Clinical Policy Title: Aquatic therapy

Clinical Policy Number: 15.02.09

Effective Date:	**January 1, 2016**
Initial Review Date:	August 20, 2014
Most Recent Review Date:	July 3, 2018
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Policy contains:

- Aquatic therapy.
- Hydrotherapy.
- Musculoskeletal conditions.

Related policies:

None.

ABOUT THIS POLICY: *AmeriHealth Caritas has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas' clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by AmeriHealth Caritas when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas' clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas' clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas will update its clinical policies as necessary. AmeriHealth Caritas' clinical policies are not guarantees of payment.*

Coverage policy

AmeriHealth Caritas considers the use of aquatic therapy, CPT code 97113, to be clinically proven and, therefore, medically necessary when **all** of the following criteria are met (Agency for Healthcare Research and Quality, 2012; Al-Qubaeissy, 2013; American Medical Association, 2014; American Physical Therapy Association, 2014; Bartels, 2007; Gusi, 2008; Lima, 2013; Mehrholz, 2011; Patrick, 2001; Pozzi, 2013; Veerbeek, 2014; Villalta, 2013):

- To restore function to patients with musculoskeletal conditions that result in the loss or restriction of joint motion, strength, mobility, balance, or function due to pain, injury, or illness by using the buoyancy and resistance properties of water either:
  - When the patient cannot perform land-based exercises effectively to treat his or her condition without first undergoing aquatic therapy.
  - When aquatic therapy facilitates progress to land-based exercise or increased function.
- Not duplicative of other land-based rehabilitation services.
- Part of an authorized treatment plan.

- Delivered by a licensed physical or occupational therapist permitted to use the American Medical Association's CPT codes in accordance with the therapist's respective scope of practice and state law.
- Delivered in constant attendance and one-on-one contact with the patient.
- Delivered in an aquatic therapy pool that is operated and maintained in accordance with local and/or state health department regulations.
- Documentation must include **all** of the following:
    - Justification for use of water-based exercises rather than land-based exercises, including a plan for transitioning from water-based exercises to land-based exercises.
    - Objective loss of activities of daily living, mobility, range of motion, strength, balance, coordination, posture, and effect on function.
    - Pain rating, location of pain, and effect of pain on function, if used for pain.
    - Specific exercises/activities performed (including progression of the activity), purpose of exercises as related to function, instructions given, and/or assistance needed to perform exercises to demonstrate that the skills and assistance of a therapist were required.
    - The medical necessity of other forms of exercise therapy in addition to aquatic therapy.

Limitations:

All other uses of aquatic therapy are not medically necessary.

Aquatic therapy is covered in accordance with plan-specific limitations. However, submitted documentation must support the medical necessity for continued treatment.

Only the professional charges associated with aquatic therapy will be covered. Charges for aquatic exercise programs or separate charges for use of a pool are not covered.

Supervising multiple patients in a pool at one time (group therapy) and billing for each of these patients per 15 minutes of therapy time is inappropriate and will not be covered.

Exercises in the water environment to promote overall fitness, flexibility, endurance, aerobic conditioning, and weight reduction or for maintenance purposes is not medically necessary and will not be covered.

Situations where no exercise is being performed in the water environment will not be covered.

CPT code 97113 should not be used for debridement of ulcers.

Employing hydrotherapy (CPT codes 97022 and 97036) and aquatic therapy during the same treatment session is not medically necessary.

Alternative covered services:

Land-based physical therapy (PT) or occupational therapy (OT).

Background

Water has long been believed to promote healing and has been used widely in the management of medical ailments (Martin, 2004). Aquatic therapy refers to treatments and exercises performed in water for therapeutic benefit, but its definition and scope vary across disciplines. Several terms are used to refer to aquatic therapy and are often used interchangeably, but there are distinctions among them. For example, thalassotherapy (use of the marine environment) and balneotherapy (spa therapy that uses hot or cold mineral springs or naturally occurring waters and other natural remedies) are examples of aquatic therapy used for healing. However, they may not be readily accessible or include an exercise component. Research into the therapeutic benefits of physical interventions that suggest a more rapid recovery when performed in an aquatic environment has contributed to the recent increase in the use of the aquatic environment for rehabilitation purposes.

According to the American Medical Association, aquatic therapy is a therapeutic procedure that attempts to improve function through the application of aquatic therapeutic exercises (American Medical Association, 2014). The American Medical Association specifies that physicians or other qualified health care professionals (i.e., PT or OT) are eligible to provide aquatic therapy. Therefore, aquatic therapy is not under the exclusive domain of any one profession, and the exact nature of those acts and services will differ for each profession (Aquaticnet, 2007). The health professional must provide the therapy in constant attendance and is required to have direct one-on-one patient contact (American Medical Association, 2014). All healthcare providers who can legally perform aquatic therapy must operate in accordance with their respective scope of practice and state law, and be permitted to use the American Medical Association's CPT codes. Aquatic therapy used for improving function is referred to by many names, such as aquatic rehabilitation, aqua therapy, pool therapy, water therapy, and hydrotherapy (Aquaticnet, 2007).

In the United States, PTs and OTs provide most of the aquatic therapy interventions (American Physical Therapy Association, 2014). These include, but are not limited to, treatment, rehabilitation, prevention and health, wellness, and fitness of patients in an aquatic environment. Aquatic therapy may use assistive, adaptive, orthotic, protective, or supportive devices and equipment that exploit the unique properties of the aquatic environment. The therapeutic goals of aquatic therapy are to improve flexibility, function, gait, and walking, and to promote relaxation and independence. Aquatic therapy enhances treatment for persons across all ages with musculoskeletal, neuromuscular, cardiovascular/pulmonary, and integumentary (skin) diseases, disorders, or conditions (American Physical Therapy Association, 2014).

Searches

AmeriHealth Caritas searched PubMed and the databases of:

- UK National Health Services Centre for Reviews and Dissemination.

- Agency for Healthcare Research and Quality (AHRQ) Guideline Clearinghouse and evidence-based practice centers.
- The Centers for Medicare & Medicaid Services (CMS).

We conducted searches on May 8, 2018. Search terms were: "hydrotherapy (MeSH)," "balneology (MeSH)," as well as free text terms "hydrotherapy rehabilitation," "aquatic physical therapy," "aquatic rehabilitation," and "aqua* treatment."

We included:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews.**
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.

Findings

We identified 13 systematic reviews and two cost-effectiveness analyses for this policy. The systematic reviews assessed the safety and efficacy of aquatic therapy as treatment for mobility disorders in adults caused by osteoarthritis, rheumatoid arthritis, fibromyalgia syndrome, and orthopedic surgery; mobility disorders in children with juvenile idiopathic arthritis; improving pain and physical function for people awaiting joint replacement surgery of the hip or knee; and improving function and quality of life related to asthma, chronic obstructive pulmonary disease, and stroke. Two cost-effectiveness analyses examined aquatic therapy programs for treatment of adults with osteoarthritis who were participating in 20-week aquatic classes and in women with fibromyalgia who participated in one-hour, supervised, water-based exercise sessions three times per week for eight months (Patrick, 2001; Gusi, 2008).

The overall quality of studies included in the systematic reviews was low to moderate. Low statistical power, insufficient standardized outcome measurement, inadequate reporting of intervention detail, and inappropriate randomization and blinding to outcome were the main limitations of the evidence. PTs and, to a lesser extent, OTs, provided aquatic therapy. Most studies focused on short-term benefits of aquatic therapy compared with no treatment with respect to pain, function, and quality of life. Short-term duration was defined inconsistently across studies, ranging from two weeks to several months. Adverse events were rare, although inconsistently reported as an outcome. Few studies compared the efficacy of aquatic therapy to established land-based interventions or over the long term.

There is sufficient evidence to support the use of aquatic therapy for treatment of musculoskeletal conditions that result in the loss or restriction of joint motion, strength, mobility, balance, or function due to pain, injury, or illness by using the buoyancy and resistance properties of water (Al-Qubaeissy, 2013;

Bartels, 2007; Gusi, 2008; Lima, 2013; Mehrholz, 2011; Veerbeek, 2014; Patrick, 2001; Pozzi, 2013; AHRQ, 2012; Villalta, 2013). Aquatic therapy is safe and confers short-term benefits in pain symptoms, function, and QOL that are at least comparable to land-based interventions. Finally, the evidence supports the use of aquatic therapy for these conditions in individuals who are unable to exercise on land or as a transition to land-based PT.

Policy updates:

We identified three new systematic reviews and meta-analyses for this policy update. For persons with stable heart failure, aquatic therapy may provide a safe and effective alternative for those unable to participate in traditional exercise programs, but inadequate sample size and a moderate potential for bias limited the findings (Adset, 2015). Marinho-Buzelli (2015) found "fair" evidence supporting the use of aquatic therapy to improve dynamic balance and gait speed in adults with certain neurological conditions. Bartels (2016) updated a previous 2007 Cochrane review with nine new trials and found moderate quality evidence that aquatic therapy may have small, short-term, and clinically relevant effects on patient-reported pain, disability, and quality of life in people with knee and hip osteoarthritis. The conclusions of these new reviews do not alter the findings of the original policy. Therefore, no changes to the policy are warranted.

In 2017, we identified two new evidence-based guidelines (MacFarlane, 2017; Ward, 2016) and three new systematic reviews or meta-analyses in lymphedema (Yeung, 2017), cerebral palsy (Roostaei, 2016), and hemophilia (Strike, 2016). The secondary analyses found that aquatic therapy is generally safe for each condition with low-quality evidence suggesting aquatic therapy is, at best, comparable to land-based therapy or standard of care. In all cases, additional research is needed to refine patient selection criteria and dosing parameters.

The European League Against Rheumatism recommends either land- or aquatic-based exercise therapy for fibromyalgia, as both appear equally effective (MacFarlane, 2017). The American College of Rheumatology, the Spondylitis Association of America, and the Spondyloarthritis Research and Treatment Network issued a joint recommendation for land-based PT over aquatic-based therapy in persons with active ankylosing spondylitis based on moderate-quality evidence suggesting no significant short-term differences in outcomes between the two modalities and land-based PT having a stronger evidence base (Ward, 2016). These new findings do not change the previous findings. No policy changes are warranted.

In 2018, one guideline and five peer-reviewed publications were added to the reference list.

Summary of clinical evidence:

Citation	Content, Methods, Recommendations
Macfarlane (2017)	**Key points:** • This guideline is from the European League Against Rheumatism.

Citation	Content, Methods, Recommendations
Guideline: Management of fibromyalgia	• Guideline based on 107 high quality reviews or meta-analyses, including three addressing aquatic therapy. • Strong recommendation issued for exercise therapy that can include either land or aquatic exercise, both appear equally effective.
Yeung (2017) Lymphedema	**Key points:** • Systematic review (four RCTs) and meta-analysis (two RCTs). • Overall quality: moderate based on physiotherapy evidence database (PEDro) scores averaging 6.5 out of 10. • Aquatic therapy versus land-based standard care: no significant differences in either lower limb lymphedema status (as measured by lymphedema relative volume) (standardized mean difference [SMD]: 0.14; 95% confidence interval [CI]: -0.37 to 0.64, I2 = 0%, p = 0.59), or improvement in upper limb physical function (SMD -0.27, 95% CI: -0.78 to 0.23, I2 = 0%, p = 0.29). • No adverse events reported.
Roostaei (2016) Children with cerebral palsy	**Key points:** • Systematic review of two RCTs and nine of mixed designs (mostly within group analyses); participant ages 3 to 21 years; aquatic therapy administered for two to three times per week and lasting for six to 16 weeks. • Overall quality: low. • Mild to no adverse reactions reported. • Aquatic therapy is feasible and adverse effects are minimal; dosing parameters are unclear.
Strike (2016) Cochrane review Exercise for hemophilia	**Key points:** • Systematic review of eight randomized or quasi-randomized controlled studies, including one comparing land- and water-based exercises. • Overall quality: low or very low due to small sample sizes and potential bias. • Aquatic therapy produced significant decreases in pain compared to controls and land-based exercise groups, but no between-group difference in range of motion. • No data reported on bleed frequency, quality of life, or aerobic activity in any study.
Bartels (2007, updated 2016) Cochrane review Aquatic therapy for osteoarthritis of knee or hip	**Key points:** • Systematic review of 13 randomized clinical trials (RCTs), 1,190 adults. • Evidence suggests some beneficial short-term improvement of aquatic therapy for patients with hip and/or knee osteoarthritis; long-term effects are unknown. – Small short-term improvement versus controls in pain (standard mean difference [SMD] -0.31, 95% confidence interval [CI] -0.47 to -0.15; 12 trials, 1,076 participants) and disability (SMD -0.32, 95% CI -0.47 to -0.17; 12 trials, 1,059 participants). – Small effect on quality of life (SMD -0.25, 95% CI -0.49 to -0.01; 10 trials, 971 participants). – Effects on pain and disability correspond to a mean pain and mean disability score 5 points lower (95% CI 3 to 8 points lower) than the control group (scale 0 to 100), and a score 7 points higher (95% CI 0 to 13 points higher) on mean QOL than the control group (scale 0 to 100).

Citation	Content, Methods, Recommendations
	– No included trials performed a radiographic evaluation. No serious adverse events were reported in relation to aquatic therapy. • Based on this, consider aquatic therapy as the first part of a longer exercise program. Studies of clearly defined patient groups with long-term outcomes needed.
Ward (2016) Guideline: Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis	**Key points:** • This guideline is from the American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network. • Conditional recommendation for land-based PT over aquatic therapy based on moderate-quality evidence from four controlled trials comparing aquatic therapy and land-based treatment in active ankylosing spondylitis suggesting no significant short-term differences in changes in disease activity, pain, or stiffness between treatment groups, but some slightly better outcomes with aquatic interventions.
Adsett (2015) Stable heart failure	**Key points:** • Systematic review and meta-analysis of eight studies (156 total participants). • Aquatic therapy is superior to comparator protocols for six-minute walk test ($p < 0.004$) and peak power ($p < 0.044$). • Compared to land-based training programs, aquatic therapy provided similar benefits for peak oxygen consumption, muscle strength, and quality of life. • Aquatic therapy had no influence on cardiac dimensions, left ventricular ejection fraction, cardiac output, and B-type natriuretic peptide levels. • Aquatic therapy may be a safe and effective alternative for those unable to participate in traditional exercise programs.
Marinho-Buzelli (2015) Neurological diseases	**Key points:** • Systematic review of four RCTs, four non-randomized studies, and 12 before-and-after tests. • Overall quality: fair. • Evidence suggests use of aquatic therapy improves dynamic balance and gait speed in adults with certain neurological conditions.
Gibson (2015) Cochrane review Aquatic therapy versus land-based therapy after hip or knee replacement	**Key points:** • Meta-analysis of two of these studies found moderate-quality evidence that aquatic therapy plus land-based therapy improves functional outcomes, knee ROM, and edema compared with land-based therapy alone. • The results for improved functional outcomes were not considered clinically significant. • Further studies of sound methodological quality are required to confirm the results.
Grande Antonio (2014) Cochrane review Asthma	**Key points:** • Systematic review of three RCTs (136 total adults). • No clear differences noted between groups regarding symptoms, lung function, changes in medication, and adverse effects, where reported. • Insufficient evidence to assess the place of water-based exercise in asthma.
Veerbeek (2014)	**Key points:**

Citation	Content, Methods, Recommendations
Chronic phase stroke	• Systematic review of three RCTs (65 total patients) of aquatic therapy versus land-based PT. • Water-based exercises had a significant homogeneous positive summary effect size for muscle strength and a nonsignificant SES for balance. No values reported.
Al-Qubaeissy (2013) Rheumatoid arthritis	**Key points:** • Systematic review of six RCTs (419 total adult patients). • Favorable outcomes for aquatic therapy versus no treatment or other interventionsAquatic therapy reduced pain, joint tenderness, mood, and tension symptoms, and increased grip strength and patient satisfaction with treatment in the short term. • Long-term benefits are unknown. Further studies are needed.
Gill (2013) Pre-op hip or knee replacement	**Key points:** • Systematic review of pre-op exercise interventions; three RCTs used aquatic therapy in adults awaiting hip replacement, one RCT for knee replacement. • Insufficient evidence to determine effect of aquatic therapy on outcomes.
Lima (2013) Fibromyalgia	**Key points:** • Systematic review and meta-analysis including 27 RCTs. • Aquatic PT versus no treatment: aquatic PT of > 20 weeks improved functional ability. • Insufficient evidence of effect of aquatic therapy for other outcomes.
McNamara (2013) Cochrane review COPD	**Key points:** • Systematic review of five RCTs or quasi-RCTs (176 total adults [71 aquatic therapy, 54 land-based exercise training, 51 no exercise training]). • Aquatic therapy versus no exercise: aquatic therapy improved the six-minute walk distance, the incremental shuttle walk distance, the endurance shuttle walk distance, and quality of life. • Aquatic therapy versus land-based: No significant differences in six-minute walk distance or the incremental shuttle walk distance. Endurance shuttle walk favored aquatic therapy. No significant differences for quality of life as measured by the St. George's Respiratory Questionnaire or by three of four domains of the Chronic Respiratory Disease Questionnaire. • Limited quality evidence that aquatic therapy is safe and offers short-term advantages over land-based exercises in improving endurance exercise capacity, but impact on quality of life remains uncertain. Sustained long-term effects are uncertain.
Mehrholz (2011) Cochrane review Chronic phase stroke	**Key points:** • Systematic review of four RCTs (94 total patients). • Results of single studies suggest significant improvement in activity of dailies living. No significant improvement in walking ability after water-based exercise compared to control. Adverse effects not reported. • Insufficient evidence to confirm or refute the effect of aquatic therapy on disability in persons with chronic stroke. Higher-quality studies needed.

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Professional society guidelines/other:

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CMS National Coverage Determinations (NCDs):

No NCDs were identified as of the writing of this policy.

Local Coverage Determinations (LCDs):

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Commonly submitted codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

CPT Code	Description	Comments
97022	Application of a modality to one or more areas; whirlpool	Does not require one-on-one patient contact
97036	Application of a modality to one or more areas; Hubbard tank each 15 minutes	Requires direct one-on-one patient contact
97113	Aquatic therapy with therapeutic exercises	Physician or other qualified health care professional (i.e., therapist) required to have direct (one-on-one) patient contact and are time-based

ICD-10 Code	Description	Comments
G04.1	Tropical spastic paraplegia	
G81.00-G81.94	Hemiplegia	
G82.20	Paraplegia, unspecified	
G82.21	Paraplegia, complete	
G82.22	Paraplegia, incomplete	
M05.40-M05.49	Rheumatoid myopathy with rheumatoid arthritis	
M05.50-M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis	
M05.70-M05.79	Rheumatoid arthritis with rheumatoid factor	
M05.80-M05.89	Other rheumatoid arthritis with rheumatoid factor	
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	

ICD-10 Code	Description	Comments
M06.00-M06.09	Rheumatoid arthritis without rheumatoid factor	
M06.20-M06.29	Rheumatoid bursitis	
M06.30-M06.39	Rheumatoid nodule	
M06.80-M06.89	Other specified rheumatoid arthritis	
M06.9	Rheumatoid arthritis, unspecified	
M08.00-M08.09	Unspecified juvenile rheumatoid arthritis	
M08.20-M08.29	Juvenile rheumatoid arthritis with systemic onset	
M08.3	Juvenile rheumatoid polyarthritis (seronegative)	
M08.40-M08.48	Pauciarticular juvenile rheumatoid arthritis	
M08.80-M08.89	Other juvenile arthritis	
M08.90-M08.99	Juvenile arthritis, unspecified, unspecified site	
M08.91-M08.99	Juvenile arthritis, unspecified	
M15.0	Primary generalized (osteo)arthritis	
M15.1	Heberden's nodes (with arthropathy)	
M15.2	Bouchard's nodes (with arthropathy)	
M15.3	Secondary multiple arthritis	
M15.4	Erosive (osteo)arthritis	
M15.8	Other polyosteoarthritis	
M15.9	Polyosteoarthritis, unspecified	
M16.10	Unilateral primary osteoarthritis, unspecified hip	
M16.11	Unilateral primary osteoarthritis, right hip	
M16.12	Unilateral primary osteoarthritis, left hip	
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	
M16.30	Unilateral osteoarthritis resulting from hip dysplasia, unspecified hip	
M16.31	Unilateral osteoarthritis resulting from hip dysplasia, right hip	
M16.32	Unilateral osteoarthritis resulting from hip dysplasia, left hip	
M16.4	Bilateral post-traumatic osteoarthritis of hip	
M16.50	Unilateral post-traumatic osteoarthritis, unspecified hip	
M16.51	Unilateral post-traumatic osteoarthritis, right hip	
M16.52	Unilateral post-traumatic osteoarthritis, left hip	
M16.6	Other bilateral secondary osteoarthritis of hip	
M16.7	Other unilateral secondary osteoarthritis of hip	
M16.9	Osteoarthritis of hip, unspecified	
M17.0	Bilateral primary osteoarthritis of knee	
M17.10	Unilateral primary osteoarthritis, unspecified knee	
M17.11	Unilateral primary osteoarthritis, right knee	
M17.12	Unilateral primary osteoarthritis, left knee	
M17.2	Bilateral post-traumatic osteoarthritis of knee	
M17.30	Unilateral post-traumatic osteoarthritis, unspecified knee	
M17.31	Unilateral post-traumatic osteoarthritis, right knee	
M17.32	Unilateral post-traumatic osteoarthritis, left knee	
M17.4	Other bilateral secondary osteoarthritis of knee	

ICD-10 Code	Description	Comments
M17.5	Other unilateral secondary osteoarthritis of knee	
M17.9	Osteoarthritis of knee, unspecified	
M18.0	Bilateral primary osteoarthritis of first carpometacarpal joints	
M18.10	Unilateral primary osteoarthritis of first carpometacarpal joint, unspecified hand	
M18.11	Unilateral primary osteoarthritis of first carpometacarpal joint, right hand	
M18.12	Unilateral primary osteoarthritis of first carpometacarpal joint, left hand	
M18.2	Bilateral post-traumatic osteoarthritis of first carpometacarpal joints	
M18.30	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified hand	
M18.31	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, right hand	
M18.32	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, left hand	
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	
M18.50	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified hand	
M18.51	Other unilateral secondary osteoarthritis of first carpometacarpal joint, right hand	
M18.52	Other unilateral secondary osteoarthritis of first carpometacarpal joint, left hand	
M18.9	Osteoarthritis of first carpometacarpal joint, unspecified	
M19.011-M19.079	Primary osteoarthritis	
M19.111-M19.179	Post-traumatic osteoarthritis	
M19.211-M19.279	Secondary osteoarthritis	
M19.90	Unspecified osteoarthritis, unspecified site	
M19.91	Primary osteoarthritis, unspecified site	
M19.92	Post-traumatic osteoarthritis, unspecified site	
M19.93	Secondary osteoarthritis, unspecified site	
M60.80-M60.89	Other myositis	
M60.9	Myositis, unspecified	
M79.1	Myalgia	
M79.7	Fibromyalgia	
Z89.111	Acquired absence of right hand	
Z89.112	Acquired absence of left hand	
Z89.119	Acquired absence of unspecified hand	
Z89.121	Acquired absence of right wrist	
Z89.122	Acquired absence of left wrist	
Z89.129	Acquired absence of unspecified wrist	
Z89.211	Acquired absence of right upper limb below elbow	
Z89.212	Acquired absence of left upper limb below elbow	
Z89.219	Acquired absence of unspecified upper limb below elbow	
Z89.221	Acquired absence of right upper limb above elbow	
Z89.222	Acquired absence of left upper limb above elbow	
Z89.229	Acquired absence of unspecified upper limb above elbow	
Z89.231	Acquired absence of right shoulder	
Z89.232	Acquired absence of left shoulder	

ICD-10 Code	Description	Comments
Z89.239	Acquired absence of unspecified shoulder	
Z89.431	Acquired absence of right foot	
Z89.432	Acquired absence of left foot	
Z89.439	Acquired absence of unspecified foot	
Z89.441	Acquired absence of right ankle	
Z89.442	Acquired absence of left ankle	
Z89.449	Acquired absence of unspecified ankle	
Z89.511	Acquired absence of right leg below knee	
Z89.512	Acquired absence of left leg below knee	
Z89.519	Acquired absence of unspecified leg below knee	
Z89.611	Acquired absence of right leg above knee	
Z89.612	Acquired absence of left leg above knee	
Z89.619	Acquired absence of unspecified leg above knee	
Z89.621	Acquired absence of right hip joint	
Z89.622	Acquired absence of left hip joint	
Z89.629	Acquired absence of unspecified hip joint	
Z89.9	Acquired absence of limb, unspecified	
Z96.641	Presence of right artificial hip joint	
Z96.642	Presence of left artificial hip joint	
Z96.643	Presence of artificial hip joint, bilateral	
Z96.649	Presence of unspecified artificial hip joint	
Z96.651	Presence of right artificial knee joint	
Z96.652	Presence of left artificial knee joint	
Z96.653	Presence of artificial knee joint, bilateral	
Z96.659	Presence of unspecified artificial knee joint	
Z96.661	Presence of right artificial ankle joint	
Z96.662	Presence of left artificial ankle joint	
Z96.669	Presence of unspecified artificial ankle joint	

HCPCS Level II Code	Description	Comments
N/A		