
Subject: Occupational Therapy
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INSTRUCTIONS FOR USE

This Medical Necessity Guideline outlines the factors CareAllies considers in determining medical necessity for this indication. Please note, the terms of a participant's particular benefit plan document or summary plan description (SPD) may differ significantly from the standard upon which this Medical Necessity Guideline is based. For example, a participant's benefit plan document or SPD may contain a specific exclusion related to the topic addressed. In the event of a conflict, a participant's benefit plan document or SPD always supercedes the information in this Medical Necessity Guideline. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document or SPD. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document or SPD in effect on the date of service; 2) any applicable laws/regulations, and; 3) the specific facts of the particular situation. Medical Necessity Guidelines are not recommendations for treatment and should never be used as treatment guidelines. ©2008 Intracorp/CareAllies

Occupational therapy is considered medically necessary when it is performed by an appropriate healthcare provider and ALL of the following criteria are met:

- The program is designed to improve or compensate for lost or impaired physical functions, particularly those impacting activities of daily living, resulting from illness, injury, congenital defect, or surgery.
- The program is expected to result in significant therapeutic improvement over a clearly defined period of time.
- The program is individualized, and there is documentation outlining quantifiable, attainable treatment goals.

Occupational is considered not medically necessary when used for the following purposes:

- treatment provided to prevent or slow deterioration in function or prevent reoccurrences
- treatment intended to improve or maintain general physical condition
- long-term rehabilitative services when significant therapeutic improvement is not expected

The following treatments/programs are considered to be nonmedical, educational or training in nature and thus not medically necessary:

- work hardening programs
 - vocational rehabilitation programs and any programs with the primary goal of returning an individual to work
 - group occupational therapy
 - driving safety/driver training
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General Background

The American Occupational Therapy Association (AOTA) defines occupational therapy (OT) as the use of purposeful activity or interventions designed to achieve functional outcomes which promote health or prevent injury or disability. OT also develops, improves, sustains or restores the highest possible level of independence of any individual with an injury, illness, cognitive impairment, psychosocial dysfunction, mental illness, developmental or learning disability, or a physical disability. It includes assessment by means of skilled observation or evaluation through the administration and interpretation of standardized

or nonstandardized tests and measurements (AOTA, 2004). OT is a form of health care that actively involves the patient in therapeutic tasks and activities. OT may be appropriate for clinical findings such as changes in fine motor abilities, decreased strength or range of motion in small muscle groups, presence of pain, difficulty with activities of daily living (ADLs), and circulatory problems (e.g., edema).

The occupational therapist enhances rehabilitation and recovery by clarifying a patient's impairments and functional limitations and by identifying interventions, treatment goals, and precautions relating to specific environmental needs. Techniques or equipment may be adapted to improve function in such areas of ADL as self-care (e.g., bathing, dressing, toileting, grooming, feeding), homemaking, money management, leisure, written communication, and community re-entry. The occupational therapist's goal is to provide the client with skills for performing ADLs and those activities necessary to function in the community or in the client's chosen environment.

Other related OT services include fabrication and/or selection and training in the use of orthoses, custom therapeutic garments, upper-extremity prosthetics and adaptive equipment/assistive technology. Superficial heat (e.g., paraffin, hot packs, and fluid therapy) may also be used in preparation for functional activities.

OT interventions should be structured, systematic, goal-directed, individualized and restorative. The OT clinical records should document the necessity of an OT course through objective findings and subjective complaints. An OT treatment plan should include the following elements:

- planned modalities
- frequency of treatment
- attainable short- and long-term goals that can be objectively measured
- duration of treatment, with an estimated date when established goals will be achieved
- plan to transition to a self-administered home program

There should be a reasonable expectation that the identified goals will be met. If no improvement is documented after two weeks of treatment, an alternative treatment plan should be attempted. If no significant improvement is documented after a total of four weeks, re-evaluation by the referring provider may be indicated.

If measurable improvement is made, and continued treatment is requested by the occupational therapist, the patient's progress toward identified goals should be clearly documented and the treatment plan updated accordingly.

Many patients with neuromuscular, skeletal or physical motion impairment may experience improvement when following home treatment programs prescribed by their providers. Home treatment programs may include pharmacotherapy, modifications to diet and lifestyle, splinting, supporting or wrapping, and self-monitored, graded exercise therapy that does not require professional or medical supervision.

Modalities and Procedures

The American Medical Association Current Procedural Terminology (CPT) manual defines a modality as "any physical agent applied to produce therapeutic changes to biological tissue; includes but is not limited to thermal, acoustic, light, mechanical, or electric energy." Modalities may be supervised or may require constant attendance by a healthcare professional. Examples of modalities include range of motion (ROM) and body mechanics (e.g., kinetic and isotonic exercise and fine motor assessments). Therapeutic procedures are defined as "a manner of effecting change through the application of clinical skills and/or services that attempt to improve function." Examples of therapeutic procedures include therapeutic exercise, neuromuscular re-education, and manual therapy techniques.

The application of therapeutic modalities is based on empirical experience. Few clinical trials have been undertaken to assess the effects of individual modalities on the treatment of specific conditions. In addition, because rehabilitation programs typically include several treatment interventions in each session, it is difficult to draw conclusions regarding the efficacy of individual interventions.

Below is a list of interventions that are associated with OT. This material is for informational purposes only and is not indicative of medical necessity.

- activities of daily living training and functional activities: training in self-care activities
- aquatic therapy or pool therapy: exercise in a gravity-reduced, nonweight-bearing environment performed for muscle strengthening
- body mechanics, including kinetic and isotonic exercise: e.g., body scheme recalibration
- cutaneous sensation tests, including for touch, textural discrimination, pain, and temperature
- diathermy: local temperature elevation within the tissues believed to promote healing; produced by application of high-frequency current, usually ultrasonic or microwave current; commonly used in acute phases of trauma recovery
- fine motor assessments
- hemispheric dominance and compensation strategies
- hot and cold packs: the use of moist heat is intended to increase blood flow to the area, reduce pain and improve motion. Typically performed in the acute phase of an injury, the application of cold reduces blood flow to the area to reduce swelling and for pain relief.
- hydrotherapy: application of water in treatment of disease, e.g., contrast baths, whirlpool, Hubbard tank
- infrared: involves the treatment of damaged tissues with light from a single beam of low-intensity infrared laser or light-emitting diode; the energy is perceived as heat in superficial tissues; for stimulation of circulation (local and general) and pain relief (Note: this does not refer to the Anodyne[®] Therapy System, which involves delivery of infrared with an array of light-emitting diodes, also referred to as monochromatic near-infrared photoenergy [MIRE] therapy.
- iontophoresis: treatment based on the principle of like-ion repulsion; delivered by continuous direct current (DC)
- isokinetic exercise: muscle contraction during which force is exerted but muscle shortening is maximal
- manipulations: especially hand, in-hand and grasp
- massage therapy: applying pressure with the hands, primarily to affect the musculoskeletal, circulatory-lymphatic system or nervous system to treat discomfort or pain
- mobilizations and movement patterns, including speed, positioning, distance and location cues in movement
- myofascial release: soft-tissue mobilization, similar to the effect achieved by massage therapy
- neuromuscular stimulation: electrical current applied to stimulate motor nerves and induce muscle contraction
- orthotic device training: training with orthotic devices such as braces and splints
- paraffin baths: repeated immersion and withdrawal of limb into warm paraffin soak until temporarily encased; used for topical heat application to traumatized or inflamed extremities
- perceived motor competence and perceptual motor therapy
- prosthetic training: training/re-education with prosthetic devices
- range of motion (ROM): active or passive arcs of mobility as permitted by joint's construction; should be confined to a pain-free arc, which increases as healing occurs
- splinting and arm-hand posture
- self-care efficiencies
- tactile and tactile-location functions: active and passive
- therapeutic exercises: exercise to improve functional status by increasing muscle strength and improving flexibility
- transcutaneous nerve stimulation (TENS): thought to generate neuroregulatory peripheral and central effects and modulate pain transmission
- ultrasound (US) therapy: sub-audible, high-frequency vibrations that produce nonthermal physiological effects and may be perceived as heat in superficial tissues
- ultraviolet (UV) therapy: energy perceived as heat in superficial tissues; also called light therapy

Literature Review

Steultjens et al. (2003) conducted a systematic review for the purpose of determining, from the available literature, whether OT interventions improve outcome for stroke patients. Thirty-two studies were included

in the review, 18 of which were randomized, controlled trials. The review identified small but significant effect sizes for the efficacy of comprehensive OT on primary ADL, extended ADL, and social participation. It was noted that the amount of evidence with respect to specific interventions is limited.

A Cochrane systematic review (Steultjens, et al., 2004) was performed for the purpose of reviewing the efficacy of OT interventions for rheumatoid arthritis. The outcome measures were pain, fatigue, functional ability, and social participation. In addition, process measures such as knowledge about disease management, compliance, self-efficacy, grip strength and ROM were taken into account. Thirty-eight studies were analyzed in the review. It was noted that studies that evaluated splint interventions showed limited evidence for the effectiveness on functional ability. However, it was noted that there was strong evidence for the efficacy of instruction of joint protection on functional ability. The authors concluded that OT can help patients with rheumatoid arthritis to overcome problems in performing daily living activities.

Walker et al. (2004) conducted a meta-analysis of randomized, controlled trials of community OT for stroke patients. Eight single-blind, randomized, controlled trials incorporating 1143 patients were included in the review. The primary outcome measure was the Nottingham Extended Activities of Daily Living (NEADL) score at the end of intervention. It was noted that the principal finding from this study is that OT for stroke patients living in the community was associated with a higher NEADL score at the end of intervention and trial. The review concluded that community OT significantly improved personal and extended ADLs and leisure activity in patients with stroke.

Steultjens et al. (2005) conducted an evaluation of published systematic reviews. The objective was to summarize the research evidence available in the systematic reviews of the efficacy of OT for practitioners, researchers, purchasing organizations and policy-makers. They included reviews that utilized a systematic search for evidence with regard to OT for specific patient groups. The data was summarized for patient group, interventions, outcome domains, the type of study designs, method of data synthesis and conclusions. The study included 14 systematic reviews: three were related to rheumatoid arthritis, four reviewed stroke, and four focused on elderly people, with the remainder involving Parkinson's disease, multiple sclerosis, Huntington's disease, cerebral palsy and mental illnesses. The authors noted that reviews of rheumatoid arthritis, stroke and elderly people showed evidence of the efficacy of OT in increasing functional abilities; positive results were noted for quality of life and social participation in elderly people and stroke, respectively. It was noted that the efficacy of OT in all other patient groups is unknown due to insufficient evidence. The authors concluded that elderly people and individuals with stroke or rheumatoid arthritis can expect to benefit from comprehensive OT. In addition, the conclusion noted that the evidence of efficacy of specific interventions is sparse and should be addressed in future research.

Morris et al. (2006) conducted a systematic review and critical evaluation of the international literature on the effects of physical therapy, speech pathology, and OT for people with motor neuron disease. Motor neuron disease is a chronic neurological condition that is usually diagnosed in adults, with the most familiar condition being amyotrophic lateral sclerosis (ALS). The review identified a small number of studies for OT. These were small, noncontrolled pre-post designs or clinical reports. The review noted that the highest level of evidence for OT intervention was one nonexperimental study which documented the outcome of an aquatic program for a person with ALS. The authors observed that this does not necessarily mean that therapy has no positive effects, but rather that there has been an absence of controlled experimentation to quantify therapy outcomes.

Legg et al. (2006) conducted a Cochrane review to determine whether OT focused specifically on personal activities of daily living improves recovery for patients following stroke. The primary outcomes in the review were the proportion of patients who had deteriorated or were dependent in personal activities of daily living and performance in personal activities of daily living at the end of follow-up. The study included nine randomized, controlled trials (1258 patients). The authors concluded that, "Occupational therapy interventions for patients after stroke reduce the chances of a poor outcome in terms of deterioration in ability to perform activities of daily living, and have a beneficial effect on a patient's ability to perform personal activities of daily living and extended activities of daily living." Additionally, it was noted that the analysis was based on a review of heterogeneous interventions and that further research is needed to define the optimum method of organizing and delivering the OT interventions and to define the components of the intervention.

Dixon et al. (2007) conducted a Cochrane review to compare the efficacy and effectiveness of occupational therapy with placebo or no interventions in patients with Parkinson's disease. The review included two trials (84 patients). The analysis noted that "although both trials reported a positive effect from occupational therapy, all of the improvements were small. The trials did not have adequate placebo treatments, used small numbers of patients and the method of randomization and concealment of allocation was not specified in one trial." The authors concluded that while both trials report a positive outcome for occupational therapy, there were significant methodological problems present in both studies. These problems, along with the small numbers in both of the trials, prevent the authors from drawing a firm conclusion regarding the efficacy and effectiveness of occupational therapy in Parkinson's disease.

Summary

Occupational therapy (OT) is treatment provided to develop, improve, sustain or restore the highest possible level of independence of any individual with an injury, illness, cognitive impairment, psychosocial dysfunction, mental illness, developmental or learning disability, or a physical disability. OT should be structured, goal-directed, and individualized in nature. The therapy should be expected to result in significant therapeutic improvement.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

When medically necessary:

CPT®* Codes	Description
97003	Occupational therapy evaluation
97004	Occupational therapy re-evaluation
97010	Application of a modality to one or more areas; hot or cold packs
97014	Application of a modality to one or more areas; electrical stimulation (unattended)
97016	Application of a modality to one or more areas; vasopneumatic devices
97018	Application of a modality to one or more areas; paraffin bath
97022	Application of a modality to one or more areas; whirlpool
97024	Application of a modality to one or more areas; diathermy (eg. microwave)
97026	Application of a modality to one or more areas; infrared
97028	Application of a modality to one or more areas; ultraviolet
97032	Application of a modality to one or more areas; electrical stimulation (manual), each 15 minutes
97033	Application of a modality to one or more areas; iontophoresis, each 15 minutes
97034	Application of a modality to one or more areas; contrast baths, each 15 minutes
97035	Application of a modality to one or more areas; ultrasound, each 15 minutes
97036	Application of a modality to one or more areas; Hubbard tank, each 15 minutes
97110	Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Therapeutic procedure, one or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
97113	Therapeutic procedure, one or more areas, each 15 minutes; aquatic therapy with therapeutic exercises
97116	Therapeutic procedure, one or more areas, each 15 minutes; gait training (includes stair climbing)
97140	Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), one or more regions, each 15 minutes
97535	Self-care/home management training (eg, activities of daily living (ADL) and

	compensatory training, meal preparation, safety procedures, and instructions in use of assistive technology devices/adaptive equipment) direct one-on-one contact by provider, each 15 minutes
97760	Orthotic(s) management and training (including assessment and fitting when not otherwise reported), upper extremity(s), lower extremity(s) and/or trunk, each 15 minutes
97761	Prosthetic training, upper and/or lower extremity(s), each 15 minutes
97762	Checkout for orthotic/prosthetic use, established patient, each 15 minutes

HCPCS Codes	Description
G0129	Occupational therapy requiring the skills of a qualified occupational therapist, furnished as a component of a partial hospitalization treatment program, per day
G0152	Services of occupational therapist in home health setting, each 15 minutes
S9129	Occupational therapy, in the home, per diem

ICD-9-CM Diagnosis Codes	Description
	Multiple/varied

Educational or training in nature/Not medically necessary:

CPT* Codes	Description
97150	Therapeutic procedure(s), group (2 or more individuals)
97537	Community/work integration training (eg, shopping, transportation, money management, avocational activities and/or work environment/modification analysis, work task analysis, use of assistive technology device/adaptive equipment), direct one-on-one contact by provider, each 15 minutes
97545	Work hardening/conditioning; initial 2 hours
97546	Work hardening/conditioning; each additional hour

HCPCS Codes	Description
	No specific codes

ICD-9-CM Diagnosis Codes	Description
	Multiple/varied

*Current Procedural Terminology (CPT®) © 2007 American Medical Association: Chicago, IL.

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