and patient education on use of equipment |
| 0608T | Remote monitoring of an external continuous pulmonary fluid monitoring system, including measurement of radiofrequency-derived pulmonary fluid levels, heart rate, respiration rate, activity, posture, and cardiovascular rhythm (e.g., ECG data), transmitted to a remote 24-hour attended surveillance center; analysis of data received and transmission of reports to the physician or other qualified health care professional |
| 0609T | Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); acquisition of single voxel data, per disc, on biomarkers (i.e., lactic acid, carbohydrate, alanine, laal, propionic acid, proteoglycan, and collagen) in at least 3 discs |
| 0610T | Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); transmission of biomarker data for software analysis |
| 0611T | Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); post-processing for algorithmic analysis of biomarker data for determination of relative chemical differences between discs |
| 0612T | Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); interpretation and report |
| 0615T | Eye-movement analysis without spatial calibration, with interpretation and report |
| 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 |
| 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 |
| 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 |
| 0619T | Cystourethroscopy with transurethral anterior prostate commissurotomy and drug delivery, including transrectal ultrasound and fluoroscopy, when performed |
| 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 |

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| 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 |
| 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 |
| 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 |
| 0648T | Quantitative magnetic resonance for analysis of tissue composition (e.g., fat, iron, water content), including multi-parametric data acquisition, data preparation and transmission, interpretation and report, obtained without diagnostic MRI examination of the same anatomy (e.g., organ, gland, tissue, target structure) during the same session |
| 0649T | Quantitative magnetic resonance for analysis of tissue composition (e.g., fat, iron, water content), including multi-parametric data acquisition, data preparation and transmission, interpretation and report, obtained with diagnostic MRI examination of the same anatomy (e.g., organ, gland, tissue, target structure) (List separately in addition to code for primary procedure) |
| 0707T | Injection(s), bone substitute material (e.g., 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 |
| 0738T | Treatment planning for magnetic field induction ablation of malignant prostate tissue, using data from previously performed magnetic resonance imaging (MRI) examination |
| 0739T | Ablation of malignant prostate tissue by magnetic field induction, including all intra-procedural, transperineal needle/catheter placement for nanoparticle installation and intra-procedural temperature monitoring, thermal dosimetry, bladder irrigation, and magnetic field nanoparticle activation |
| 0740T | Remote autonomous algorithm-based recommendation system for insulin dose calculation and titration; initial set-up and patient education |
| 0741T | Remote autonomous algorithm-based recommendation system for insulin dose calculation and titration; provision of software, data collection, transmission, and storage, each 30 days |
| 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 |

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| 0744T | Insertion of bioprosthetic valve, open, femoral vein, including duplex ultrasound imaging guidance, when performed, including autogenous or non-autogenous patch graft (e.g., polyester, ePTFE, bovine pericardium), when performed |
| 0745T | Cardiac focal ablation utilizing radiation therapy for arrhythmia; noninvasive arrhythmia localization and mapping of arrhythmia site (nidus), derived from anatomical image data (e.g., CT, MRI, or myocardial perfusion scan) and electrical data (e.g., 12-lead ECG data), and identification of areas of avoidance |
| 0746T | Cardiac focal ablation utilizing radiation therapy for arrhythmia; conversion of arrhythmia localization and mapping of arrhythmia site (nidus) into a multidimensional radiation treatment plan |
| 0747T | Cardiac focal ablation utilizing radiation therapy for arrhythmia; delivery of radiation therapy, arrhythmia |
| 0748T | Injections of stem cell product into perianal perirectal soft tissue, including fistula preparation (e.g., removal of setons, fistula curettage, closure of internal openings) |
| 0749T | Bone strength and fracture-risk assessment using digital X-ray radiogrammetry-bone mineral density (DXR-BMD) analysis of bone mineral density (BMD) utilizing data from a digital X ray, retrieval and transmission of digital X-ray data, assessment of bone strength and fracture risk and BMD, interpretation, and report |
| 0750T | Bone strength and fracture-risk assessment using digital X-ray radiogrammetry-bone mineral density (DXR-BMD) analysis of bone mineral density (BMD) utilizing data from a digital X ray, retrieval and transmission of digital X-ray data, assessment of bone strength and fracture risk and BMD, interpretation and report; with single-view digital X-ray examination of the hand taken for the purpose of DXR-BMD |
| 0764T | Assistive algorithmic electrocardiogram risk-based assessment for cardiac dysfunction (e.g., low-ejection fraction, pulmonary hypertension, hypertrophic cardiomyopathy); related to concurrently performed electrocardiogram (List separately in addition to code for primary procedure) |
| 0765T | Assistive algorithmic electrocardiogram risk-based assessment for cardiac dysfunction (e.g., low-ejection fraction, pulmonary hypertension, hypertrophic cardiomyopathy); related to previously performed electrocardiogram |
| 0766T | Transcutaneous magnetic stimulation by focused low-frequency electromagnetic pulse, peripheral nerve, initial treatment, with identification and marking of the treatment location, including noninvasive electroneurographic localization (nerve conduction localization), when performed; first nerve |
| 0767T | Transcutaneous magnetic stimulation by focused low-frequency electromagnetic pulse, peripheral nerve, initial treatment, with identification and marking of the treatment location, including noninvasive electroneurographic localization (nerve conduction localization), when performed; each additional nerve (List separately in addition to code for primary procedure) |

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| 0768T | Transcutaneous magnetic stimulation by focused low-frequency electromagnetic pulse, peripheral nerve, subsequent treatment, including noninvasive electroneurographic localization (nerve conduction localization), when performed; first nerve |
| 0769T | Transcutaneous magnetic stimulation by focused low-frequency electromagnetic pulse, peripheral nerve, subsequent treatment, including noninvasive electroneurographic localization (nerve conduction localization), when performed; each additional nerve (List separately in addition to code for primary procedure) |
| 0770T | Virtual reality technology to assist therapy (List separately in addition to code for primary procedure) |
| 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 patient's level of dissociation or consciousness and physiological status; initial 15 minutes of intra-service time, patient aged 5 years or older |
| 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 patient's level of dissociation or consciousness and physiological status; each additional 15 minutes intra-service time (List separately in addition to code for primary service) |
| 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 intra-service time, patient aged 5 years or older |
| 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 intra-service time (List separately in addition to code for primary service) |
| 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 (e.g., vital signs and sport concussion assessment tool 5 [SCAT5]), 30 minutes of treatment |
| 0777T | Real-time pressure-sensing epidural guidance system (List separately in addition to code for primary procedure) |
| 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 |

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| 0779T | Gastrointestinal myoelectrical activity study, stomach through colon, with interpretation and report |
| 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 |
| 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 |
| 0783T | Transcutaneous auricular neurostimulation, set-up, calibration, and patient education on use of equipment |
| 0791T | Motor-cognitive, semi-immersive virtual reality–facilitated gait training, each 15 minutes (List separately in addition to code for primary procedure) |
| 0805T | Transcatheter superior and inferior vena cava prosthetic valve implantation (ie, caval valve implantation [CAVI]); percutaneous femoral vein approach |
| 0806T | Transcatheter superior and inferior vena cava prosthetic valve implantation (ie, caval valve implantation [CAVI]); open femoral vein approach |
| 0393U | Neurology (eg, Parkinson disease, dementia with Lewy bodies), cerebrospinal fluid (CSF), detection of mis-folded α -synuclein protein by seed amplification assay, qualitative |
| 33440 | Replacement, aortic valve; by translocation of autologous pulmonary valve and transventricular aortic annulus enlargement of the left ventricular outflow tract with valved conduit replacement of pulmonary valve (Ross-Konno procedure) |
| 64454 | Injection(s), anesthetic agent(s) and/or steroid; genicular nerve branches, including imaging guidance, when performed |
| 64624 | Destruction by neurolytic agent, genicular nerve branches including imaging guidance, when performed |
| 64625 | Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (i.e., fluoroscopy or computed tomography) |
| 92145 | Corneal hysteresis determination, by air impulse stimulation, unilateral or bilateral, with interpretation and report |
| 92229 | Imaging of retina for detection or monitoring of disease; point-of-care automated analysis and report, unilateral or bilateral |
| 92517 | Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) |
| 92518 | Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; ocular (oVEMP) |
| 92519 | Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) and ocular (oVEMP) |
| 93895 | Quantitative carotid intima media thickness and carotid atheroma evaluation, bilateral |

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| 96931 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; image acquisition and interpretation and report, first lesion |
| 96932 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; image acquisition only, first lesion |
| 96933 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; interpretation and report only, first lesion |
| 96934 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; image acquisition and interpretation and report, each additional lesion (List separately in addition to code for primary procedure) |
| 96935 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; image acquisition only, each additional lesion (List separately in addition to code for primary procedure) |
| 96936 | Reflectance confocal microscopy (RCM) for cellular and sub-cellular imaging of skin; interpretation and report only, each additional lesion (List separately in addition to code for primary procedure) |
| A4563 | Rectal control system for vaginal insertion, for long term use, includes pump and all supplies and accessories, any type each |
| A7049 | Expiratory positive airway pressure intranasal resistance valve |
| A9591 | Fluoroestradiol f 18, diagnostic, 1 millicurie |
| C1734 | Orthopedic/device/drug matrix for opposing bone-to-bone or soft tissue-to bone (implantable) |
| C1748 | Endoscope, single-use (i.e. disposable), upper GI, imaging/illumination device (insertable) |
| C1761 | Catheter, transluminal intravascular lithotripsy, coronary |
| C1824 | Generator, cardiac contractility modulation (implantable) |
| C1839 | Iris prosthesis |
| C1982 | Catheter, pressure generating, one-way valve, intermittently occlusive |
| C2596 | Probe, image guided, robotic, water jet ablation |
| C9068 | Copper cu-64, dotatate, diagnostic, 1 millicurie |
| C9250 | Human plasma fibrin sealant, vapor-heated, solvent-detergent (artiss), 2 ml |
| C9758 | Blind procedure for NYHA Class III/IV heart failure; transcatheter implantation of interatrial shunt including right heart catheterization, transesophageal echocardiography (TEE)/intracardiac echocardiography (ICE), and all imaging with or without guidance (e.g., ultrasound, fluoroscopy), performed in an approved investigational device exemption (IDE) study |
| C9759 | Transcatheter intraoperative blood vessel microinfusion(s) (e.g., intraluminal, vascular wall and/or perivascular) therapy, any vessel, including radiological supervision and interpretation, when performed |

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| C9760 | Non-randomized, non-blinded procedure for NYHA Class II, III, IV heart failure; transcatheter implantation of interatrial shunt or placebo control, including right and left heart catheterization, transeptal puncture, transesophageal echocardiography (TEE)/intracardiac echocardiography (ICE), and all imaging with or without guidance (e.g., ultrasound, fluoroscopy), performed in an approved investigational device exemption (IDE) study |
| C9762 | Cardiac magnetic resonance imaging for morphology and function, quantification of segmental dysfunction; with strain imaging |
| C9763 | Cardiac magnetic resonance imaging for morphology and function, quantification of segmental dysfunction; with stress imaging |
| C9764 | Revascularization, endovascular, open or percutaneous, any vessel(s); with intravascular lithotripsy, includes angioplasty within the same vessel(s), when performed |
| C9765 | Revascularization, endovascular, open or percutaneous, any vessel(s); with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed |
| C9766 | Revascularization, endovascular, open or percutaneous, any vessel(s); with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel(s), when performed |
| C9767 | Revascularization, endovascular, open or percutaneous, any vessel(s); with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel(s), when performed |
| E0677 | Nonpneumatic sequential compression garment, trunk |
| E1905 | Virtual reality cognitive behavioral therapy device (CBT), including preprogrammed therapy software |
| K1001 | Electronic positional obstructive sleep apnea treatment, with sensor, includes all components and accessories, any type |
| L2006 | Knee-ankle-foot (KAF) device, any material, single or double upright, swing and stance phase microprocessor control with adjustability, includes all components (e.g., sensors, batteries, charger), any type activation, with or without ankle joint(s), custom fabricated |
| L8608 | Miscellaneous external component, supply or accessory for use with the Argus II Retinal Prosthesis System |
| 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 |
| 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 |
| Q0035 | Cardiokymography |

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| S8130 | Interferential current stimulator, 2 channel |
| S8131 | Interferential current stimulator, 4 channel |
| S3902 | Ballistocardiogram |
| S8040 | Topographic brain mapping |
| S9025 | Omnicrodiogram/cardiointegram |

REFERENCES:

Frey ME, Depalma MJ, Cifu DX, Bhagia SM, Carne W, Daitch JS. Percutaneous sacroplasty for osteoporotic sacral insufficiency fractures: a prospective, multicenter, observational pilot study. *Spine J*. 2008;8(2):367-373. doi:10.1016/j.spinee.2007.05.011. Accessed June 6, 2022.

Haleem S, Ahmed A, Ganesan S, McGillion SF, Fowler JL. Mean 5-Year Follow-Up Results of a Facet Replacement Device in the Treatment of Lumbar Spinal Stenosis and Degenerative Spondylolisthesis. *World Neurosurg*. 2021;152:e645-e651. doi:10.1016/j.wneu.2021.06.045. Accessed June 6, 2022.

Arita R, Fukuoka S. Non-pharmaceutical treatment options for meibomian gland dysfunction. *Clin Exp Optom*. 2020;103(6):742-755. doi:10.1111/cxo.13035. Accessed June 6, 2022.

American Academy of Ophthalmology (AAO). Blepharitis: Preferred Practice Pattern. San Francisco, CA: AAO; 2018. Accessed June 6, 2022.

Mazzone PJ, Obuchowski N, Phillips M, Risius B, Bazerbashi B, Meziane M. Lung cancer screening with computer aided detection chest radiography: design and results of a randomized, controlled trial. *PLoS One*. 2013;8(3):e59650. doi:10.1371/journal.pone.0059650. Accessed June 9, 2022.

Ng FL, Saxena M, Mahfoud F, Pathak A, Lobo MD. Device-based Therapy for Hypertension. *Curr Hypertens Rep*. 2016;18(8):61. doi:10.1007/s11906-016-0670-5. Accessed June 9, 2022.

Jordan J. Device-Based Approaches for the Treatment of Arterial Hypertension. *Curr Hypertens Rep*. 2017;19(7):59. doi:10.1007/s11906-017-0755-9. Accessed June 9, 2022.

Wallbach M, Lehnig LY, Schroer C, et al. Effects of Baroreflex Activation Therapy on Ambulatory Blood Pressure in Patients With Resistant Hypertension. *Hypertension*. 2016;67(4):701-709. doi:10.1161/HYPERTENSIONAHA.115.06717. Accessed June 9, 2022.

Starkweather AR, Coyne P, Lyon DE, Elswick RK Jr, An K, Sturgill J. Decreased low back pain intensity and differential gene expression following Calmare®: results from a double-blinded randomized sham-controlled study. *Res Nurs Health*. 2015;38(1):29-38. doi:10.1002/nur.21632. Accessed June 9, 2022.

Smith TJ, Marineo G. Treatment of Postherpetic Pain With Scrambler Therapy, a Patient-Specific Neurocutaneous Electrical Stimulation Device. *Am J Hosp Palliat Care*. 2018;35(5):812-813. doi:10.1177/1049909113494002. Accessed June 9, 2022.

Graham ME, Jawrani NT, Goel VK. The effect of HyProCure(®) sinus tarsi stent on tarsal tunnel compartment pressures in hyperpronating feet. *J Foot Ankle Surg*. 2011;50(1):44-49. doi:10.1053/

j.jfas.2010.10.002. Accessed June 14, 2022.

National Institute for Health and Clinical Excellence (NICE). Sinus tarsi implant insertion for mobile flatfoot. Interventional Procedure Guidance 305. London, UK: NICE; July 2009. Accessed June 14, 2022.

Bhatt DL, Kandzari DE, O'Neill WW, et al. A controlled trial of renal denervation for resistant hypertension. *N Engl J Med*. 2014;370(15):1393-1401. doi:10.1056/NEJMoa1402670. Accessed June 14, 2022.

Bhatt DL, Kandzari DE, O'Neill WW, et al; SYMPLICITY HTN-3 Investigators. A controlled trial of renal denervation for resistant hypertension. *N Engl J Med*. 2014;370(15):1393-1401. Accessed June 14, 2022.

Brandt JD, Sall K, DuBiner H, et al. Six-Month Intraocular Pressure Reduction with a Topical Bimatoprost Ocular Insert: Results of a Phase II Randomized Controlled Study. *Ophthalmology*. 2016;123(8):1685-1694. doi:10.1016/j.ophtha.2016.04.026. Accessed June 14, 2022.

Carrasco-Zevallos OM, Viehland C, Keller B, et al. Review of intraoperative optical coherence tomography: technology and applications [Invited]. *Biomed Opt Express*. 2017;8(3):1607-1637. Published 2017 Feb 21. doi:10.1364/BOE.8.001607. Accessed June 14, 2022.

Cheng DL, Greenberg PB, Borton DA. Advances in Retinal Prosthetic Research: A Systematic Review of Engineering and Clinical Characteristics of Current Prosthetic Initiatives. *Curr Eye Res*. 2017;42(3):334-347. doi:10.1080/02713683.2016.1270326. Accessed June 14, 2022.

Hu J, Chen Y, Cheng S, et al. Transcatheter mitral valve implantation for degenerated mitral bioprostheses or failed surgical annuloplasty rings: A systematic review and meta-analysis. *J Card Surg*. 2018;33(9):508-519. doi:10.1111/jocs.13767. Accessed June 15, 2022.

Cho NH, Lee SH, Jung W, Jang JH, Kim J. Optical coherence tomography for the diagnosis and evaluation of human otitis media [published correction appears in *J Korean Med Sci*. 2015 Jun;30(6):834]. *J Korean Med Sci*. 2015;30(3):328-335. doi:10.3346/jkms.2015.30.3.328. Accessed June 15, 2022.

Lucente V, van Raalte H, Murphy M, Egorov V. Biomechanical paradigm and interpretation of female pelvic floor conditions before a treatment. *Int J Womens Health*. 2017;9:521-550. Published 2017 Aug 3. doi:10.2147/IJWH.S136989. Accessed June 16, 2022.

Egorov V, Murphy M, Lucente V, et al. Quantitative Assessment and Interpretation of Vaginal Conditions. *Sex Med*. 2018;6(1):39-48. doi:10.1016/j.esxm.2017.08.002. Accessed June 16, 2022.

Biazzo A, D'Ambrosi R, Masia F, Izzo V, Verde F. Autologous adipose stem cell therapy for knee osteoarthritis: where are we now?. *Phys Sportsmed*. 2020;48(4):392-399. doi:10.1080/00913847.2020.1758001. Accessed June 16, 2022.

Zhang L, Fu XB, Chen S, Zhao ZB, Schmitz C, Weng CS. Efficacy and safety of extracorporeal shock wave therapy for acute and chronic soft tissue wounds: A systematic review and meta-analysis. *Int Wound J*. 2018;15(4):590-599. doi:10.1111/iwj.12902. Accessed June 16, 2022.

Rosenson RS, Durrington P. HDL cholesterol: Clinical aspects of abnormal values. UpToDate [online serial]. Waltham, MA. Updated August 29, 2021, literature review current through August 2022. Accessed September 16, 2022.

Tardif JC, Grégoire J, L'Allier PL, et al. Effects of reconstituted high-density lipoprotein infusions on coronary atherosclerosis: a randomized controlled trial. *JAMA*. 2007;297(15):1675-1682. doi:10.1001/jama.297.15.jpc70004. Accessed September 16, 2022.

Yu HJ, Kiernan DF, Eichenbaum D, Sheth VS, Wykoff CC. Home Monitoring of Age-Related Macular Degeneration: Utility of the ForeseeHome Device for Detection of Neovascularization. *Ophthalmol Retina*. 2021;5(4):348-356. doi:10.1016/j.oret.2020.08.003. Accessed September 16, 2022.

Chung JY, Min BH. Is bicompartamental knee arthroplasty more favourable to knee muscle strength and physical performance compared to total knee arthroplasty?. *Knee Surg Sports Traumatol Arthrosc*. 2013;21(11):2532-2541. doi:10.1007/s00167-013-2489-9. Accessed September 16, 2022.

Holmes MV, Simon T, Exeter HJ, et al. Secretary phospholipase A(2)-IIA and cardiovascular disease: a mendelian randomization study. *J Am Coll Cardiol*. 2013;62(21):1966-1976. doi:10.1016/j.jacc.2013.06.044. Accessed September 16, 2022.

Loudon SE, Rook CA, Nassif DS, Piskun NV, Hunter DG. Rapid, high-accuracy detection of strabismus and amblyopia using the pediatric vision scanner. *Invest Ophthalmol Vis Sci*. 2011;52(8):5043-5048. Published 2011 Jul 7. doi:10.1167/iops.11-7503. Accessed September 19, 2022.

Suter VGA, Sjölund S, Bornstein MM. Effect of laser on pain relief and wound healing of recurrent aphthous stomatitis: a systematic review. *Lasers Med Sci*. 2017;32(4):953-963. doi:10.1007/s10103-017-2184-z. Accessed September 19, 2022.

Santos H, Santos M, Almeida I, et al. A systemic review of endocardial left ventricular pacing. *Heart Lung*. 2022;51:82-86. doi:10.1016/j.hrtlng.2021.10.003. Accessed September 19, 2022.

Reddy VY, Miller MA, Neuzil P, et al. Cardiac Resynchronization Therapy With Wireless Left Ventricular Endocardial Pacing: The SELECT-LV Study. *J Am Coll Cardiol*. 2017;69(17):2119-2129. doi:10.1016/j.jacc.2017.02.059. Accessed September 19, 2022.

kender, S., Ose, J., Chang-Claude, J. et al. Accelerometry and physical activity questionnaires - a systematic review. *BMC Public Health* **16**, 515 (2016). <https://doi.org/10.1186/s12889-016-3172-0>. Accessed September 20, 2022.

Arnold M, Zhao S, Ma S, et al. Microindentation - a tool for measuring cortical bone stiffness? A systematic review. *Bone Joint Res*. 2017;6(9):542-549. doi:10.1302/2046-3758.69.BJR-2016-0317.R2. Accessed September 20, 2022.

Barber SR, Wong K, Kanumuri V, Kiringoda R, Kempfle J, Remenschneider AK, Kozin ED, Lee DJ. Augmented Reality, Surgical Navigation, and 3D Printing for Transcanal Endoscopic Approach to the Petrous Apex. *OTO Open*. 2018 Oct 29;2(4):2473974X18804492. doi: 10.1177/2473974X18804492. PMID: 30719506. Accessed September 20, 2022.

Diment LE, Thompson MS, Bergmann JHM. Clinical efficacy and effectiveness of 3D printing: a

systematic review. *BMJ Open*. 2017;7(12):e016891. Published 2017 Dec 21. doi:10.1136/bmjopen-2017-016891. Accessed

Femasys Inc. FemBloc contraception pivotal trial (BLOC). ClinicalTrials.gov Identifier: NCT03433911. Bethesda, MD: National Library of Medicine; last updated April 22, 2022. Accessed September 20, 2022. Note: This product is not yet commercially available.

Fender EA, Nishimura RA, Holmes DR. Percutaneous therapies for tricuspid regurgitation. *Expert Rev Med Devices*. 2017;14(1):37-48. doi:10.1080/17434440.2017.1268912. Accessed September 20, 2022.

Otto CM. Management and prognosis of tricuspid regurgitation. UpToDate [online serial]. Waltham, MA: UpToDate. Last updated August 31, 2022. Accessed September 20, 2022.

Pijpe A, Ozdemir Y, Sinnige JC, Kwa KAA, Middelkoop E, Meij-de Vries A. Detection of bacteria in burn wounds with a novel handheld autofluorescence wound imaging device: a pilot study. *J Wound Care*. 2019;28(8):548-554. doi:10.12968/jowc.2019.28.8.548. Accessed September 20, 2022.

Astur DC, de Freitas EV, Cabral PB, Morais CC, Pavei BS, Kaleka CC, Debieux P, Cohen M. Evaluation and Management of Subchondral Calcium Phosphate Injection Technique to Treat Bone Marrow Lesion. *Cartilage*. 2019 Oct;10(4):395-401. doi: 10.1177/1947603518770249. Epub 2018 Apr 18. PMID: 29667853; PMCID: PMC6755871. Accessed January 12, 2023.

Davidson MB, Davidson SJ. Effect of Remote Glucose Monitoring Utilizing Computerized Insulin Dose Adjustment Algorithms: A Pilot Project. *Diabetes Ther*. 2019 Apr;10(2):523-533. doi: 10.1007/s13300-019-0565-y. Epub 2019 Feb 5. PMID: 30721451; PMCID: PMC6437238. Accessed January 12, 2023.

Naoum S, Vasiliadis AV, Koutserimpas C, Mylonakis N, Kotsapas M, Katakalos K. Finite Element Method for the Evaluation of the Human Spine: A Literature Overview. *J Funct Biomater*. 2021 Jul 31;12(3):43. doi: 10.3390/jfb12030043. PMID: 34449646; PMCID: PMC8395922. Accessed January 12, 2023.

Jorge H. Ulloa, Marc Glickman. Human trial using the novel bioprosthetic VenoValve in patients with chronic venous insufficiency. *Journal of Vascular Surgery: Venous and Lymphatic Disorders*. 2021; 9(4). <https://doi.org/10.1016/j.jvsv.2020.10.017>. Accessed January 12, 2023.

Hayase J, Chin R, Cao M, Hu P, Shivkumar K, Bradfield JS. Non-invasive Stereotactic Body Radiation Therapy for Refractory Ventricular Arrhythmias: Venturing into the Unknown. *J Innov Card Rhythm Manag*. 2022 Feb 15;13(2):4894-4899. doi: 10.19102/icrm.2022.130202. PMID: 35251759; PMCID: PMC8887931. Accessed January 12, 2023.

Panes J. Stem Cell Therapy for Perianal Fistulas in Crohn's Disease. *Gastroenterol Hepatol (N Y)*. 2016 Oct;12(10):637-640. PMID: 27917079; PMCID: PMC5114507. Accessed January 12, 2023.

Astarita C, Arora CL, Trovato L. Tissue regeneration: an overview from stem cells to micrografts. *J Int Med Res*. 2020 Jun;48(6):300060520914794. doi: 10.1177/0300060520914794. PMID: 32536230; PMCID: PMC7297485. Accessed January 12, 2023.

Leijten AD, Hampsink B, Janssen M, Klein WM, Draaisma JMT. Can digital X-ray radiogrammetry be an alternative for dual-energy X-ray absorptiometry in the diagnosis of secondary low bone quality in

children? *Eur J Pediatr.* 2019 Sep;178(9):1433-1441. doi: 10.1007/s00431-019-03425-5. Epub 2019 Jul 27. PMID: 31352546; PMCID: PMC6694095. Accessed January 12, 2023.

Kälvesten J, Lui LY, Brismar T, Cummings S. Digital X-ray radiogrammetry in the study of osteoporotic fractures: Comparison to dual energy X-ray absorptiometry and FRAX. *Bone.* 2016 May;86:30-5. doi: 10.1016/j.bone.2016.02.011. Epub 2016 Feb 24. PMID: 26921822; PMCID: PMC4833670. Accessed January 12, 2023.

Fiorina L, Maupain C., Gardella C., et al. Evaluation of an Ambulatory ECG Analysis Platform Using Deep Neural Networks in Routine Clinical Practice. *J. Am. heart Assoc.* September 8, 2022; 11(18). <https://doi.org/10.1161/JAHA.122.026196>. Accessed January 12, 2023.

Friedman, P.A. Evaluation of ECG Transmission and AI Models Using Apple Watch ECGs and Symptoms Data Collected Using a Mayo iPhone App. NCT05324566. Last updated April 12, 2022. <https://clinicaltrials.gov/ct2/show/NCT05324566>. Accessed January 12, 2023.

Kanjanapanang N, Chang KV. Peripheral Magnetic Stimulation. In: *StatPearls*. Treasure Island (FL): StatPearls Publishing; October 31, 2022. Accessed January 12, 2023.

Leung A, Fallah A, Shukla S. Transcutaneous magnetic stimulation (TMS) in alleviating post-traumatic peripheral neuropathic pain States: a case series. *Pain Med.* 2014;15(7):1196-1199. doi:10.1111/pme.12426. Accessed January 12, 2023.

Gardini V, Gamberini G, Müller S, Grandi S, Tomba E. The Effects of Virtual Reality in Targeting Transdiagnostic Factors for Mental Health: A Systematic Review of the Literature. *Journal of Clinical Medicine.* 2022; 11(21):6463. <https://doi.org/10.3390/jcm11216463>. Accessed January 12, 2023.

Maples-Keller JL, Bunnell BE, Kim SJ, Rothbaum BO. The Use of Virtual Reality Technology in the Treatment of Anxiety and Other Psychiatric Disorders. *Harv Rev Psychiatry.* 2017 May/ Jun;25(3):103-113. doi: 10.1097/HRP.000000000000138. PMID: 28475502; PMCID: PMC5421394. January 12, 2023.

Rousseaux F, Faymonville ME, Nyssen AS, Dardenne N, Ledoux D, Massion PB, Vanhauzenhuyse A. Can hypnosis and virtual reality reduce anxiety, pain and fatigue among patients who undergo cardiac surgery: a randomised controlled trial. *Trials.* 2020 Apr 15;21(1):330. doi: 10.1186/s13063-020-4222-6. PMID: 32293517; PMCID: PMC7157998. January 12, 2023.

Terzulli C, Melchior M, Goffin L, Faisan S, Ganesini C, Graff D, Dufour A, Laroche E, Chauvin C, Poisbeau P. Effect of Virtual Reality Hypnosis on Pain Threshold and Neurophysiological and Autonomic Biomarkers in Healthy Volunteers: Prospective Randomized Crossover Study. *J Med Internet Res.* 2022 Jul 29;24(7):e33255. doi: 10.2196/33255. PMID: 35904872; PMCID: PMC9377475. January 12, 2023.

Hugli, O. Virtual Reality During Invasive Medical Procedures in an Emergency Department. University of Lausanne. NCT04273958. First posted February 18, 2020, last updated July 19, 2021. <https://clinicaltrials.gov/ct2/show/study/NCT04273958>. January 12, 2023.

Cooper DJ, Nichol AD, Bailey M, Bernard S, et al. POLAR Trial Investigators and the ANZICS Clinical Trials Group. Effect of Early Sustained Prophylactic Hypothermia on Neurologic Outcomes Among Patients

With Severe Traumatic Brain Injury: The POLAR Randomized Clinical Trial. *JAMA*. 2018 Dec 4;320(21):2211-2220. doi: 10.1001/jama.2018.17075. PMID: 30357266; PMCID: PMC6583488. Accessed January 13, 2023.

You JS, Kim JY, Yenari MA. Therapeutic hypothermia for stroke: Unique challenges at the bedside. *Front Neurol*. 2022;13:951586. Published 2022 Oct 3. doi:10.3389/fneur.2022.951586. Accessed January 13, 2023.

Lyden P, Hemmen T, Grotta J, et al. Results of the ICTuS 2 Trial (Intravascular Cooling in the Treatment of Stroke 2). *Stroke*. 2016;47(12):2888-2895. doi:10.1161/STROKEAHA.116.014200. Accessed January 13, 2023.

Choi JH, Pile-Spellman J. Selective brain hypothermia. *Handb Clin Neurol*. 2018;157:839-852. doi:10.1016/B978-0-444-64074-1.00052-5. Accessed January 13, 2023.

Bassotti G, Antonelli E, Villanacci V, et al. Abnormal gut motility in inflammatory bowel disease: an update. *Tech Coloproctol*. 2020;24(4):275-282. doi:10.1007/s10151-020-02168-y. Accessed January 13, 2023.

Gebhard, RE, Moeller-Bertram, T, Dobecki, D, et al. Objective Epidural Space Identification Using Continuous Real-Time Pressure Sensing Technology: A Randomized Controlled Comparison With Fluoroscopy and Traditional Loss of Resistance. *Anesthesia & Analgesia* 129(5):p 1319-1327, November 2019. | DOI: 10.1213/ANE.0000000000003873. Accessed January 13, 2023.

Valipour A, Asadi S, Pison C, et al. Long-term safety of bilateral targeted lung denervation in patients with COPD. *Int J Chron Obstruct Pulmon Dis*. 2018;13:2163-2172. Published 2018 Jul 16. doi:10.2147/COPD.S158748. Accessed January 13, 2023.

Valipour A, Shah PL, Herth FJ, et al. Two-Year Outcomes for the Double-Blind, Randomized, Sham-Controlled Study of Targeted Lung Denervation in Patients with Moderate to Severe COPD: AIRFLOW-2. *Int J Chron Obstruct Pulmon Dis*. 2020;15:2807-2816. Published 2020 Nov 5. doi:10.2147/COPD.S267409. Accessed January 13, 2023.

Jenkins DD, Khodaparast N, O'Leary GH, Washburn SN, Covalin A, Badran BW. Transcutaneous Auricular Neurostimulation (tAN): A Novel Adjuvant Treatment in Neonatal Opioid Withdrawal Syndrome. *Front Hum Neurosci*. 2021;15:648556. Published 2021 Mar 8. doi:10.3389/fnhum.2021.648556. Accessed January 13, 2023.

Badran BW, Dowdle LT, Mithoefer OJ, et al. Neurophysiologic effects of transcutaneous auricular vagus nerve stimulation (taVNS) via electrical stimulation of the tragus: A concurrent taVNS/fMRI study and review. *Brain Stimul*. 2018;11(3):492-500. doi:10.1016/j.brs.2017.12.009. Accessed January 13, 2023.

Butt MF, Albusoda A, Farmer AD, Aziz Q. The anatomical basis for transcutaneous auricular vagus nerve stimulation. *J Anat*. 2020;236(4):588-611. doi:10.1111/joa.13122. Accessed January 13, 2023.

Tirado CF, Washburn SN, Covalin A, et al. Delivering transcutaneous auricular neurostimulation (tAN) to improve symptoms associated with opioid withdrawal: results from a prospective clinical trial. *Bioelectron Med*. 2022;8(1):12. Published 2022 Aug 18. doi:10.1186/

s42234-022-00095-x. Accessed January 13, 2023.

Patel AV, Hwang D, Masdeu MJ, Chen GM, Rapoport DM, Ayappa I. Predictors of response to a nasal expiratory resistor device and its potential mechanisms of action for treatment of obstructive sleep apnea. *J Clin Sleep Med*. 2011;7(1):13-22. Accessed June 13, 2023.

Riaz M, Certal V, Nigam G, et al. Nasal Expiratory Positive Airway Pressure Devices (Provent) for OSA: A Systematic Review and Meta-Analysis. *Sleep Disord*. 2015;2015:734798. doi:10.1155/2015/734798. Accessed June 13, 2023.

Rockson SG, Whitworth PW, Cooper A, et al. Safety and effectiveness of a novel nonpneumatic active compression device for treating breast cancer-related lymphedema: A multicenter randomized, crossover trial (NILE). *J Vasc Surg Venous Lymphat Disord*. 2022;10(6):1359-1366.e1. doi:10.1016/j.jvsv.2022.06.016. Accessed June 13, 2023.

Hadjiat Y, Arendt-Nielsen L. Digital health in pain assessment, diagnosis, and management: Overview and perspectives. *Front Pain Res (Lausanne)*. 2023;4:1097379. Published 2023 Apr 17. doi:10.3389/fpain.2023.1097379. Accessed June 13, 2023.

Couin, D.G., Irwin, D.J. Fluid and Biopsy Based Biomarkers in Parkinson's Disease. *Neurotherapeutics* (2023). <https://doi.org/10.1007/s13311-023-01379-z>. Accessed June 15, 2023.

Hwang NK, Choi JB, Choi DK, et al. Effects of Semi-Immersive Virtual Reality-Based Cognitive Training Combined with Locomotor Activity on Cognitive Function and Gait Ability in Community-Dwelling Older Adults. *Healthcare (Basel)*. 2021;9(7):814. Published 2021 Jun 28. doi:10.3390/healthcare9070814. Accessed June 15, 2023.

Zukowski LA, Shaikh FD, Haggard AV, Hamel RN. Acute effects of virtual reality treadmill training on gait and cognition in older adults: A randomized controlled trial. *PLoS One*. 2022;17(11):e0276989. Published 2022 Nov 2. doi:10.1371/journal.pone.0276989. Accessed June 15, 2023.

Abdul-Jawad Altisent O, Benetis R, Rumbinaite E, et al. Caval Valve Implantation (CAVI): An Emerging Therapy for Treating Severe Tricuspid Regurgitation. *J Clin Med*. 2021;10(19):4601. Published 2021 Oct 7. doi:10.3390/jcm10194601. Accessed June 15, 2023.

Holmes DR Jr, Krucoff MW, Mullin C, et al. Implanted Monitor Alerting to Reduce Treatment Delay in Patients With Acute Coronary Syndrome Events. *J Am Coll Cardiol*. 2019;74(16):2047-2055. doi:10.1016/j.jacc.2019.07.084. Accessed June 16, 2023.

Zhao X, Xu M, Jorgenson K, Kong J. Neurochemical changes in patients with chronic low back pain detected by proton magnetic resonance spectroscopy: A systematic review. *Neuroimage Clin*. 2016;13:33-38. Published 2016 Nov 24. doi:10.1016/j.nicl.2016.11.006. Accessed June 16, 2023.

Mani R, Asper L, Khuu SK. Deficits in saccades and smooth-pursuit eye movements in adults with traumatic brain injury: a systematic review and meta-analysis. *Brain Inj*. 2018;32(11):1315-1336. doi:10.1080/02699052.2018.1483030. Accessed June 16, 2023.

POLICY HISTORY:

| Date | Summary of Changes |
|-----------|---|
| 6/2/2022 | Annual Review: Removed codes from attachments, and added code list to body of the policy under the "CODES" section. Added references, post-payment audit statement, and disclaimer. Removed the following codes: 0219T, 0220T, 0222T, 0421T, 0440T, 0441T, 0442T, 0497T, 0498T, 0508T, 0544T, 0554T, 0555T, 0556T, 0557T, 0564T, 64454, 64624, 64625, 92145, 92229, 92517, 92518, 92519, A9591, C2596, C9763. 0400T and 0401T removed as they are no longer active codes. Added 0623T-0649T, and C1761. |
| 9/28/2022 | Updated: Added References. Removed code 0356T (no longer an active code), 0421T, and 0465T. |
| 1/25/2023 | Update: Added the following statement to the "Policy Position" section: Research is unavailable as the treatment, procedure, equipment, drug, service, supply or intervention has not been adequately studied. Added references. Added codes 0707T, 0738T, 0739T, 0740T, 0741T, 0743T, 0744T, 0745T, 0746T, 0747T, 0748T, 0749T, 0750T, 0764T, 0765T, 0766T, 0767T, 0768T, 0769T, 0770T, 0771T, 0772T, 0773T, 0774T, 0776T, 0777T, 0778T, 0779T, 0781T, 0782T, 0783T, S8130, and S8131. |
| 6/28/2023 | Annual Review: Added A7049, E0677, E1905, 0393U, 0791T, 0805T, and 0806T. Updated references. |

POST-PAYMENT AUDIT STATEMENT:

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by THP at any time pursuant to the terms of your provider agreement.

DISCLAIMER:

This policy is intended to serve as a guideline only and does not constitute medical advice, any guarantee of payment, plan pre-authorization, an explanation of benefits, or a contract. This policy is intended to address medical necessity guidelines that are suitable for most individuals. Each individual's unique clinical situation may warrant individual consideration based on medical records. Individual claims may be affected by other factors, including but not necessarily limited to state and federal laws and regulations, legislative mandates, provider contract terms, and THP's professional judgment. Reimbursement for any services shall be subject to member benefits and eligibility on the date of service, medical necessity, adherence to plan policies and procedures, claims editing logic, provider contractual agreement, and applicable referral, authorization, notification, and utilization management guidelines. Unless otherwise noted within the policy, THP's policies apply to both participating and non-participating providers and facilities. THP reserves the right to review and revise these policies periodically as it deems necessary in its discretion, and it is subject to change or termination at any time by THP. THP has full and final discretionary authority for its interpretation and application. Accordingly, THP may use reasonable discretion in interpreting and applying this policy to health care services provided in any particular case.

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All Revision Dates

7/7/2023, 2/23/2023, 10/25/2022, 7/25/2022, 3/15/2021