CLINICAL GUIDELINES

Large Joint Services

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ASURIS NORTHWEST HEALTH

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Clinical guidelines for medical necessity review of comprehensive musculoskeletal management services.

Large Joint Services	

400 Buckwalter Place Boulevard, Bluffton, SC 29910 (800) 918-8924

CMM-311: Knee Replacement/Arthroplasty

CMM-311.1: Definition

- **Knee arthroplasty** is an orthopaedic surgical procedure during which the articular surface of the knee joint is replaced, remodeled or realigned.
- **Knee replacement** is a form of arthroplasty that includes the surgical replacement of the knee joint with a prosthesis.
- **Prosthesis** refers to an artificial device used to replace a structural element within a joint to improve and enhance function.
- **Total knee replacement** involves surgical reconstruction or replacement of the entire knee joint as a result of unicompartmental, bicompartmental, or tricompartmental involvement.
- **Partial knee replacement** involves surgical reconstruction or replacement of one joint surface of the knee joint as a result of unicompartmental (e.g., medial, lateral, or patellofemoral) involvement.
- **Revision of knee replacement (partial or total)** involves surgical reconstruction or replacement due to failure or complications of previous knee replacement.
- **The Modified Outerbridge Classification** is a system that has been developed for judging articular cartilage injury to the knee. This system allows delineation of varying areas of chondral pathology, based on the qualitative appearance of the cartilage surface, and can assist in identifying those injuries that are suitable for repair techniques. The characterization of cartilage in this system is as follows:
  - Grade I - Softening with swelling
  - Grade II - Fragmentation and fissuring less than one square centimeter (1 cm^2)
  - Grade III - Fragmentation and fissuring greater than one square centimeter (1 cm^2)
  - Grade IV - Subchondral bone exposed
- **The Kellgren-Lawrence Grading System** is a radiographic grading system that has been developed for describing osteoarthritic changes to the knee. When used, the radiographic findings are typically reported within one of the following categories:
  - Grade I – Doubtful narrowing of joint space and possible osteophytic lipping
  - Grade II – Definite osteophytes and possible narrowing of joint space
  - Grade III – Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis, and possible deformity of bone contour
  - Grade IV – Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone contour
- **Non-surgical management**, with regard to the treatment of knee osteoarthritis, is defined as any provider-directed non-surgical treatment, which has been demonstrated in the scientific literature as efficacious and/or is considered reasonable care in the treatment of knee pain from osteoarthritis. The types of treatment involved can include, but are not limited to: relative rest/activity modification, weight loss, supervised physiotherapy modalities and therapeutic exercises, oral prescription and non-prescription medications, bracing and other

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assistive devices (e.g., cane, crutches, walker, wheelchair), and/or intra-articular injections (i.e., steroid and/or viscosupplementation).

CMM-311.2: General Guidelines

The determination of medical necessity for the performance of knee replacement (partial or total) is always made on a case-by-case basis.

CMM-311.3: Indications and Non-Indications

Partial Knee Replacement

- **Partial knee replacement** (medial, lateral, or patellofemoral unicompartmental) is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
  - Loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
  - Severe unicompartmental (medial, lateral, or patellofemoral) degenerative arthritis evidenced by **EITHER** of the following:
    - Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone contour (i.e., Kellgren-Lawrence Grade IV radiographic findings)
    - Exposed subchondral bone (i.e., Modified Outerbridge Classification Grade IV arthroscopy findings)
  - Intact, stable ligaments, in particular the anterior cruciate ligament
  - Knee arc of motion (full extension to full flexion) greater than 90º
  - Failure of at least three (3) months of provider-directed non-surgical management
    - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
    - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.
- **Patellofemoral unicompartmental replacement** to manage protracted anterior knee pain and/or mechanical symptoms attributed to the patellofemoral joint following a total knee replacement, during which patellar replacement was not performed at the time of the index knee replacement, is considered **medically necessary** when the above criteria are met for the performance of patellofemoral unicompartmental replacement, with the exception of radiographic criteria.
- **Partial knee replacement** (medial, lateral, or patellofemoral unicompartmental) is considered **not medically necessary** for any other indication or condition, when **ANY** of the following criteria is present:
  - Grade III or IV patellofemoral joint arthritis (when unicompartmental replacement is to be performed of the medial or lateral compartment) and Grade IV medial or lateral compartment degenerative changes (when unicompartmental

replacement is to be performed of the patellofemoral compartment), evidenced by **ANY** of the following:
  - Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone contour (i.e., Kellgren-Lawrence Grade IV radiographic findings)
  - Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis, and possible deformity of bone contour (i.e., Kellgren-Lawrence Grade III radiographic findings)
  - Exposed subchondral bone (i.e., Modified Outerbridge Classification Grade IV arthroscopy findings)
- Tibial or femoral shaft deformity
- Radiographic evidence of medial or lateral subluxation
- Flexion contracture greater than 15º
- Varus deformity greater than 15º
- Valgus deformity greater than 20º
- Inflammatory arthropathy
- Active local or systemic infection
- Osseous abnormalities that cannot be optimally managed prior to surgery which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant)
- Severe lack of collateral ligament integrity leading to joint instability
- Charcot joint
- One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
- Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
- Severe immunocompromised state

Total Knee Replacement

- **Total Knee Replacement** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
  - Loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
  - Severe unicompartmental (medial, lateral, or patellofemoral), bicompartmental, or tricompartmental degenerative arthritis evidenced by **EITHER** of the following:
    - Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone contour (i.e., Kellgren-Lawrence Grade IV radiographic findings)
    - Exposed subchondral bone (i.e., Modified Outerbridge Classification Grade IV arthroscopy findings)

- Failure of at least three (3) months of provider-directed non-surgical management
  - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
  - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.

- **Total Knee Replacement** is considered **medically necessary** for a fracture of the distal femur when conservative management or surgical fixation is not considered a reasonable option.
- **Total Knee Replacement** is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Active local or systemic infection
  - Osseous abnormalities that cannot be optimally managed and which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant)
  - Joint instability due to a lack of collateral ligament integrity not amenable to surgical correction (e.g., specialized implant, constrained implant, or a hinge implant)
  - Greater than 30 degrees of fixed varus or valgus deformity not amenable to surgical correction.
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
  - Severe immunocompromised state
- Refer to **MS-12: Osteoarthritis** and **MS-25: Knee** for the advanced imaging indications prior to knee replacement surgery.

Revision of Knee Replacement – Partial or Total

- **Revision of Knee Replacement** (including revision of a total knee replacement, revision of a medial, lateral, or patellofemoral unicompartmental replacement to another medial, lateral, or patellofemoral unicompartmental replacement, or revision of a medial, lateral, or patellofemoral unicompartmental replacement to a total knee replacement) is considered **medically necessary** for an individual who has previously undergone a partial or total knee replacement when **ANY** of the following criteria have been met:
  - Presence of **ANY** of the following:
    - Fracture or dislocation of the patella
    - Aseptic loosening
    - Periprosthetic infection
    - Periprosthetic fracture
    - Implant fracture or component failure
    - Stiffness more than 12 weeks post-operatively when manipulation is deemed unsafe by provider with well positioned, well fixed, appropriately sized complents
    - Stiffness due to component sizing of positioning
    - Instability of the knee
    - Clinically significant, symptomatic limb malalignment due to existing component position
  - Unexplained function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for greater than six (6) months unresponsive to provider-directed non-surgical management
  - Kellgren-Lawrence Grade IV radiographic findings in the non-replaced medial, lateral, or patellofemoral compartments if revising from a partial (unicompartmental) knee replacement to a total joint replacement
- **Revision of knee replacement** is considered **not medically necessary** for any other indication or condition.
- **Isolated polyethylene liner exchange (IPE)** is considered **medically necessary** when **ANY** of the following criteria have been met:
  - Wear and Osteolysis:
    - Symptomatic individual with progressive osteolysis noted on imaging studies which also confirm well-fixed implants in acceptable position
  - Periprosthetic joint infection:
    - Individual is less than four (4) weeks from the index replacement procedure with well-fixed implants
  - Stiffness following total knee replacement (flexion contracture of > 15 degrees or flexion limited to < 90 degrees):
    - Individual presents later than three (3) months from the index replacement procedure, after failure of physical therapy and manipulation under anesthesia with persistent restricted range-of-motion
  - Instability:
    - Individual with flexion or mid-flexion instability without component malrotation or malalignment

- **Isolated polyethylene liner exchange (IPE)** is considered **not medically necessary** for any other indication or condition.
- Refer to **MS-16: Post-Operative Joint Replacement Surgery** and **MS-25: Knee** for advanced imaging indications following knee replacement surgery.

Knee Arthroplasty

- Refer to **CMM-312.3: Procedures for Patellofemoral Conditions** for the indications and non-indications of trochleoplasty using CPT® 27442 for a hypoplastic trochlea in patients with recurrent patellar instability.

Lysis of Adhesions/Manipulation Under Anesthesia (MUA)

- Refer to **CMM-312.3: Lysis of Adhesion/Manipulation Under Anesthesia (MUA)** for indications and non-indications of lysis of adhesions/manipulation under anesthesia (MUA).

CMM-311.4: Experimental, Investigational, or Unproven

- Based on lack of scientific evidence of efficacy and safety, the following are considered **experimental, investigational, or unproven**:
  - Bicompartmental knee arthroplasty
  - Bi-unicompartmental knee arthroplasty
  - Focal resurfacing of a single knee joint defect (e.g., Arthrosurface® femoral condyle implant)
  - Unicompartmental free-floating (un-fixed) interpositional device (e.g., UniSpacer®)
- The following CPT codes for arthroplasty of the patella, distal femur, or tibia are considered **experimental, investigational or unproven**:
  - CPT® 27437 - Arthoplasty, patella; without prosthesis
  - CPT® 27440 - Arthroplasty, knee, tibial plateau
  - CPT® 27441 - Arthroplasty, knee, tibial plateau; with debridement and partial synovectomy
  - CPT® 27443 - Arthroplasty, femoral condyles or tibial plateau(s), knee; with debridement and partial synovectomy

CMM-311.5: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
27438	Arthroplasty, patella; with prosthesis
27442	Arthroplasty, femoral condyles or tibial plateau(s), knee
27445	Arthroplasty, knee, hinge prosthesis (e.g. Walldius type)
27446	Arthroplasty, knee, condyle and plateau; medial OR lateral compartment
27447	Arthroplasty, knee, condyle and plateau; medical AND lateral compartments with or without patella resurfacing (total knee Arthroplasty)
27486	Revision of total knee Arthroplasty, with or without allograft; 1 component
27487	Revision of total knee Arthroplasty, with or without allograft; femoral and entire tibial component
27488	Removal of prosthesis, including total knee prosthesis, methylmethacrylate with or without insertion of spacer, knee
+0055	Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image-guidance based on CT/MRI images (List separately in addition to code for primary procedure)
HCPCS Level II	
S2900	Surgical techniques requiring use of robotic surgical system (list separately in addition to code for primary procedure)
The use of the following CPT® codes are considered experimental, investigational, and unproven.	
27437	Arthoplasty, patella; without prosthesis
27440	Arthroplasty, knee, tibial plateau
27441	Arthroplasty, knee, tibial plateau; with debridement and partial synovectomy
27443	Arthroplasty, femoral condyles or tibial plateau(s), knee; with debridement and partial synovectomy

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

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CMM-311.6: References

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CMM-312: Knee Surgery-Arthroscopic and Open Procedures

CMM-312.1: Definitions

- The Modified Outerbridge Classification is a system that has been developed for judging articular cartilage injury to the knee. This system allows delineation of varying areas of chondral pathology, based on the qualitative appearance of the cartilage surface, and can assist in identifying those injuries that are suitable for repair techniques. The characterization of cartilage in this system is as follows:
  - Grade I – Softening with swelling
  - Grade II – Fragmentation and fissuring less than one square centimeter (1 cm^2)
  - Grade III – Fragmentation and fissuring greater than one square centimeter (1 cm^2)
  - Grade IV – Subchondral bone exposed
- **The Kellgren-Lawrence Grading System** is a radiographic grading system that has been developed for describing osteoarthritic changes to the knee. When used, the radiographic findings are typically reported within one of the following categories:
  - Grade 0 – No radiographic features of osteoarthritis are present
  - Grade I – Doubtful narrowing of joint space and possible osteophytic lipping
  - Grade II – Definite osteophytes and possible narrowing of joint space
  - Grade III – Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis, and possible deformity of bone contour
  - Grade IV – Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone contour.
- **Autologous Chondrocyte Implantation (ACI) or Autologous Chondrocyte Transplantation (ACT)** is a cell-based cartilage repair surgical technique which utilizes an individual's own cells in an effort to repair damage to articular cartilage with the goal of improving joint function and reducing pain. The procedure involves the collection and culture of articular cartilage cells (i.e., chondrocytes) that are then implanted into the cartilage defect with the intent that the cultured cells will contribute to the regeneration and repair of the articular surface.
- **MACI® Implant** (Vericel Corporation, Cambridge, MA [formerly Genzyme Biosurgery]**):** Until recently**,** Carticel® (Vericel Corporation, Cambridge, MA [formerly Genzyme Biosurgery]) was the only technology that received FDA approval for the culturing of chondrocytes. MACI® Implant received approval from the U.S. Food and Drug Administration December 2016 as an autologous cellularized scaffold indicated for repair of single or multiple symptomatic, full-thickness cartilage defects of the knee with or without bone involvement in adults. MACI® Implant is utilized as part of an ACI procedure in which cartilage cells are removed during arthroscopy, and shipped to a laboratory, where the cells are cultured over a period of several weeks. The cells are seeded on a porcine collagen membrane, and once the culturing process is complete, the cells seeded on the membrane are returned to the surgeon for implantation during the procedure. The membrane is placed into the defect, and over several months the cells create a matrix that is intended to cover the articular surface of the knee. The safety and effectiveness of MACI® Implant in joints other than the knee has not been established.

- **Kissing Lesion** is an articular cartilage defect on opposing joint surfaces of the knee and that are in contact either between the patella and distal femur or the distal femur and tibia (e.g., bipolar lesion).
- **Mosaicplasty** (or osteochondral cylinder transplantation) is a surgical technique which consists of harvesting cylindrical bone-cartilage grafts and transplanting them into focal chondral or osteochondral defects in the knee. After excision of the chondral lesion, an abrasion arthroplasty is performed to refresh the base of the defect. The grafting procedure involves collecting grafts from the posterior aspect of the distal femoral articular surfaces (medial condyle, lateral condyle or trochlea) and implanting the grafts in a mosaic-like pattern that will contribute to regeneration and repair the articular surface. A recipient tunnel is created and sized with a drill bit slightly larger than the length of the graft. The harvested graft is placed in the tunnel by a press-fit method. All subsequent grafts are inserted in a similar pattern.
- **The Osteochondral Allograft Transplantation (OATS) Procedure** is similar to mosaicplasty, involving the use of a larger, single plug that usually fills an entire defect. It is often performed to graft chondral defects that are also associated with anterior cruciate ligament (ACL) tears. This method allows arthroscopic access to both the ACL and the chondral defect for the performance of a repair and the grafting procedure.
- **Subchondral Drilling or Microfracturing** is a surgical procedure which is performed after the calcified cartilage is debrided and the surgeon creates tiny fractures in the adjacent bones (through the use of an awl). Blood and bone marrow (which contains stem cells) seep out of the fractures, creating a blood clot that releases cartilage-building cells. The microfractures are treated as an injury by the body, which is why the surgery results in new, replacement cartilage. Studies have shown that microfracturing techniques do not fill the chondral defect fully and the repair material that forms is fibrocartilage. Fibrocartilage is not as mechanically sound as the original hyaline cartilage; it is much denser and isn't able to withstand the demands of everyday activities as well as hyaline cartilage and is; therefore, at a higher risk of breaking down. The procedure is less effective in treating older individuals, overweight individuals, or in larger cartilage lesions. Furthermore, chances are high that after only one or two years, symptoms start to return as the fibrocartilage wears away, forcing the individual to reengage in articular cartilage repair.
- **Arthrofibrosis** is a condition of the appendicular skeletal system that has resulted from disease, injury, or surgery, and results in pain and restricted range of motion due to internal scarring of the joint with consequent stiffness.

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- **Non-surgical management**, with regard to the treatment of knee pain, is defined as any provider-directed non-surgical treatment which has been demonstrated in the scientific literature as efficacious and/or is considered reasonable care in the treatment of knee pain. The types of treatment involved can include, but are not limited to: ice, relative rest/activity modification, acupuncture, weight loss, supervised physiotherapy modalities and therapeutic exercises, oral prescription and non-prescription medications, assistive devices (e.g., brace, cane, crutches, walker, wheelchair), and/or intra-articular injections (i.e., steroid, viscosupplementation).

CMM-312.2: General Guidelines

- The determination of medical necessity for the performance of knee surgery is always made on a case-by-case basis.
- Refer to **MS-25: Knee** for advanced imaging indications for conditions about the knee.

CMM-312.3: Indications and Non-Indications

Knee arthroscopic or open surgical procedures may be considered **medically necessary** for individuals when surgery is being performed for fracture, tumor, infection or foreign body that has led to, or will likely lead to, progressive destruction.

Diagnostic Arthroscopy

- Diagnostic arthroscopy is considered **medically necessary** as a stand-alone procedure when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least six (6) months in duration
  - Any **ONE** of the following physical examination findings:
    - Limited range of motion
    - Evidence of joint swelling/effusion
    - Joint line tenderness
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Absence of Kellgren-Lawrence Grade 2 or greater findings on plain radiographs
  - MRI or CT arthrogram is inconclusive for internal derangement/pathology
- Diagnostic Arthroscopy is considered **not medically necessary** for any other indication or condition.

Arthroscopic Debridement (Chondroplasty)/Loose Body/Foreign Body Removal

- Arthroscopic debridement (chondroplasty), loose body removal, and foreign body removal are considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual reports pain and any **ONE** of the following mechanical symptoms:
    - Knee range of motion is "blocked" due to pain
    - Giving way, subjective weakness, buckling of the knee
    - Painful locking, clicking, catching, or popping during weight-bearing activities
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
    - **Please note**: In the presence of an acutely locked knee joint related to an intra-articular loose body or foreign body, three (3) months of provider-directed non-surgical management is not required.
  - MRI or CT arthrogram demonstrates articular cartilage degeneration and any **ONE** of the following conditions:
    - Loose body or foreign body within the joint
    - Unstable flaps of articular cartilage
    - Meniscal tear that extends to the articular surface (not simply degenerative changes, i.e., fraying) in conjunction with articular cartilage degeneration
    - Impinging osteophytes, which would be reasonably expected to result in mechanical symptoms and loss of knee joint function
- Arthroscopic debridement (chondroplasty) is considered **not medically necessary** in the presence of Kellgren-Lawrence Grade 2 or greater findings on plain radiographs
- Arthroscopic debridement (chondroplasty), loose body removal, and foreign body removal are considered **not medically necessary** for any other indication or condition.

Synovectomy

- Synovectomy (limited [e.g., plica or shelf resection], as a stand-alone procedure, or a major procedure with 2 or more compartments [e.g., medial or lateral]) is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Any **ONE** of the following physical examination findings:
    - Limited range of motion
    - Evidence of joint swelling/effusion
    - Joint line or plica tenderness
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - MRI or CT arthrogram demonstrates evidence of synovitis or plica
  - Presence of any **ONE** of the following:
    - Plica syndrome
    - Inflammatory arthritis (i.e., rheumatoid arthritis, gout, pseudogout, psoriatic arthritis)
    - Pigmented villonodular synovitis (PVNS)
    - Synovial chondromatosis
    - Lyme synovitis
    - Hemophilia
    - Hemochromatosis
    - Non-specific synovitis (including proliferative synovitis, post-operative synovitis as a sequela from a knee replacement, patellar clunk syndrome, cyclops lesion, etc.)
    - Recurrent hemarthrosis (i.e., secondary to sickle cell anemia, bleeding diathesis, etc.)
- Synovectomy is considered **not medically necessary** for any other indication or condition.

Meniscectomy or Meniscal Repair

- Meniscectomy (partial or total) or meniscal repair is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual reports pain and any **ONE** of the following mechanical symptoms:
    - Knee range of motion is “blocked” due to pain
    - Giving way, subjective weakness, or buckling of the knee
    - Painful locking, clicking, catching, or popping during weight-bearing activities
  - **TWO OR MORE** of the following physical examination findings:
    - Limited range of motion
    - Evidence of joint swelling/effusion
    - Joint line tenderness
    - Positive McMurray’s Test, Thessaly Test, or Apley’s Compression Test

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- Failure of provider-directed non-surgical management for at least three (3) months in duration,
  - **Please note**: Acute meniscal tear with associated function-limiting pain or locked knee does not require three (3) months of provider-directed non-surgical management.
- MRI or CT arthrogram demonstrates a meniscal tear that extends to the articular surface (not simply degenerative changes, i.e., fraying) that correlates with the individual's reported symptoms and physical exam findings

- Meniscectomy/debridement for degenerative meniscal tears is considered **medically necessary** when **ALL** of the above criteria have been met **AND** when **BOTH** of the following criteria have been met:
  - Acute or acute on chronic degenerative meniscal tear that produced a recent change in symptoms which includes new mechanical symptoms
  - Absence of Kellgren-Lawrence Grade 2 or greater findings on plain radiographs
- Meniscectomy/saucerization for discoid lateral meniscus is considered **medically necessary** when MRI confirms the presence of a discoid meniscus and **ALL** of the above criteria are met (other than demonstration of a meniscal tear)
- Meniscectomy (partial or total) or meniscal repair is considered **not medically necessary** for any other indication or condition.

Meniscal Allograft Transplantation

- Meniscal allograft transplantation is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands or employment)
  - Prior significant trauma resulting in an irreparable meniscal tear or has undergone a meniscectomy where at least 50% of the meniscus has been removed
  - Any **ONE** of the following physical examination findings:
    - Limited range of motion
    - Evidence of joint swelling/effusion
    - Joint line tenderness
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Body Mass Index (BMI) 35 or less
  - Age 49 years or younger
- Meniscal allograft transplantation is considered **not medically necessary** for any other indication or condition, including when **EITHER** of the following criteria is present:
  - Upon standing radiographs, individual demonstrates osteoarthritic change in the knee including joint space narrowing and osteophytes which is classified by the Kellgren-Lawrence Scale as Grade III or IV

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- Upon MRI, individual demonstrates articular degeneration in affected compartment which is classified by the Modified Outerbridge Scale as Grade III or IV

Anterior Cruciate Ligament (ACL) Reconstruction

- Anterior cruciate ligament (ACL) reconstruction with allograft or autograft is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain and/or a documented loss of knee function during the course of preoperative treatment which interferes with **ANY** of the following:
    - Ability to carry out age appropriate activities of daily living
    - Demands of employment
    - Need to return to activities that require cutting, pivoting, and/or agility in which ACL insufficiency may predispose to further instability episodes that may result in new articular or meniscal cartilage injuries
  - Individual reports knee instability which is noted as giving way, subjective weakness, or "buckling" during the course of preoperative treatment
  - Any **ONE** of the following physical examination findings:
    - Positive Lachman's Test
    - Positive Anterior Drawer Test
    - Positive Pivot Shift Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, except in an acute injury setting where hemarthrosis, effusion, and joint instability have been documented and **ANY** of the following are present:
    - Need to return to high-demand sports that require cutting, pivoting, and/or agility activities in which ACL insufficiency may predispose to further instability episodes that may result in new articular or meniscal cartilage injuries
    - A confirmed ACL tear and a repairable meniscus tear
    - Concomitant ligament injuries (i.e., multi-ligamentous knee injury) that require reconstruction to provide stability
  - MRI, CT arthrogram, or arthroscopy demonstrates a tear/disruption or significant laxity of the anterior cruciate ligament (ACL)
- Anterolateral ligament reconstruction is considered **medically necessary** when the above criteria are met for anterior cruciate ligament (ACL) reconstruction and when anterolateral ligament (ALL) reconstruction is required to augment the anterior cruciate ligament (ACL) reconstruction.
- Anterior cruciate ligament (ACL) reconstruction is considered **not medically necessary** for any other indication or condition.

Posterior Cruciate Ligament (PCL) Reconstruction

- Posterior cruciate ligament (PCL) reconstruction with allograft or autograft is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain and a documented loss of knee function which interferes with the ability to carry out the age appropriate activities of daily living and/or demands of employment
  - Any **ONE** of the following physical examination/radiographic imaging findings:
    - Positive Posterior Drawer Sign
    - Positive Posterior Sag Sign or Tibial Drop Back Test
    - Positive Quadriceps Active Test
    - Eight (8) millimeters or more of increased posterior translation on stress radiographs
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, except in an acute injury setting where hemarthrosis, effusion and joint instability have been documented and **EITHER** of the following are present:
    - Need to return to high-demand sports that require cutting, pivoting, and/or agility activities in which PCL insufficiency may predispose to further instability episodes that may result in new articular or meniscal cartilage injuries
    - Concomitant ligament injuries (i.e., multi-ligamentous knee injury) that require reconstruction to provide stability
  - MRI, CT arthrogram, or arthroscopy demonstrates a tear/disruption or significant laxity of the posterior cruciate ligament (PCL)
- Posterior cruciate ligament (PCL) reconstruction is considered **not medically necessary** for any other indication or condition.

Medial/Lateral Collateral Ligament (MCL/LCL) Repair/Reconstruction

- Medial/lateral collateral ligament (MCL/LCL) repair/reconstruction with allograft or autograft is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain and/or a loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
  - Individual reports knee instability which is noted as giving way, subjective weakness, or buckling
  - **EITHER** of the following physical examination findings:
    - Positive Valgus Stress Test (Medial)
    - Positive Varus Stress Test (Lateral)
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, except in an acute injury setting of the lateral collateral ligament (LCL) (including the posterolateral corner) when total disruption of the ligament is documented on MRI or CT arthrogram and effusion and joint instability have been documented on physical examination
  - MRI or CT arthrogram demonstrates a tear/disruption of the medial or lateral collateral ligament (MCL/LCL)

- Medial collateral ligament (MCL) repair/reconstruction is considered **not medically necessary** in an acute injury setting, including an isolated MCL repair.
- Medial/lateral collateral ligament (MCL/LCL) repair/reconstruction is considered **not medically necessary** for any other indication or condition.

Autologous Chondrocyte Implantation (ACI) or Autologous Chondrocyte Transplantation (ACT)

- Autologous chondrocyte implantation (ACI) or autologous chondrocyte transplantation (ACT) (using the MACI™ implant) is considered **medically necessary** for the treatment of symptomatic single or multiple full-thickness cartilage defects of the distal femoral articular surface (i.e., medial condyle, lateral condyle or trochlea) and/or patella caused by acute or repetitive trauma when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Presence of **BOTH** of the following on physical examination:
    - A stable knee with intact or reconstructed ligaments (ACL or PCL)
    - Normal tibial-femoral and/or patella-femoral alignment
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - A full-thickness distal femoral articular surface (i.e., medial condyle, lateral condyle or trochlea) and/or patellar chondral defect of 1-10cm^2 in size that has been identified during an MRI or CT arthrogram, or during an arthroscopy and classified by the Modified Outerbridge Scale as Grade III or Grade IV
  - Absence of an osteochondritis dissecans (OCD) lesion that requires bone grafting
  - Absence of inflammatory arthritis or other systemic disease affecting the joints
  - Minimal to absent osteoarthritic changes in the surrounding articular cartilage (e.g., Kellgren-Lawrence Grade 2 or less)
  - Previous arthroscopic or other traditional surgical procedure (i.e., microfracture, drilling, abrasion, osteochondral graft) which has resulted in an unsatisfactory outcome
  - Normal articular cartilage at the lesion border (contained lesion)
  - For femoral and patellar chondral lesions, absence of a corresponding 'kissing lesion' with a Modified Outerbridge Scale of Grade III or IV of the distal femur (trochlea, condyles), patella or tibia
  - Body Mass Index (BMI) 35 or less
  - Age 15 - 55 years
- Autologous chondrocyte implantation is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Any knee joint surgery within six (6) months before screening excluding surgery to procure a biopsy or a concomitant procedure to prepare the knee for a MACI implant
  - Modified Outerbridge grade III or IV defect(s) on the patella or tibia

- Presence of Kellgren-Lawrence Grade 3 or 4 osteoarthritic changes in the surrounding articular cartilage
- Total meniscectomy, meniscal allograft, or bucket-handle tear or displaced tear requiring > 50% removal of the meniscus in the target knee
- Septic arthritis within one (1) year before screening
- Known history of hypersensitivity to gentamicin, other aminoglycosides, or products of porcine or bovine origin
- Uncorrected congenital blood coagulation disorders
- Cruciate ligament instability

- Hybrid autologous chondrocyte implantation performed with osteochondral autograft transfer system (Hybrid ACI/OATS) technique for the treatment of osteochondral defects is considered **experimental, investigational, or unproven**.

Osteochondral Allograft/Autograft Transplantation Systems (OATS)/ Mosaicplasty

- Osteochondral allograft/autograft transplantation (OATS)/mosaicplasty is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Presence of **BOTH** of the following on physical examination:
    - A stable knee with intact or reconstructed ligaments (ACL or PCL)
    - Normal tibial-femoral and/or patella-femoral alignment
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - A full-thickness distal femoral articular surface (i.e., medial condyle, lateral condyle or trochlea) and/or patellar chondral defect that has been identified during an MRI or CT arthrogram, or during an arthroscopy and classified by Modified Outerbridge Scale as Grade III or Grade IV
  - **EITHER** of following:
    - Osteochondral autograft transplants and mosaicplasty:
      - Small (i.e., ≤ 2.5 cm^2 total) chondral defects with sharp, definite borders surrounded by normal-appearing hyaline cartilage
    - Osteochondral allograft transplants:
      - Larger (i.e., ≤ 10.0 cm^2 total) chondral defects with sharp definite borders surrounded by normal appearing hyaline cartilage
  - Previous arthroscopic or other traditional surgical procedure (i.e., microfracture, drilling, abrasion, osteochondral graft) which has resulted in an unsatisfactory outcome
  - Absence of inflammatory arthritis or other systemic disease affecting the joints
  - Minimal to absent osteoarthritic changes in the surrounding articular cartilage (e.g., Kellgren-Lawrence Grade 2 or less)
  - Normal articular cartilage at the lesion border (contained lesion)
  - For femoral and patellar chondral lesions, absence of a corresponding 'kissing lesion' with a Modified Outerbridge Scale of Grade III or IV of the distal femur (trochlea, condyles), patella or tibia

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- Individual is not a candidate for total knee arthroplasty
- Body Mass Index (BMI) of less than 35
- Age 49 years or younger

- Osteochondral allograft/autograft transplantation (OATS)/mosaicplasty of the distal femoral articular or patellar surface is considered **experimental, investigational, or unproven** for any other indication or condition.
- Hybrid autologous chondrocyte implantation performed with osteochondral autograft transfer system (Hybrid ACI/OATS) technique for the treatment of osteochondral defects is considered **experimental, investigational, or unproven**.

Abrasion Arthroplasty/Subchondral Drilling/Microfracturing

- Abrasion arthroplasty, subchondral drilling, or microfracturing is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Presence of **BOTH** of the following on physical examination:
    - A stable knee with intact or reconstructed ligaments (ACL or PCL) and menisci
    - Normal tibial-femoral and/or patella-femoral alignment
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - A full-thickness distal femoral articular surface (i.e., medial condyle, lateral condyle or trochlea) and/or patellar chondral defect of ≤ 2.5 cm^2 in size on the weight-bearing surface that has been identified during an MRI or CT arthrogram, or during an arthroscopy and classified by the Modified Outerbridge Scale as Grade III or IV
- Abrasion arthroplasty, subchondral drilling, or microfracturing is considered **not medically necessary** for any other indication or condition.

Procedures for Patellofemoral Conditions

- Procedures for anterior knee pain (i.e., Fulkerson or Maquet type procedures) are considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting anterior knee pain (e.g., loss of knee function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Any **ONE** of the following physical examination findings:
    - Joint effusion
    - Tenderness of the medial or lateral facets
    - Positive Patellar Grind Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Confirmed osteochondral defect of the patellofemoral joint (MRI, CT scan, or previous arthroscopic procedure)
- Procedures for recurrent patellar instability (i.e., Campbell, Goldwaite, or Hauser type procedures, trochleoplasty) are considered **medically necessary** when **ALL** of the following criteria have been met:
  - Recurrent patellar instability interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
  - Positive Patellar Apprehension Test on physical examination
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Increased TT-TG (tibial tubercle-trochlear groove) distance of > 20 mm
- Medial patellofemoral ligament (MPFL) reconstruction is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Recurrent patellar instability interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
  - Positive Patellar Apprehension Test on physical examination
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
- Lateral retinacular release is considered **medically necessary** when **EITHER** of the following criteria have been met:
  - Documented radiographic evidence of acute patellar dislocation with associated intra-articular fracture
  - Documented radiographic evidence of patellar “tilt” and failure of provider-directed non-surgical management for at least three (3) months in duration
- Procedures for patellofemoral conditions are considered **not medically necessary** for any other indication or condition.

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High Tibial Osteotomy

- High tibial osteotomy is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - **ALL** of the following physical examination findings:
    - Less than 15 degrees of fixed varus deformity
    - The individual must be capable of at least 90 degrees of flexion
    - Joint stability in full extension
    - Intact anterior cruciate ligament (ACL)
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Unicompartmental osteoarthritis of the knee
  - Age 60 years or less
  - Individual is not a candidate for a knee arthroplasty
- High tibial osteotomy is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Inflammatory arthropathy (i.e., rheumatoid arthritis)
  - Chondrocalcinosis
  - Anterior cruciate ligament (ACL) tear
  - Degenerative change affecting more than 1/3 of the femoral condylar surface
  - Osteochondral defect more than five (5) mm in depth

Lysis of Adhesions/Manipulation Under Anesthesia (MUA)

- Lysis of Adhesions/Manipulation Under Anesthesia (MUA) is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of knee function interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Patient demonstrates less than 90° of knee flexion by two (2) months after surgery including knee replacement or trauma
  - Failure of provider-directed non-surgical management for at least two (2) months in duration, including a combination of anti-inflammatory medication, cortisone injection, and at least two (2) months of physical therapy (i.e., active exercise and manual therapy designed to increase joint mobility and range of motion)
- Manipulation Under Anesthesia (MUA) should be performed in conjunction with an active rehabilitation/therapeutic exercise program. Manipulation performed in isolation without the individual participating in an active rehabilitation/therapeutic exercise program is considered **not medically necessary**.
- Lysis of adhesions, with or without manipulation, is considered **not medically necessary** for any other indication or condition.

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CMM-312.4: Experimental, Investigational, or Unproven

- Based on lack of scientific evidence of efficacy and safety, the following are considered **experimental, investigational, or unproven**:
  - Subchondroplasty
  - Focal resurfacing of a single knee joint defect (e.g., Arthrosurface® femoral condyle implant)
  - In-office diagnostic arthroscopy (e.g., Mi-Eye™, VisionScope®)

CMM-312.5: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
27301	Incision and drainage, deep abscess, bursa, or hematoma, thigh or knee region
27303	Incision, deep, with opening of bone cortex, femur or knee (e.g., osteomyelitis or bone abscess)
27305	Fasciotomy, iliotibial (tenotomy), open
27306	Tenotomy, percutaneous, adductor or hamstring; single tendon (separate procedure)
27307	Tenotomy, percutaneous, adductor or hamstring; multiple tendons
27310	Arthrotomy, knee, with exploration, drainage, or removal of foreign body (e.g., infection)
27323	Biopsy, soft tissue of thigh or knee area; superficial
27324	Biopsy, soft tissue of thigh or knee area; deep (subfascial or intramuscular)
27325	Neurectomy, hamstring muscle
27326	Neurectomy, popliteal (gastrocnemius)
27327	Excision, tumor, soft tissue of thigh or knee area, subcutaneous; less than 3 cm
27328	Excision, tumor, soft tissue of thigh or knee area, subfascial (e.g. intramuscular); less than 5 cm
27329	Radical resection of tumor (eg, sarcoma), soft tissue of thigh or knee area; less than 5 cm
27330	Arthrotomy, knee; with synovial biopsy only
27331	Arthrotomy, knee; including joint exploration, biopsy, or removal of loose or foreign bodies
27332	Arthrotomy, with excision of semilunar cartilage (meniscectomy) knee; medial OR lateral
27333	Arthrotomy, with excision of semilunar cartilage (meniscectomy) knee; medial AND lateral
27334	Arthrotomy, with synovectomy, knee; anterior OR posterior
27335	Arthrotomy, with synovectomy, knee; anterior AND posterior including popliteal area
27337	Excision, tumor, soft tissue of thigh or knee area, subcutaneous; 3 cm or greater
27339	Excision, tumor, soft tissue of thigh or knee area, subfascial (eg, intramuscular); 5 cm or greater
27340	Excision, prepatellar bursa
27345	Excision of synovial cyst of popliteal space (e.g. Baker's cyst)
27347	Excision of lesion of meniscus or capsule (e.g. cyst, ganglion), knee
27350	Patellectomy or hemipatellectomy
27355	Excision or curettage of bone cyst or benign tumor of femur
27356	Excision or curettage of bone cyst or benign tumor of femur; with allograft
27357	Excision or curettage of bone cyst or benign tumor of femur; with autograft (includes obtaining graft)
27358	Excision or curettage of bone cyst or benign tumor of femur; with internal fixation (List in addition to code for primary procedure)
27360	Partial excision (craterization, saucerization, or diaphysectomy) bone, femur, proximal tibia and/or fibula (e.g., osteomyelitis or bone abscess)

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27364	Radical resection of tumor (e.g. sarcoma), soft tissue of thigh or knee area; 5 cm or greater
27365	Radical resection of tumor, femur or knee
27372	Removal of foreign body, deep, thigh region or knee area
27380	Suture of infrapatellar tendon; primary
27381	Suture of infrapatellar tendon; secondary reconstruction, including fascial or tendon graft
27385	Suture of quadriceps or hamstring muscle rupture; primary
27386	Suture of quadriceps or hamstring muscle rupture; secondary reconstruction, including fascial or tendon graft
27390	Tenotomy, open, hamstring, knee to hip; single tendon
27391	Tenotomy, open, hamstring, knee to hip; multiple tendons, one leg
27392	Tenotomy, open, hamstring, knee to hip; multiple tendons, bilateral
27393	Lengthening of hamstring tendon; single tendon
27394	Lengthening of hamstring tendon; multiple tendons, one leg
27395	Lengthening of hamstring tendon; multiple tendons, bilateral
27396	Transplant, hamstring tendon to patella; single tendon
27397	Transplant, hamstring tendon to patella; multiple tendons
27400	Transfer, tendon or muscle, hamstrings to femur (eg, Egger's type procedure)
27403	Arthrotomy with meniscus repair, knee
27405	Repair, primary, torn ligament and/or capsule, knee; collateral
27407	Repair, primary, torn ligament and/or capsule, knee; cruciate
27409	Repair, primary, torn ligament and/or capsule, knee; collateral and cruciate ligaments
27412	Autologous chondrocyte implantation, knee
27415	Osteochondral allograft, knee, open
27416	Osteochondral autograft(s), knee, open (e.g. mosaicplasty) (includes harvesting of autograft[s])
27418	Anterior tibial tubercleplasty (e.g. Maquet type procedure)
27420	Reconstruction of dislocating patella; (e.g. Hauser type procedure)
27422	Reconstruction of dislocating patella; with extensor realignment and/or muscle advancement or release (e.g. Campbell, Goldwaite type procedure)
27424	Reconstruction of dislocating patella; with patellectomy
27425	Lateral retinacular release, open
27427	Ligamentous reconstruction (augmentation), knee; extra-articular
27428	Ligamentous reconstruction (augmentation), knee; intra-articular (open)
27429	Ligamentous reconstruction (augmentation), knee; intra-articular (open) and extra-articular
27430	Quadricepsplasty (e.g., Bennett or Thompson type)
27435	Capsulotomy, posterior capsular release, knee
27448	Osteotomy, femur, shaft or supracondylar; without fixation
27450	Osteotomy, femur, shaft or supracondylar; with fixation
27454	Osteotomy, multiple, with realignment on intramedullary rod, femoral shaft (e.g., Sofield type procedure)
27455	Osteotomy, proximal tibia, including fibular excision or osteotomy (includes correction of genu varus [bowleg] or genu valgus [knock-knee]); before epiphyseal closure
27457	Osteotomy, proximal tibia, including fibular excision or osteotomy (includes correction of genu varus [bowleg] or genu valgus [knock-knee]); after epiphyseal closure
27465	Osteoplasty, femur; shortening (excluding 64876)
27466	Osteoplasty, femur; lengthening
27468	Osteoplasty, femur; combined, lengthening and shortening with femoral segment transfer

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27470	Repair, nonunion or malunion, femur, distal to head and neck; without graft (e.g., compression technique)
27472	Repair, nonunion or malunion, femur, distal to head and neck; with iliac or other autogenous bone graft (includes obtaining graft)
27475	Arrest, epiphyseal, any method (e.g., epiphysiodesis); distal femur
27477	Arrest, epiphyseal, any method (e.g., epiphysiodesis);tibia and fibula, proximal
27479	Arrest, epiphyseal, any method (e.g., epiphysiodesis);combined distal femur, proximal tibia and fibula
27485	Arrest, hemiepiphyseal, distal femur or proximal tibia or fibula (e.g., genu varus or valgus)
27495	Prophylactic treatment (nailing, pinning, plating, or wiring) with or without methylmethacrylate, femur
27496	Decompression fasciotomy, thigh and/or knee, one compartment (flexor or extensor or adductor)
27497	Decompression fasciotomy, thigh and/or knee, one compartment (flexor or extensor or adductor); with debridement of nonviable muscle and/or nerve
27498	Decompression fasciotomy, thigh and/or knee, multiple compartments
27499	Decompression fasciotomy, thigh and/or knee, multiple compartments; with debridement of nonviable muscle and/or nerve
27570	Manipulation of knee joint under general anesthesia (includes application of traction or other fixation devices)
29850	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; without internal or external fixation (includes arthroscopy)
29851	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; with internal or external fixation (includes arthroscopy)
29855	Arthroscopically aided treatment of tibial fracture, proximal (plateau); unicondylar, includes internal fixation, when performed (includes arthroscopy)
29856	Arthroscopically aided treatment of tibial fracture, proximal (plateau); bicondylar, includes internal fixation, when performed (includes arthroscopy)
29866	Arthroscopy, knee, surgical; osteochondral autograft(s) (e.g. mosaicplasty) (includes harvesting of the autograft[s])
29867	Arthroscopy, knee, surgical; osteochondral allograft (e.g. mosaicplasty)
29868	Arthroscopy, knee, surgical; meniscal transplantation (includes arthrotomy for meniscal insertion), medial or lateral
29870	Arthroscopy, knee, diagnostic; with or without synovial biopsy (separate procedure)
29871	Arthroscopy, knee, surgical; for infection, lavage and drainage
29873	Arthroscopy, knee, surgical; with lateral release
29874	Arthroscopy, knee, surgical; for removal of loose body or foreign body (e.g. osteochondritis dissecans fragmentation, chondral fragmentation)
29875	Arthroscopy, knee, surgical; synovectomy, limited (eg, plica or shelf resection) (separate procedure)
29876	Arthroscopy, knee, surgical; synovectomy, major, two or more compartments (eg, medial or lateral)
29877	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)
29879	Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture
29880	Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any

	meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29882	Arthroscopy, knee, surgical; with meniscus repair (medial OR lateral)
29883	Arthroscopy, knee, surgical; with meniscus repair (medial AND lateral)
29884	Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)
29885	Arthroscopy, knee, surgical; drilling for osteochondritis dissecans with bone grafting, with or without internal fixation (including debridement of base of lesion)
29886	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion
29887	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion with internal fixation
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
29889	Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-312.6: Procedure (HCPCS) Codes

This guideline relates to the HCPCS code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

J7330	Autologous cultured chondrocytes, implant

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-312.7: References

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CMM-313: Hip Replacement/Arthroplasty

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CMM-313.1: Definition

- **Hip arthroplasty** is an orthopaedic surgical procedure during which the articular surface of the hip joint is replaced, remodeled, or realigned.
- **Hip replacement** is a form of arthroplasty that includes the surgical replacement of the hip joint with a prosthesis.
- **Prosthesis** refers to an artificial device used to replace a structural element within a joint to improve and enhance function.
- **Hip resurfacing arthroplasty (HRA)**, also called metal-on-metal (MOM) hip resurfacing and hemiresurfacing arthroplasty, is a surgical technique that involves the removal of diseased cartilage and bone from the head of the femur, and the replacement of the surface of the femoral head with a metal hemisphere that fits into a metal acetabular cup or into the acetabulum respectively. The technique conserves femoral bone and maintains normal femoral loading and stresses. Because of bone conservation, it may not compromise future total hip replacements. Hip resurfacing arthroplasty has been promoted as an alternative to total hip replacement for younger individuals. Hip resurfacing arthroplasty may be either a partial HRA (i.e., hemi-hip resurfacing, hemiresurfacing or femoral head resurfacing arthroplasty [FHRA]) or a total HRA.
- **Partial hip replacement**, also called hip hemiarthroplasty, is a surgical technique where only the femoral head (the ball) of the damaged hip joint is replaced. The acetabulum (the socket) is not replaced.
- **Total hip replacement** is a surgical technique that involves the removal of the damaged hip joint which is then replaced with an artificial prosthesis composed of two or three different components: 1) the head that replaces the original femoral head, 2) the femoral component (a metal stem placed into the femur), and 3) the acetabular component that is implanted into the acetabulum. The stem may be secured using bone cement or press-fit for the bone to grow into it.
- **The Tönnis Classification System** is commonly used to describe the presence of osteoarthritis in the hips with grading as follows:
  - Grade 0: No signs of osteoarthritis
  - Grade 1: Sclerosis of the joint with slight joint space narrowing and osteophyte formation, and no or slight loss of femoral head sphericity
  - Grade 2: Small cysts in the femoral head or acetabulum with moderate joint space narrowing and moderate loss of femoral head sphericity
  - Grade 3: Large cysts in the femoral head or acetabulum, severe joint space narrowing or obliteration of the joint space, and severe deformity and loss of sphericity of the femoral head.
- **Revision of hip replacement (partial or total)** involves surgical reconstruction or replacement due to failure or complications of previous hip replacement.

- **Non-surgical management**, with regard to the treatment of hip osteoarthritis, is defined as any provider-directed non-surgical treatment, which has been demonstrated in the scientific literature as efficacious and/or is considered reasonable care in the treatment of hip pain from osteoarthritis. The types of treatment involved can include, but are not limited to: relative rest/activity modification, weight loss, supervised physiotherapy modalities and therapeutic exercises, oral prescription and non-prescription medications, assistive devices (e.g., cane, crutches, walker, wheelchair), and/or intra-articular injections (i.e., steroid).

CMM-313.2: General Guidelines

- The determination of medical necessity for the performance of hip resurfacing and replacement (partial or total) is always made on a case-by-case basis.
- Until the scientific literature is more definitive, the type of bearing surface, such as metal-on-metal, ceramic-on-ceramic, metal-on-polyethylene, should be determined by the treating surgeon and the patient following a frank discussion explaining the pros and cons of each bearing surface.
- For individuals with significant medical conditions or co-morbidities, the risk/benefit of hip arthroplasty procedures should be clearly documented in the medical record.

CMM-313.3: Indications and Non-Indications

Partial Hip Resurfacing Arthroplasty

- **Partial hip resurfacing arthroplasty** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
  - Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
  - Presence of **EITHER** of the following:
    - Degenerative arthritis primarily affecting the femoral head with joint space narrowing on weight-bearing radiographs
    - Osteonecrosis (avascular necrosis) of the femoral head when the disease is detected early and there is less than 50% involvement of the femoral head
  - Individual is age 64 years or younger
  - Failure of at least three (3) months of provider-directed non-surgical management
    - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
    - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.

- **Partial hip resurfacing arthroplasty** is considered **not medically necessary** for any other indication or condition, including **ANY** of the following:
  - Degenerative arthritis affecting both the femoral head and the acetabulum with joint space narrowing on weight-bearing radiographs
  - Inflammatory arthropathy affecting both the femoral head and acetabulum
  - Osteonecrosis (avascular necrosis) of the femoral head involving more than 50% of the femoral head
  - Skeletal immaturity
  - Active local or systemic infection
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
  - Osseous abnormalities that cannot be optimally managed prior to surgery which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant)
  - Severe immunocompromised state
  - Charcot joint

Total Hip Resurfacing Arthroplasty

- **Total hip resurfacing arthroplasty** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
  - Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
  - Presence of **EITHER** of the following:
    - Degenerative arthritis or an inflammatory arthropathy affecting both the femoral head and acetabulum with joint space narrowing on weight-bearing radiographs
    - Osteonecrosis (avascular necrosis) of the femoral head with possible acetabular surface involvement when the disease is detected early and there is less than 50% involvement of the femoral head
  - Individual is age 64 years or younger
  - Failure of at least three (3) months of provider-directed non-surgical management
    - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
    - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.

- **Total hip resurfacing arthroplasty** is considered **not medically necessary** for any other indication or condition, including **ANY** of the following:
  - Osteonecrosis (avascular necrosis) of the femoral head involving more than 50% of the femoral head
  - Skeletal immaturity
  - Active local or systemic infection
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
  - Osseous abnormalities that cannot be optimally managed prior to surgery which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant)
  - Severe immunocompromised state
  - Charcot joint

Partial Hip Replacement

- **Partial hip replacement** is considered **medically necessary** when **ANY** of the following criteria have been met:
  - A non-displaced intracapsular fracture is present and surgical fixation is not considered a reasonable option
  - An impacted fracture, partially displaced fracture, completely displaced or comminuted fracture of the femoral neck or femoral head is present and conservative management or surgical fixation is not considered a reasonable option
  - Tönnis Grade 3 osteoarthritis **or** avascular necrosis with stage III collapse of the femoral head when **ALL** of the following criteria have been met:
    - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
    - Loss of hip function secondary to osteoarthritis which interferes with the ability to carry out age-appropriate activities of daily living and/or their demands of employment
    - Failure of at least three (3) months of provider-directed non-surgical management
      - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
      - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.

- **Partial hip replacement** is considered **not medically necessary** for any other indication or condition, including **ANY** of the following:
  - Active local or systemic infection
  - Osseous abnormalities that cannot be optimally managed prior to surgery which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant) unless the procedure is being performed for a fracture indication
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
  - Severe immunocompromised state
  - Charcot joint
  - Inflammatory arthropathy affecting both the femoral head and acetabulum

Total Hip Replacement

- **Total hip replacement** is considered **medically necessary** when **ANY** of the following criteria have been met:
  - An impacted fracture, partially displaced fracture, completely displaced or comminuted fracture of the femoral neck or femoral head is present and conservative management or surgical fixation is not considered a reasonable option
  - Tönnis Grade 3 osteoarthritis **or** avascular necrosis with stage III collapse of the femoral head **or** inflammatory arthropathy affecting both the femoral head and acetabulum with joint space narrowing when ALL of the following criteria have been met:
    - Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
    - Loss of hip function secondary to osteoarthritis which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
    - Failure of at least three (3) months of provider-directed non-surgical management
      - For patients with BMI > 40, there must be failure of at least six (6) months of provider-directed non-surgical management
      - Provider-directed non-surgical management may be inappropriate. The medical record must clearly document why provider-directed non-surgical management is not appropriate.

- **Total hip replacement** is considered **not medically necessary** for any other indication or condition, including **ANY** of the following:
  - Active local or systemic infection
  - Osseous abnormalities that cannot be optimally managed prior to surgery which would increase the likelihood of a poor surgical outcome (i.e., inadequate bone stock to support the implant) unless the procedure is being performed for a fracture indication
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
  - Severe immunocompromised state
  - Charcot joint
- Refer to **MS-12: Osteoarthritis** and **MS-24: Hip** for the advanced imaging indications prior to hip resurfacing and hip replacement surgery
- Refer to **CMM-314: Hip Surgery – Arthroscopic & Open Procedures** for non-resurfacing and non-replacement treatment of avascular necrosis of the femoral head

Revision of Hip Replacement – Partial or Total

- **Revision of Hip Replacement** is considered **medically necessary** for an individual who has previously undergone a partial or total hip replacement and when **ANY** of the following criteria have been met:
  - Presence of **ANY** of the following:
    - Recurrent prosthetic dislocation/subluxation not responsive to a reasonable course of non- surgical care
    - Aseptic loosening
    - Periprosthetic infection
    - Periprosthetic fracture
    - Instability of the implant (e.g., disassembly, modular neck failure)
    - Leg length discrepancy
    - Osteolysis without eccentric wear (wear of elevated rim liner without wear superiorly)
  - Unexplained function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for greater than six (6) months unresponsive to provider-directed non-surgical management

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- **Isolated head and polyethylene liner exchange (IPE)** is considered **medically necessary** when **ANY** of the following criteria have been met:
  - Eccentric Polyethylene Wear with or without Osteolysis:
    - Symptomatic individual with well-fixed implants in acceptable position
  - Periprosthetic joint infection including acute hematogenous infection:
    - Individual is less than four (4) weeks from the index replacement procedure with well-fixed implants
  - Treatment of dislocation/instability (conversion to a liner with higher offset, larger head size, dual-mobility, constrained liner) and conversion of failed metal-on-metal (MoM) or ceramic-on-ceramic (CoC) bearing surface to metal-on-polyethylene (MoP) or ceramic-on-polyethylene (CoP) bearing surface
- **Isolated head and polyethylene liner exchange (IPE)** is considered **not medically necessary** for any other indication or condition.
- **Revision of Hip Replacement** is considered **not medically necessary** for any other indication or condition.
- Refer to **MS-16: Post-Operative Joint Replacement Surgery** and **MS-24: Hip** for advanced imaging indications following hip replacement surgery.

Salvage Procedures

- **Salvage procedures** (e.g., Girdlestone acetabuloplasty, hip joint arthrodesis) may be considered **medically necessary** as a surgical alternative in certain patients for whom primary hip replacement or revision of hip replacement is not a reasonable surgical option including **ANY** of the following:
  - Chronic infection, osteomyelitis, or persistent periprosthetic infection
  - Pre-existing ambulatory dysfunction or non-ambulatory patient
  - Presence of co-morbidities or diseases which would preclude the performance of a successful hip replacement
  - Inadequate bone stock (e.g., severe osteoporosis or following tumor resection when there is insufficient bone remaining to support a joint replacement)
  - Recurrent instability/dislocation of the replaced hip
  - Aseptic loosening of the replaced hip with no other practical surgical options
  - Inability to pursue a successful reimplantation
- **Salvage procedures** are considered **not medically necessary** for any other indication or condition.

CMM-313.4: Procedure (CPT®)

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only.
Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
27090	Removal of hip prosthesis; (separate procedure)
27091	Removal of hip prosthesis; complicated, including total hip prosthesis, methylmethacrylate with or without insertion of spacer
27122	Acetabuloplasty; resection, femoral head (e.g. Girdlestone procedure)
27125	Hemiarthroplasty, hip, partial (e.g. femoral stem prosthesis, bipolar Arthroplasty)
27130	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip Arthroplasty), with or without autograft or allograft
27132	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft
27134	Revision of total hip arthroplasty; both components, with or without autograft or allograft
27137	Revision of total hip Arthroplasty; acetabular component only, with or without autograft or allograft
27138	Revision of total hip Arthroplasty; femoral component only, with or without allograft
27284	Arthrodesis, hip joint (including obtaining graft);
27286	Arthrodesis, hip joint (including obtaining graft);with subtrochanteric osteotomy
HCPCS S2118	Metal-on-metal total hip resurfacing, including acetabular and femoral components

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-313.5: References

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CMM-314: Hip Surgery-Arthroscopic and Open Procedures

Prior Authorization Requirements:

For Hip Surgery-Arthroscopic and Open Procedures, please refer to **Asuris Northwest Health SUR Policy No. 160 Femoroacetabular Impingement Surgery**

CMM-315: Shoulder Surgery-Arthroscopic and Open Procedures

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CMM-315.1: Definitions

- **Rotator cuff tears** result when there is a disruption of the tendon(s) of the rotator cuff muscles which attach the humerus to the scapula and are important in shoulder movements and maintaining glenohumeral joint stability. The supraspinatus tendon is most commonly involved, but the infraspinatus, teres minor, and subscapularis tendons can also be torn.
  - Defining whether a rotator cuff tear is acute has relevance to treatment. In evaluating patients, the surgeon should attempt to properly identify patients with acute tears as opposed to patients with pre-existing chronic tears that become symptomatic after an injury event. A discrete traumatic event is more suggestive of acute tear. Physical examination findings including supraspinatus and infraspinatus muscle atrophy, as well as internal and external rotation lag signs, may be indicative of larger and more chronic rotator cuff tears.
  - Evaluation of rotator cuff muscle quality with CT or MRI is an important consideration. Chronic and larger tears are associated with muscle atrophy and fatty replacement, both of which correlate with inferior functional outcome after rotator cuff repair. It is thought that early repair of acute rotator cuff tears might mitigate the development of chronic tendon and muscle pathology and improve functional outcomes.
- Classification of rotator cuff tears (based upon surgical findings):
  - Partial-thickness tears, also called incomplete tears (Ellman):
    - Grade 1: < 3 mm deep (< 25% thickness)
    - Grade 2: 3–6 mm in depth but not exceeding 50% of the tendon thickness
    - Grade 3: > 6 mm deep (> 50% thickness)
  - Full-thickness tears, also called complete tears (Cofield):
    - Small: < 1 cm
    - Medium: 1-3 cm
    - Large: 3-5 cm
    - Massive: > 5 cm
- **Impingement syndrome** commonly results from friction, abrasion, and inflammation of the rotator cuff and the long head of the biceps tendon with the subacromial arch (anterior lip of the acromion, coracoacromial ligament, and acromioclavicular joint) from acute trauma, repetitive use or degenerative changes.
- **Distal clavicle excision** is the removal of the end of the clavicle at the acromioclavicular (AC) joint. The superior AC ligament remains intact so that the joint remains stable.
- **Acromioplasty** is the removal of bone from the acromion and partial resection of the coracoacromial ligament.
- **Subacromial decompression** is the removal of bone or other abnormality to enlarge the space between the rotator cuff musculature and the acromion.
- **Labral tears** result when the glenoid labrum becomes injured or torn. Tears are typically classified by the position of the tear in relation to the glenoid.

- **Bankart tear** is a tear in the labrum located in the front, lower (anterior, inferior) part of the glenoid. This type of tear occurs most commonly during a shoulder dislocation and makes the shoulder more prone to recurrent dislocations.
- **SLAP tear (Superior Labral, Anterior and Posterior tear)** is a tear in the labrum that covers the top part of the glenoid from the front to back. A SLAP tear occurs at the point where the long head of biceps tendon attaches. This type of tear occurs most commonly during falls on an outstretched arm.

- **Shoulder dislocation** is defined as the complete loss of the humeral articulation with the glenoid fossa, usually as a result of acute trauma.
- **Shoulder subluxation** is defined as a partial loss of humeral articulation with the glenoid fossa (incomplete or partial dislocation) usually as a result of repetitive trauma to the degree that symptoms are produced.
- **Shoulder instability and/or laxity** is defined as a partial loss of the glenohumeral articulation of which there are two categories:
  - Post-traumatic shoulder instability includes an individual with a previous injury that has stretched or torn the ligaments of the shoulder
  - Atraumatic instability and/or laxity includes an individual with generalized looseness of the joints “double-jointed” or “multi-directional instability” usually representing a type of congenital ligamentous laxity
- **Adhesive capsulitis** is a condition of the shoulder characterized by stiffness, loss of motion (contracture), and pain due to scarring in and/or around the shoulder joint. Conditions that have been suggested to predispose an individual to adhesive capsulitis are trauma, surgery to the shoulder, inflammatory diseases, diabetes, hyperthyroidism, dyslipidemia. Often called frozen shoulder, adhesive capsulitis is clinically divided into classes:
  - Primary adhesive capsulitis is characterized by a significant limitation of both active and passive motions on the shoulder; individuals are typically unable to recall a possible cause of the condition (idiopathic adhesive capsulitis)
  - Secondary adhesive capsulitis is characterized by a trauma or a possible cause prior to the onset of the symptoms, such as fracture of the humerus, rotator cuff repair, shoulder girdle injury/surgery, or prolonged immobilization
- **Non-surgical management**, with regard to the treatment of shoulder pain, is defined as any provider-directed non-surgical treatment that has been demonstrated in the scientific literature to be efficacious and/or is considered reasonable care in the treatment of shoulder pain. The types of treatment involved can include, but are not limited to: relative rest/activity modification, supervised physiotherapy modalities and therapeutic exercises, oral prescription and non-prescription medications, assistive devices (e.g., sling, splint, brace), and/or injections (i.e., steroid).

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CMM-315.2: General Guidelines

- The determination of medical necessity for the performance of shoulder surgery is always made on a case-by-case basis.
- Refer to **MS-19: Shoulder** for advanced imaging indications for conditions of the shoulder.

CMM-315.3: Indications and Non-Indications

- Shoulder arthroscopic or open surgical procedures may be considered **medically necessary** for individuals when surgery is being performed for fracture, tumor, infection or foreign body that has led to or will likely lead to progressive destruction.

Diagnostic Arthroscopy

- Diagnostic arthroscopy is considered **medically necessary** as a separate procedure when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least six (6) months in duration.
  - Individual demonstrates **ANY** of the following abnormal shoulder physical examination findings as compared to the non-involved side:
    - Functionally limited range of motion (active or passive)
    - Measurable loss in strength
    - Positive Neer Impingement Test or Hawkins-Kennedy Impingement Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Advanced diagnostic imaging study (e.g., MRI, CT) is inconclusive for internal derangement/pathology
  - Other potential pathological conditions including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis have been excluded
- Diagnostic arthroscopy is considered **not medically necessary** for any other indication or condition.

Loose Body/Foreign Body Removal

- Loose body or foreign body removal is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Mechanical symptoms including painful locking, clicking, catching, or popping
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, except when the loose body or foreign body has caused an acute restriction of shoulder joint range of motion (i.e., locking)
  - Advanced diagnostic imaging study (e.g., MRI, CT) is conclusive for the presence of a loose body or foreign body within the shoulder joint
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis
- Loose body or foreign body removal is considered **not medically necessary** for any other indication or condition.

Synovectomy

- Synovectomy (partial or complete) is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates functionally limited range of motion (active or passive) on physical examination as compared to the non-involved side
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates underlying pathology consistent with the individual's reported medical condition (e.g., synovitis, joint effusion) which correlates with the individual's reported symptoms and physical exam findings
  - Presence of any **ONE** of the following:
    - Inflammatory arthritis (i.e., rheumatoid arthritis, gout, pseudogout, psoriatic arthritis)
    - Pigmented villonodular synovitis (PVNS)
    - Synovial chondromatosis
    - Lyme synovitis
    - Hemophilia
    - Hemochromatosis
    - Non-specific synovitis (including proliferative synovitis, post-operative synovitis as a sequela from a shoulder replacement, etc.)
    - Recurrent hemarthrosis (i.e., secondary to sickle cell anemia, bleeding diathesis, etc.)

- Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis

- Synovectomy is considered **not medically necessary** for any other indication or condition.

Debridement

- Debridement (limited or extensive) is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates the following on physical examination when compared to the non-involved side:
    - **EITHER** of the following:
      - Functionally limited range of motion
      - Measurable loss of strength
    - **ONE OR MORE** of the following positive orthopedic tests/signs:
      - Drop Arm Test
      - Painful Arc Test
      - Jobe or Empty Can Test
      - External Rotation Lag Sign
      - Lift-Off Test
      - Belly-Press Test
      - Cross Body Adduction Test
      - Resisted AC Joint Extension Test
      - Neer Impingement Test
      - Hawkins-Kennedy Impingement Test
      - O'Brien's Test
      - Biceps Load Test
      - Clunk Test
      - Anterior Slide Test
      - Compression Rotation Test
      - Speed's Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates underlying pathology which correlates with the individual's reported symptoms and physical exam findings
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis

- Debridement is considered **not medically necessary** for any other indication or condition.

Rotator Cuff Repair

- Rotator cuff repair is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., documented loss of shoulder function to the extent which interferes with ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates the following on physical examination when compared to the non-involved side:
    - **EITHER** of the following :
      - Functionally limited range of motion
      - Measurable loss of strength of the rotator cuff musculature
    - **ONE OR MORE** of the following positive orthopedic tests/signs:
      - Drop Arm Test
      - Painful Arc Test
      - Jobe or Empty Can Test
      - External Rotation Lag Sign
      - Lift-Off Test
      - Belly-Press Test
      - Neer Impingement Test
      - Hawkins-Kennedy Impingement
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, except for an individual who suffers a discrete traumatic event that results in an acute full-thickness rotator cuff tear AND associated function-limiting pain
    - Advanced diagnostic imaging (e.g., MRI, CT) findings of fatty infiltration and/or muscle atrophy are not suggestive of an acute rotator cuff tear. The failure of provider-directed non-surgical management for at least three (3) months in duration is required in the presence of these findings, regardless of whether a discrete traumatic event occurred
  - Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates a Grade 2 or 3 partial-thickness rotator cuff tear (Ellman classification) or a full-thickness rotator cuff tear (Cofield classification) that correlates with the individual's reported symptoms and physical exam findings
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis
- Rotator cuff repair is considered **not medically necessary** for any other indication or condition.

Distal Clavicle Excision/Subacromial Decompression/Acromioplasty

- Distal clavicle excision is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., documented loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates localized tenderness to palpation of the acromioclavicular (AC) joint and **ONE or MORE** of the following positive orthopedic tests on physical examination when compared to the non-involved side:
    - Cross Body Adduction Test
    - Resisted AC Joint Extension Test
    - Neer Impingement Test
    - Hawkins-Kennedy Impingement Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Plain radiographs demonstrate findings consistent with pathology in the subacromial space and/or at the AC joint
  - Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates underlying pathology (e.g., AC joint arthritis, impingement, etc.) which correlates with the individual's reported symptoms and physical exam findings
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis
- Subacromial decompression/acromioplasty is considered **medically necessary** as an add-on procedure only when performed with other medically necessary primary shoulder surgical procedures **AND ALL** of the above criteria have been met with the exception of localized tenderness to palpation of the acromioclavicular joint
- Subacromial decompression/acromioplasty cannot be approved as a stand-alone procedure.
- Distal clavicle excision/subacromial decompression/acromioplasty is considered **not medically necessary** for any other indication or condition.

Labral Repair/Biceps Tenodesis

- Labral repair/biceps tenodesis is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates **BOTH** of the following on physical examination when compared to the non-involved side:
    - Minimally limited or full shoulder range of motion
    - **ONE OR MORE** of the following positive orthopedic tests
      - O'Brien's Test
      - Biceps Load Test
      - Clunk Test
      - Anterior Slide Test
      - Compression Rotation Test
      - Speed's Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration
  - Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates labral tear/biceps tendon pathology (e.g., SLAP, Bankart) and correlates with the individual's reported symptoms and physical exam findings
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis
- Labral repair/biceps tenodesis is considered **not medically necessary** for any other indication or condition.

Shoulder Instability and/or Laxity

- Arthroscopic or open surgical procedures for shoulder instability and/or laxity are considered **medically necessary** when **ALL** of the following criteria have been met:
  - Documented history of "post-traumatic" or "atraumatic" instability and/or laxity that has resulted in function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment)
  - Individual demonstrates **ONE OR MORE** of the following positive orthopedic tests on physical examination when compared to the non-involved side:
    - Anterior or Posterior Apprehension Test
    - Sulcus Sign
    - Load and Shift Test
  - Failure of provider-directed non-surgical management for at least three (3) months in duration that includes shoulder stabilization/strengthening exercises, except when **EITHER** of the following criteria are met in an acute traumatic injury setting:
    - Irreducible shoulder dislocation
    - Anterior shoulder instability in competitive contact or collision athletes

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- Advanced diagnostic imaging study (e.g., MRI, CT) demonstrates labral tear/biceps tendon pathology (e.g., SLAP, Bankart) and correlates with the individual's reported symptoms and physical exam findings
- Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis

- Arthroscopic or open surgical procedures for shoulder instability and/or laxity are considered **not medically necessary** for any other indication or condition.

Arthroscopic Capsular Release/Lysis of Adhesions/Manipulation Under Anesthesia (MUA)

- Arthroscopic capsular release/lysis of adhesions/manipulation under anesthesia (MUA) for an individual with documented chronic refractory adhesive capsulitis/arthrofibrosis which has resulted from disease, injury or surgery is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least six (6) months in duration
  - Individual demonstrates functionally limited and painful global loss of active and passive range of motion of at least 50% when compared to the non-involved side
  - Failure of provider-directed non-surgical management for at least three (3) months in duration, including a combination of anti-inflammatory medication, cortisone injection, and at least two (2) months of physical therapy (i.e., active exercise and manual therapy designed to increase joint mobility and range of motion)
  - Other potential pathological conditions have been excluded including, but not limited to: fracture, thoracic outlet syndrome, brachial plexus disorders, referred neck pain, and advanced glenohumeral osteoarthritis
- Manipulation under anesthesia (MUA) should be performed in conjunction with an active rehabilitation/therapeutic exercise program. Manipulation performed in isolation without the individual participating in an active rehabilitation/therapeutic exercise program is considered **not medically necessary**.
- Arthroscopic capsular release/lysis of adhesions/manipulation under anesthesia (MUA) is considered **not medically necessary** for any other indication or condition.

CMM-315.4: Experimental, Investigational, or Unproven

- Based on the lack of scientific evidence of efficacy and safety, in-office diagnostic arthroscopy (e.g., Mi-Eye™, VisionScope®) is considered **experimental, investigational, or unproven**.

CMM-315.5: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
23000	Removal of subdeltoid calcareous deposits, open
23020	Capsular contracture release (e.g. Sever type procedure)
23030	Incision and drainage, shoulder area; deep abscess or hematoma
23031	Incision and drainage, shoulder area; infected bursa
23035	Incision, bone cortex (e.g., osteomyelitis or bone abscess), shoulder area
23040	Arthrotomy, glenohumeral joint, including exploration, drainage, or removal of foreign body
23044	Arthrotomy, acromioclavicular, sternoclavicular joint, including exploration, drainage, or removal of foreign body
23065	Biopsy, soft tissue of shoulder area; superficial
23066	Biopsy, soft tissue of shoulder area; deep
23071	Excision, tumor, soft tissue of shoulder area, subcutaneous; 3 cm or greater
23073	Excision, tumor, soft tissue of shoulder area, subfascial (e.g. intramuscular); 5 cm or greater
23075	Excision, tumor, soft tissue of shoulder area, subcutaneous; less than 3 cm
23076	Excision, tumor, soft tissue of shoulder area, subfascial (e.g. intramuscular); less than 5 cm
23077	Radical resection of tumor (e.g. sarcoma), soft tissue of shoulder area; less than 5 cm
23078	Radical resection of tumor (e.g. sarcoma), soft tissue of shoulder area; 5 cm or greater
23100	Arthrotomy, glenohumeral joint, including biopsy
23101	Arthrotomy, acromioclavicular joint or sternoclavicular joint, including biopsy and/or excision of torn cartilage
23105	Arthrotomy; glenohumeral joint, with synovectomy, with or without biopsy
23106	Arthrotomy; sternoclavicular joint, with synovectomy, with or without biopsy
23107	Arthrotomy, glenohumeral joint, with joint exploration, with or without removal of loose or foreign body
23120	Claviculectomy; partial
23125	Claviculectomy; total
23130	Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release
23140	Excision or curettage of bone cyst or benign tumor of clavicle or scapula
23145	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with autograft (includes obtaining graft)
23146	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with allograft
23150	Excision or curettage of bone cyst or benign tumor of proximal humerus
23155	Excision or curettage of bone cyst or benign tumor of proximal humerus; with autograft (includes obtaining graft)
23156	Excision or curettage of bone cyst or benign tumor of proximal humerus; with allograft
23170	Sequestrectomy (e.g. for osteomyelitis or bone abscess), clavicle
23172	Sequestrectomy (e.g. for osteomyelitis or bone abscess), scapula
23174	Sequestrectomy (e.g. for osteomyelitis or bone abscess), humeral head to surgical neck
23180	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g.

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	osteomyelitis), clavicle
23182	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g. osteomyelitis), scapula
23184	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g. osteomyelitis), proximal humerus
23190	Ostectomy of scapula, partial (e.g., superior medial angle)
23195	Resection, humeral head
23200	Radical resection of tumor; clavicle
23210	Radical resection of tumor; scapula
23220	Radical resection of tumor, proximal humerus
23395	Muscle transfer, any type, shoulder or upper arm; single
23397	Muscle transfer, any type, shoulder or upper arm; multiple
23405	Tenotomy, shoulder area; single tendon
23406	Tenotomy, shoulder area; multiple tendons through same incision
23410	Repair of ruptured musculotendinous cuff (e.g. rotator cuff) open; acute
23412	Repair of ruptured musculotendinous cuff (e.g. rotator cuff) open; chronic
23415	Coracoacromial ligament release, with or without acromioplasty
23420	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)
23430	Tenodesis of long tendon of biceps
23440	Resection or transplantation of long tendon of biceps
23450	Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation
23455	Capsulorrhaphy, anterior; with labral repair (e.g. Bankart procedure)
23460	Capsulorrhaphy, anterior, any type; with bone block
23462	Capsulorrhaphy, anterior, any type; with coracoid process transfer
23465	Capsulorrhaphy, glenohumeral joint, posterior, with or without bone block
23466	Capsulorrhaphy, glenohumeral joint, any type multi-directional instability
23480	Osteotomy, clavicle, with or without internal fixation
23485	Osteotomy, clavicle, with or without internal fixation; with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)
23490	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; clavicle
23491	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; proximal humerus
23700	Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)
29805	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy (separate procedure)
29806	Arthroscopy, shoulder, surgical; capsulorrhaphy
29807	Arthroscopy, shoulder, surgical; repair of SLAP lesion
29819	Arthroscopy, shoulder, surgical; with removal of loose body or foreign body
29820	Arthroscopy, shoulder, surgical; synovectomy, partial
29821	Arthroscopy, shoulder, surgical; synovectomy, complete
29822	Arthroscopy, shoulder, surgical; debridement, limited

29823	Arthroscopy, shoulder, surgical; debridement, extensive
29824	Arthroscopy, shoulder, surgical; distal claviculectomy including distal articular surface (Mumford procedure)
29825	Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation
29826	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (i.e. arch) release when performed (List separately in addition to code for primary procedure)
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29828	Arthroscopy, shoulder, surgical; biceps tenodesis

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-315.6: References

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CMM-318: Shoulder Arthroplasty/ Replacement/ Resurfacing/ Revision/ Arthrodesis

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CMM-318.1: Definition

- **Shoulder arthroplasty** is an orthopaedic surgical procedure during which the articular surface of the shoulder joint is replaced, remodeled, or realigned.
- **Shoulder replacement** is a form of arthroplasty that includes the surgical replacement of the shoulder joint with a prosthesis.
- **Prosthesis** refers to an artificial device used to replace a structural element within a joint to improve and enhance function.
- **Hemi-arthroplasty (replacement)** is a surgical technique that involves replacing the humeral head and not replacing the glenoid (socket), which is typically the best option if the glenoid does not have any arthritis or if there is some concern that the glenoid component might fail if it is replaced.
- **Total shoulder arthroplasty (replacement)** is a surgical technique that involves replacing the humeral head and the glenoid. A total shoulder arthroplasty is typically the best option if the glenoid is damaged, but sufficient bone and rotator cuff remain to ensure that the glenoid component will last.
- **Reverse total shoulder arthroplasty (replacement)** is a surgical technique that involves replacing both the humeral head and the glenoid, but the ball and socket are reversed to improve muscle function. This allows the deltoid muscle, which has a longer moment arm, to generate greater force, allowing it to act in place of an inadequate functioning or torn rotator cuff.
- **Revision of shoulder arthroplasty (replacement)** is a surgical technique that involves surgical reconstruction or replacement due to failure or complication of previous shoulder arthroplasty.
- **Shoulder resurfacing** is a surgical technique that involves replacing the diseased part of the shoulder joint without replacing the humeral head. Resurfacing of the humeral head involves a prosthetic metal covering or cap to provide complete or partial coverage. It can be performed alone (hemi-resurfacing) or in combination with glenoid resurfacing (total or partial shoulder resurfacing).
- **Shoulder arthrodesis** is a surgical resection and fusion of the shoulder (glenohumeral) joint.
- **Rotator cuff tear arthropathy** is a condition that results from ALL of the following:
  - Rotator cuff insufficiency (e.g., secondary to irreparable massive rotator cuff tear)
  - Advanced glenohumeral arthritis
  - Radiographically diminished acromio-humeral distance
- **Non-surgical management**, with regard to the treatment of shoulder pain, is defined as any provider-directed non-surgical treatment that has been demonstrated in the scientific literature to be efficacious and/or is considered reasonable care in the treatment of shoulder pain. The types of treatment involved can include, but are not limited to: relative rest/activity modification, supervised physiotherapy modalities and therapeutic exercises, oral prescription and non-prescription medications, assistive devices (e.g., sling, splint, brace), and/or injections (i.e., steroid).

CMM-318.2: General Guidelines

- The determination of medical necessity for the performance of shoulder surgery is always made on a case-by-case basis.

CMM-318.3: Indications and Non-Indications

Hemi-arthroplasty (Replacement)

- **Hemi-arthroplasty (replacement)** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least three (3) months duration
  - Failure of at least three (3) months of provider-directed non-surgical management
  - Radiographic imaging and/or an advanced diagnostic procedure (i.e., MRI, CT scan) is conclusive for the presence of **ANY** of the following and correlates with the individual's reported symptoms and physical exam findings:
    - Advanced destructive degenerative joint disease (i.e., rheumatoid arthritis or osteoarthritis) resulting in marked narrowing of the joint space
    - Arthritic conditions in which the glenoid bone stock is inadequate to support a glenoid prosthesis
    - Rotator cuff tear arthropathy (i.e., severe rotator cuff tearing and end-stage arthritic disease)
    - Avascular necrosis without glenoid involvement
- **Hemi-arthroplasty** (replacement) is considered **medically necessary** when radiographic imaging and/or an advanced diagnostic study (i.e., MRI, CT scan) is conclusive for the presence of a proximal humerus fracture that is not amenable to internal fixation. Criteria for duration and severity of symptoms, physical examination findings, and provider-directed non-surgical management are not required to be met.
- **Hemi-arthroplasty** (replacement) is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Active local or systemic infection
  - Paralytic disorder of the shoulder (e.g., flail shoulder due to irreversible brachial plexus palsy, spinal cord injury, or neuromuscular disease)
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk or morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Charcot joint

Total Shoulder Arthroplasty (Replacement)

- **Total Shoulder Arthroplasty (Replacement)** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least three (3) months duration
  - Failure of at least three (3) months of provider-directed non-surgical management
  - Radiographic imaging and/or an advanced diagnostic procedure (i.e., MRI, CT scan) is conclusive for the presence of advanced destructive degenerative joint disease (i.e., osteoarthritis, rheumatoid arthritis, avascular necrosis) that correlates with the individual's reported symptoms and physical exam findings including marked narrowing of the joint space and ONE OR MORE of the following:
    - Irregular joint surfaces
    - Glenoid sclerosis
    - Glenoid osteophyte changes
    - Flattened glenoid
    - Cystic changes in the humeral head
- **Total shoulder arthroplasty (replacement)** is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Active local or systemic infection
  - Paralytic disorder of the shoulder (e.g., flail shoulder due to irreversible brachial plexus palsy, spinal cord injury, or neuromuscular disease)
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk or morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Charcot joint

Reverse Total Shoulder Arthroplasty (Replacement)

- **Reverse Total Shoulder Arthroplasty (Replacement)** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least three (3) months duration
  - The individual must possess functional use of the deltoid muscle
  - At least 90º of passive shoulder range of motion (elevation/flexion)
  - Failure of at least three (3) months of provider-directed non-surgical management
  - Presence of **ANY** of the following:
    - Deficient rotator cuff with severe glenohumeral arthropathy and limited ability to actively flex the upper extremity to 90º against gravity (i.e., rotator cuff tear arthropathy)

- Pseudoparalysis from an irreparable rotator cuff tear (i.e., active forward flexion less than 90 degrees with full passive motion)
- Failed hemi-arthroplasty or total shoulder replacement with a deficient rotator cuff that is non-repairable
- Required reconstruction after a tumor resection

- **Reverse total shoulder arthroplasty (replacement)** is considered **medically necessary** when radiographic imaging and/or an advanced diagnostic study (i.e., MRI, CT scan) is conclusive for the presence of a shoulder fracture that is not repairable or cannot be reconstructed with other techniques. Criteria for duration and severity of symptoms, physical examination findings, and provider-directed non-surgical management are not required to be met.
- **Reverse total shoulder arthroplasty (replacement)** is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Active local or systemic infection
  - Paralytic disorder of the shoulder (e.g., flail shoulder due to irreversible brachial plexus palsy, spinal cord injury, or neuromuscular disease)
  - Deltoid deficiency (e.g., axillary nerve palsy)
  - One or more uncontrolled or unstable medical conditions that would significantly increase the risk or morbidity (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
  - Charcot joint
- Refer to **MS-12: Osteoarthritis** and **MS-19: Shoulder** for advanced imaging indications prior to shoulder arthroplasty/replacement surgery.

Shoulder Resurfacing

- **Shoulder Resurfacing**, including total, hemi or partial resurfacing, is considered **experimental, investigational or unproven**.

Revision of Shoulder Arthroplasty (Replacement)

- **Revision of Shoulder Arthroplasty (Replacement)** is considered **medically necessary** for an individual who has previously undergone a hemi or total shoulder arthroplasty and when **ANY** of the following criteria have been met:
  - Presence of **ANY** of the following:
    - Recurrent prosthetic dislocation not responsive to a reasonable course of non-surgical care
    - Instability of the components
    - Aseptic loosening
    - Periprosthetic infection
    - Periprosthetic fracture

- Unexplained function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for greater than six (6) months unresponsive to provider-directed non-surgical management

- **Revision of shoulder arthroplasty (replacement)** is considered **not medically necessary** for the treatment of any other indication or condition, including Charcot joint.
- Refer to **MS-16: Post-Operative Joint Replacement Surgery** and **MS-19: Shoulder** for advanced imaging indications following shoulder arthroplasty/replacement surgery.

Shoulder Arthrodesis

- **Shoulder Arthrodesis** is considered **medically necessary** when **ALL** of the following criteria have been met:
  - Function-limiting pain (e.g., loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment) for at least three (3) months duration
  - Failure of at least three (3) months of provider-directed non-surgical management and is not a candidate for alternative treatments
  - Radiographic imaging and/or and advanced diagnostic procedure (i.e., MRI, CT scan, EMG/NCV, etc.) is conclusive for the presence of ANY of the following and correlates with the individual's reported symptoms and physical exam findings:
    - Irreparable deltoid and rotator cuff deficiency
    - Failed total shoulder arthroplasty
    - Joint infection
    - Reconstruction after tumor resection
    - Brachial plexus palsy
    - Recurrent shoulder instability, which has failed previous repair/reconstruction
    - Paralytic disorder in infancy
- **Shoulder Arthrodesis** is considered **not medically necessary** for any other indication or condition, including when **ANY** of the following criteria is present:
  - Deficient functional scapulothoracic motion
  - Paralysis of the trapezius, levator scapulae, and serratus anterior
  - Charcot joint
  - Ipsilateral elbow arthrodesis
  - Contralateral shoulder arthrodesis

CMM-318.4: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
23330	Removal of foreign body, shoulder; subcutaneous
23333	Removal of foreign body, shoulder; deep (subfascial or intramuscular)
23334	Removal of prosthesis, includes debridement and synovectomy when performed; humeral or glenoid component
23335	Removal of prosthesis, includes debridement and synovectomy when performed; humeral and glenoid components (e.g. total shoulder)
23400	Scapulopexy (e.g. Sprengels deformity or for paralysis)
23470	Arthroplasty, glenohumeral joint; hemiarthroplasty
23472	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement [e.g. total shoulder])
23473	Revision of total shoulder arthroplasty, including allograft when performed; humeral or glenoid component
23474	Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component
23800	Arthrodesis, glenohumeral joint
23802	Arthrodesis, glenohumeral joint; with autogenous graft (includes obtaining graft)
23929	Unlisted procedure, shoulder

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-318.5: References

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