

MEDICAL POLICY

Medical Policy Title	Orthopedic Joint Procedures of the Knee for Managed Medicaid (MMC), Health and Recovery Plan (HARP), Child Health Plus (CHP), and Essential Plan (EP) Members
Policy Number	7.01.123
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Our medical policies are guides to evaluate technologies or services for medical necessity. Criteria are established through the assessment of evidence based, peer-reviewed scientific literature, and national professional guidelines. Federal and state law(s), regulatory mandates and the member's subscriber contract language are considered first in the determination of a covered service.

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POLICY STATEMENT(S)

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- I. Total knee arthroplasty is medically necessary when ALL the following are met:
 - A. BMI 40 kg/m² or less;
 - B. Pain results in functional impairment that limits range of motion and interferes with activities of daily living;
 - C. Conservative treatment requirements are met for EITHER of the following:
 1. Conservative treatment requirements do not apply when ANY of the following are present:
 - a. Osteonecrosis/Avascular Necrosis (AVN);
 - b. Malignancy involving the knee or adjacent structures;
 - c. Distal femur or proximal tibia malunion/nonunion fracture;
 - d. Failed partial knee arthroplasty;

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- e. Severe deformity, condylar collapse, or end-stage bone-on-bone disease.
- OR
- 2. Failure of conservative therapy to improve symptoms or functional status and treatment includes BOTH of the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b. At least ONE (1) of the following treatments:
 - i. Modification of activity/protective weight-bearing/use of an orthotic;
 - ii. Intra-articular corticosteroid injection; or
 - iii. Medication management; and
- D. Condition includes EITHER of the following:
 - 1. Disease is progressed into an uninvolved compartment; or
 - 2. ALL the following are met:
 - a. Arthritic condition includes ANY of the following:
 - iv. Osteoarthritis;
 - v. Inflammatory arthropathy;
 - vi. Post-traumatic arthritis; and
 - b. Knee pain causing loss of function for 12 weeks or more that interferes with activities of daily living;
 - c. Weight-bearing radiographs within the last 3 to 6 months demonstrate advanced degenerative joint disease including ONE (1) or more of the following:
 - i. Bone-on-bone contact involving two or more knee compartments;
 - ii. Marked narrowing of the joint space; or
 - iii. Moderate-to-severe osteoarthritic changes (Kellgren-Lawrence grade III or IV);
- E. Site of service requirements are met for EITHER of the following:
 - 1. Outpatient, when ANY of the following are met:
 - a. No history of narcotic use;
 - b. No active cardiopulmonary disease;
 - c. ASA Physical Status Classification 1-2;

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OR

2. Inpatient, when ANY of the following perioperative risk factors are present:

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- a. Congestive heart failure;
- b. Chronic atrial fibrillation that is not adequately controlled; or
- c. Transient ischemic attack (TIA) or stroke within the preceding three months;
- d. Diabetes mellitus with HbA1c greater than 8% within the last 90 days;
- e. Stage 4 or 5 chronic kidney disease;
- f. End-stage renal disease;
- g. Dialysis dependence;
- h. eGFR less than 30 mL/min/1.73 m² within 30 days; or
- i. Serum creatinine greater than 3 mg/dL within 30 days;
- j. Inherited or acquired coagulation disorders;
- k. Platelet count below 100,000 within the last 30 days;
- l. Clinically significant abnormalities in coagulation testing;
- m. Ongoing anticoagulation without reversal; or
- n. Significant history of bleeding complications;
- o. Significant chronic obstructive pulmonary disease (COPD) or emphysema; or
- p. Home oxygen dependence;
- q. Dementia or other cognitive impairment;
- r. Schizophrenia;
- s. Bipolar disorder;
- t. Recurrent major depressive disorder; or
- u. Other conditions that may increase postoperative risk or impair recovery;
- v. Age 80 years or older;
- w. Proximal femoral or adjacent soft tissue malignancy;
- x. History of alcohol withdrawal seizures or delirium tremens;
- y. Evidence of active drug toxicity manifested by physiologic instability, such as tachycardia, hypertension, or electrocardiographic abnormalities; or
- z. American Society of Anesthesiologists (ASA) Physical Status Classification greater than 3.

Total Knee Arthroplasty-Revision

II. Revision total knee arthroplasty is medically necessary when ALL the following are met:

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- A. BMI less than 40 kg/m²;
- B. Pain results in functional impairment that limits range of motion and interferes with activities of daily living;
- C. Prosthetic failure and/or removal requirement due to infection;
- D. Weight-bearing radiographs within the last 3 to 6 months or physical examination demonstrate ONE (1) or more of the following:
 - 1. Aseptic loosening;
 - 2. Component instability;
 - 3. Component failure;
 - 4. Prosthetic recall;
 - 5. Osteolysis;
 - 6. Periprosthetic infection;
 - 7. Periprosthetic fracture;
 - 8. Recurrent instability, dislocation, or subluxation.

III. Total knee arthroplasty is not medically necessary for ANY of the following contraindications:

- A. Active local or systemic infection;
- B. Uncontrolled diabetes mellitus (HbA1c greater than 8%);
- C. Uncontrolled hypertension;
- D. Nicotine or tobacco, including cigar, cigarette, e-cigarette, nicotine patch, smokeless tobacco or vape pen use within 6 weeks of surgery;
- E. Intra-articular corticosteroid injection within 12 weeks of surgery;
- F. Clinically unstable or unmanaged comorbid condition(s);
- G. Material allergy incompatible with implantation;
- H. Untreated or unmanaged substance use disorder.

Partial Knee Arthroplasty (PKA) or Unicompartamental Knee Arthroplasty (UKA)

IV. A partial knee arthroplasty (PKA) or unicompartamental (UKA) knee arthroplasty is medically necessary when documentation supports ALL the following:

- A. The remaining knee compartments do not demonstrate degenerative changes;
- B. The anterior cruciate ligament is functional, either through native integrity or prior successful reconstruction/repair;

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- C. The individual has ONE (1) of the following:
 - 1. Advanced unicompartmental osteoarthritis;
 - 2. Isolated medial or lateral compartment osteoarthritis (Kellgren-Lawrence grade III or IV); or
 - 3. Post-traumatic arthritis limited to a single compartment;
- D. BMI is either:
 - 1. 40 kg/m² or less; or
 - 2. If BMI is 40 kg/m² or greater, documented weight reduction of at least 10% before surgery;
- E. Failure of conservative therapy to improve symptoms or functional status and treatment includes BOTH of the following:
 - 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - 2. At least ONE (1) of the following treatments:
 - a. Modification of activity/protective weight-bearing/use of an orthotic;
 - b. Intra-articular corticosteroid injection; or
 - c. Medication management; and
- F. Pain in the last 12 weeks (or more) has resulted in functional impairment that limits range of motion and interferes with activities of daily living or painful weight-bearing;
- G. Physical examination is consistent with advanced unicompartmental disease and include ONE (1) or more of the following:
 - 1. Contracture;
 - 2. Crepitus;
 - 3. Correctable angular deformity (valgus deformity of 20 degrees or less or varus deformity of 15 degrees or less);
 - 4. Joint swelling or effusion;
 - 5. Instability; or
 - 6. Restricted range of motion;
- H. Recent knee radiographs demonstrate at least ONE (1) of the following:
 - 1. Severe narrowing of the affected compartment joint space;

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2. Bone-on bone contact confined to a single compartment; or
 3. Moderate-to-severe osteoarthritic degeneration (Kellgren-Lawrence grade III or IV) within the last 3 to 6 months.
- V. PKA or UKA are contraindicated when ANY of the following are present:
- A. Presence of osteoporosis or osteopenia;
 - B. Active local or systemic infection;
 - C. Uncontrolled diabetes mellitus (HbA1c greater than 8%);
 - D. Nicotine or tobacco, including cigar, cigarette, e-cigarette, nicotine patch, smokeless tobacco or vape pen use in the 6 weeks prior to surgery;
 - E. Intra-articular corticosteroid injection in the operative joint within 12 weeks of surgery;
 - F. Meniscectomy, total, in remaining compartment;
 - G. Angular deformity or contracture (or contracture exceeding the specified range) with ANY of the following:
 1. Fixed valgus deformity greater than 20 degrees;
 2. Fixed varus deformity greater than 15 degrees;
 3. Flexion contracture of at least 15 degrees;
 4. Flexion of less than 110 degrees;
 - H. Clinically unstable or unmanaged comorbid condition(s);
 - I. Material allergy incompatible with implantation;
 - J. Untreated or unmanaged substance use disorder.

Patellofemoral Arthroplasty (PFA)

- VI. A patellofemoral knee arthroplasty (PFA) is medically necessary when ALL the following are met:
- A. BMI is 40 kg/m² or less;
 - B. The individual has ONE (1) of the following:
 1. Unsuccessful outcome following a patellofemoral extensor mechanism unloading procedure;
 2. Severe patellofemoral osteoarthritis (Kellgren- Lawrence grade III or IV) limited to a single knee compartment;
 3. Isolated anterior knee pain or patellar pain that has persisted for 3 months or longer and is further exacerbated by functional activities including stairs, inclines, transfers or

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prolonged sitting;

- C. Pain in the last 12 weeks (or more) has resulted in functional impairment that limits range of motion and interferes with activities of daily living or painful weight-bearing;
- D. Failure of conservative therapy to improve symptoms or functional status and treatment includes BOTH of the following:
 - 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - 2. At least ONE (1) of the following treatments:
 - a. Modification of activity/protective weight-bearing/use of an orthotic;
 - b. Intra-articular corticosteroid injection; or
 - c. Medication management; and
- E. Physical examination includes ONE (1) or more of the following:
 - 1. Contracture;
 - 2. Crepitus;
 - 3. Deformity;
 - 4. Joint swelling or effusion;
 - 5. Patellar instability; or
 - 6. Restricted range of motion;
- F. Weight-bearing radiographs confirm BOTH the following:
 - 1. No degenerative changes in the lateral or medial compartments; and
 - 2. EITHER of the following:
 - a. Severe narrowing of the patellofemoral joint space; or
 - b. Patellofemoral bone-on bone contact confined to a single compartment.

VII. A patellofemoral arthroplasty is contraindicated in ANY of the following:

- A. Active local or systemic infection;
- B. Abnormal patellofemoral alignment or tracking;
- C. Uncontrolled diabetes mellitus (HbA1c greater than 8%);
- D. Uncontrolled hypertension;
- E. Inflammatory arthritis;

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- F. Knee instability related to ligament deficiency;
- G. Nicotine or tobacco, including cigar, cigarette, e-cigarette, nicotine patch, smokeless tobacco or vape pen use in the 6 weeks prior to surgery;
- H. Intra-articular corticosteroid injection in the operative joint within 12 weeks of surgery;
- I. Meniscectomy, total, in remaining compartment;
- J. Clinically unstable or unmanaged comorbid condition(s);
- K. Material allergy incompatible with implantation;
- L. Untreated or unmanaged substance use disorder;
- M. Fixed flexion contracture of 10 degrees or more.

Diagnostic Knee Arthroscopy

VIII. Diagnostic knee arthroscopy is medically necessary when documentation supports ALL the following:

- A. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritic degeneration (Kellgren-Lawrence grade III or IV), including anteroposterior and Rosenberg views when available;
- B. Pain in the last 12 weeks (or more) has resulted in functional impairment that limits range of motion and interferes with activities of daily living or painful weight-bearing;
- C. Failure of conservative therapy to improve symptoms or functional status and treatment includes BOTH of the following:
 - 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months, and
 - 2. At least ONE (1) of the following treatments:
 - a. Modification of activity/protective weight-bearing/use of an orthotic;
 - b. Intra-articular corticosteroid injection; or
 - c. Medication management; and
- D. Conventional diagnostic studies have failed to establish a definitive diagnosis, including BOTH:
 - 1. Plain radiographs; and
 - 2. MRI;
- E. Physical examination is consistent with intra-articular knee pathology and includes ONE (1) or more of the following:

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1. Joint swelling or effusion;
2. Restricted range of motion; or
3. A positive meniscal provocation examination consistent with joint-line tenderness.

Arthroscopic Chondroplasty

IX. Arthroscopic chondroplasty of the knee is medically necessary when ALL the following are met:

- A. Failure of conservative therapy to improve symptoms or functional status and treatment includes BOTH of the following:
 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months, and
 2. At least ONE (1) of the following treatments:
 - a. Modification of activity/protective weight-bearing/use of an orthotic;
 - b. Intra-articular corticosteroid injection; or
 - c. Medication management; and
- B. Weight-bearing radiographs conducted within the previous 3 to 6 months demonstrate minimal degenerative joint disease, consistent with Kellgren-Lawrence grade 0 or I;
- C. Knee pain that has resulted in functional impairment that interferes with activities of daily living, work-related activities, routine ambulation, participation in athletics, or other age-appropriate activities;
- D. The presence of mechanical symptoms consistent with intra-articular knee pathology, including ONE (1) or more of the following during weight bearing activity:
 1. Painful clicking or popping;
 2. Recurrent catching; or
 3. True mechanical locking or limitation of joint motion.

Debridement

X. Debridement, with or without chondroplasty, is medically necessary when documentation supports ONE (1) of the following clinical indications, when associated criteria are met:

- A. Arthrofibrosis, when ALL the following are met:
 1. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritic changes (Kellgren-Lawrence grade III or IV);
 2. Clinical findings are consistent with arthrofibrosis, including pain, stiffness, and restricted

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range of motion; and

3. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months;
- B. Debridement of Femoral Condyle or Tibial Plateau Articular Cartilage when ALL the following are met:
1. Absence of moderate-to-severe osteoarthritis on weight-bearing radiographs;
 2. Failure of conservative therapy to improve symptoms or functional status and treatment includes ALL of the following:
 - a. Use of an orthotic/brace;
 - b. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - c. ANY of the following treatments:
 - i. Intra-articular corticosteroid injection; and
 - ii. Medication management;
 3. Recurrent joint effusions (two [2] or more episodes);
 4. MRI findings demonstrating an unstable chondral lesion within the previous 3 to 6 months; and
 5. Knee pain that has resulted in functional impairment;
- C. Patellofemoral Chondrosis when ALL the following are met:
1. No evidence of an alternative pain generator, including:
 - a. Referred pain;
 - b. Bursitis;
 - c. Radicular pain; or
 - d. Tendinopathy;
 2. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
- D. Failure of conservative therapy to improve symptoms or functional status and treatment includes ALL the following:
1. Use of an orthotic/brace;
 2. A physical therapy program (including telehealth-based rehabilitation when appropriate)

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that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and

3. At least ONE (1) of the following treatments:
 - a. Intra-articular corticosteroid injection; or
 - b. Medication management; and
- E. Anterior knee pain localized to the patellofemoral compartment; and
- F. Functional limitation attributable to the patellofemoral symptoms;
- G. Osteochondritis Dissecans (Pediatric Population), when ALL the following are met:
 1. At least TWO (2) of the following are present:
 - a. Restricted range of motion;
 - b. Limping;
 - c. Locking or catching symptoms;
 - d. Joint pain, particularly during or after activity;
 - e. Joint swelling; or
 - f. Localized tenderness;
 2. Imaging conducted within the previous 3 to 6 months includes both radiographs and MRI;
 3. Failure of conservative therapy to improve symptoms or functional status and treatment includes ALL the following:
 - a. Use of an orthotic/brace;
 - b. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 4. Presence of at least ONE (1) of the following factors associated with failure of nonoperative management:
 - a. Lesion size greater than 150 mm²;
 - b. Lesion extending into shoulders or talus;
 - c. Limited remaining skeletal growth potential; or
 - d. Unstable or detached osteochondral lesion.

Removal of a Loose or Foreign Body

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XI. Arthroscopic or open removal of an intra-articular loose body or foreign body of the knee is medically necessary when ALL the following are met:

- A. Symptoms are present and include:
 - 1. Pain, with ONE (1) or more of the following:
 - a. Buckling during weight-bearing activities;
 - b. Instability or weakness; or
 - c. Mechanical symptoms including clicking, popping, catching, or locking;
- B. Imaging requirements are met:
 - 1. Knee radiographs obtained within the previous 3 to 6 months; or
 - 2. MRI obtained within the previous 3 to 6 months; and
- C. ANY of the following indications are present:
 - 1. Intra-articular loose body;
 - 2. Foreign body within the knee joint; or
 - 3. Impinging osteophyte contributing to symptoms.

Synovectomy and/or Synovial Biopsy

XII. Synovectomy or synovial biopsy is medically necessary when documentation supports ONE (1) of the following clinical indications:

- A. Hemarthrosis, when BOTH of the following are met:
 - 1. Associated with trauma, coagulation disorder, or bleeding disorder;
 - 2. Diagnosis confirmed by physical examination, joint aspiration, MRI, or a combination of these;
- B. Symptomatic Synovial Plica, when ALL the following are met:
 - 1. Examination and MRI findings support the diagnosis of plica;
 - 2. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or

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- iii. Intra-articular corticosteroid injection;
 - c. Joint aspiration or corticosteroid injection has been performed when clinically appropriate;
- C. Proliferative Synovial Disease, when ALL the following are met:
 - 1. Condition includes ONE (1) or more of the following:
 - a. Pigmented villonodular synovitis (PVNS);
 - b. Synovial chondromatosis;
 - c. Sarcoid synovitis;
 - d. Traumatic hypertrophic synovitis; or
 - e. Similar proliferative synovial disorder;
 - 2. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - iii. Intra-articular corticosteroid injection;
 - 3. Diagnosis is confirmed by biopsy, MRI, clinical history, or a combination of these;
- D. Rheumatoid Synovitis, when ALL the following are met:
 - 1. Rheumatoid arthritis with symptomatic synovial involvement;
 - 2. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or

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iii. Intra-articular corticosteroid injection;

3. Disease remains refractory following at least 6 months of disease-modifying antirheumatic drug (DMARD) therapy.

XIII. Arthroscopic Knee Procedures are contraindicated when an intra-articular corticosteroid injection has been administered within 4 weeks of the planned arthroscopic procedure.

Knee Ligament Reconstruction and/or Repair- Pediatric/Skeletally Immature

XIV. ACL reconstruction is medically necessary in skeletally immature individuals when ALL the following are met:

- A. At least TWO (2) of the following are present:
 1. Audible pop at the time of injury;
 2. Difficulty achieving full knee extension;
 3. Instability during cutting, pivoting, jumping, or athletic activities;
 4. Localized joint tenderness;
 5. Pain with weight-bearing activities;
 6. Quadriceps muscle atrophy;
 7. Reduced range of motion;
 8. Swelling occurring within 6 to 8 hours following injury;
- B. Knee radiographs obtained within the previous 3 to 6 months;
- C. MRI obtained within the previous 3 to 6 months; and
- D. EITHER of the following indications are present:
 1. Complete ACL tear associated with significant instability; or
 2. Partial ACL tear with ongoing instability despite a structured rehabilitation program

Knee Ligament Reconstruction and/or Repair- Adult

XV. Anterior cruciate ligament reconstruction is medically necessary when ALL the following criteria are met:

- A. Failure of conservative therapy to improve symptoms or functional status and treatment includes ALL the following:
 1. Use of an orthotic/brace;
 2. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months;

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3. Physical therapy program includes attempts at full-joint extension;
4. At least ONE (1) of the following treatments:
 - a. Protective or modified weight-bearing; or
 - b. Medication management;
- B. ALL age-specific criteria must be met:
 1. Individuals aged 18-25 years must meet ALL the following criteria:
 - a. Weight-bearing radiographs do not demonstrate advanced degenerative joint disease (Kellgren-Lawrence grade III or IV);
 - b. Symptomatic functional instability symptoms;
 - c. ACL rupture confirmed by ALL the following:
 - i. MRI performed within the previous 6 to 12 months;
 - ii. Physical examination demonstrates objective anterior instability, including ONE (1) or more of the following:
 - a) Positive anterior drawer test with increased anterior tibial translation compared with the uninvolved knee;
 - b) Positive Lachman examination with increased tibial translation and a diminished, soft, or absent endpoint; or
 - c) Positive pivot-shift examination;
 - iii. Range of motion requirements are met, including EITHER of the following:
 - a) Physical therapy is NOT required for individuals with full range of motion defined as having ANY of the following:
 - 1) Extension to 0 degrees;
 - 2) Flexion $\geq$ 130 degrees;
 - 3) Symmetry to the contralateral limb; or
 - b) Physical therapy* is required for individuals with restricted range of motion defined as having ANY of the following:
 - 1) Loss of full extension;
 - 2) Measurable side-to-side ROM asymmetry;
 - 3) Pain-limited range of motion affecting functional activities;
 - 4) Reduced flexion;

*A physical therapy program (including telehealth-based rehabilitation when appropriate) must

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be provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months and must attempt a full-joint extension.

OR

2. Individuals aged 26-40 years must meet ALL the following criteria:
 - a. Weight-bearing radiographs do not demonstrate advanced degenerative joint disease (Kellgren-Lawrence grade III or IV);
 - b. The individual reports symptomatic instability resulting in recurrent giving-way episodes, pivoting limitations, safety concerns, or impairment of daily activities, occupational demands, athletic participation, or other desired functional activities;
 - c. ACL rupture confirmed by ALL the following:
 - i. MRI performed within the previous 6 to 12 months;
 - ii. Physical examination demonstrates objective anterior instability, including ONE (1) or more of the following:
 - a) Positive anterior drawer test with increased anterior tibial translation compared with the uninvolved knee;
 - b) Positive Lachman examination with increased tibial translation and a diminished, soft, or absent endpoint; or
 - c) Positive pivot-shift examination;

OR

3. Individuals 40 years of age or greater must meet ALL the following criteria:
 - a. Weight-bearing radiographs do not demonstrate advanced degenerative joint disease (Kellgren-Lawrence grade III or IV);
 - b. The individual reports symptomatic instability resulting in recurrent giving-way episodes, pivoting limitations, safety concerns, or impairment of daily activities, occupational demands, athletic participation, or other desired functional activities;
 - c. ACL rupture confirmed by MRI within the last 6 to 12 months.

Multiple Ligament Reconstruction

XVI. Reconstruction or repair of multiple knee ligaments is medically necessary when BOTH of the following are met:

- A. The presence of at least TWO (2) of the following:
 1. Weight-bearing difficulty or the need for protective bracing due to pain or instability;
 2. Functional impairment affecting activities of daily living, occupational activities, or

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athletic participation;

3. Instability, including recurrent giving-way, buckling, or rotational instability;
 4. Localized joint-line tenderness or pain consistent with ligamentous or meniscal injury;
 5. Symptoms such as catching, locking, or painful clicking; or
 6. Joint swelling or effusion following the injury; and
- B. Documentation confirms injury involving two or more major stabilizing ligaments of the knee, as demonstrated by EITHER of the following:
1. MRI; or
 2. Physical examination is consistent with multiligamentous instability.

Multiligament knee injuries do not require prior conservative management, as these injuries are characteristically unstable and are unlikely to be adequately managed with physical therapy, bracing, or other nonoperative treatments alone.

Posterior Cruciate Ligament (PCL) Reconstruction

XVII. Posterior cruciate ligament (PCL) reconstruction is medically necessary when ALL the following are met:

- A. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
- B. MRI obtained within the previous 3 to 6 months demonstrates a near-complete or complete PCL tear;
- C. Reported knee instability, weakness, or episodes of giving-way;
- D. Objective physical examination is consistent with PCL insufficiency, including ANY of the following:
 1. Positive posterior drawer examination;
 2. Reverse pivot-shift test;
 3. Positive quadriceps active test;
 4. Posterior sag sign; or
 5. Tibial drop-back sign;
- E. Failure of conservative therapy to improve symptoms or functional status and treatment includes ALL the following:
 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months;

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2. At least ONE (1) of the following treatments:
 - a. Activity modification, protected weight-bearing, brace, or orthotic use; or
 - b. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics).

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

Isolated repair or reconstruction of the lateral collateral ligament (LCL) or medial collateral ligament (MCL) is uncommon and is generally performed in conjunction with treatment of additional ligamentous injuries.

Requests for collateral ligament repair or reconstruction in the absence of an acute traumatic injury will be assessed individually based on the clinical circumstances.

Arthroscopic Meniscectomy or Meniscal Repair

XVIII. Arthroscopic meniscectomy is medically necessary when ALL the following are met:

- A. Weight-bearing radiographs do not demonstrate advanced osteoarthritis (Kellgren-Lawrence grade IV);
- B. ONE (1) of the following clinical scenarios is present:
 1. Individual is younger than 18 years of age;
 - a. MRI confirms a meniscal tear; and
 - b. Physical examination is consistent with meniscal pathology;
- C. Repairable tear pattern
 1. MRI demonstrates ANY of the following:
 - a. Meniscal root tear;
 - b. Peripheral tear involving the vascular zone; or
 - c. Other repairable meniscal tear;
 2. Pain localizes to the involved compartment on physical examination;
 3. Bucket-handle tear
 - a. MRI confirms a bucket-handle meniscal tear;
 - b. Acute traumatic injury with a locked knee; and
 - c. Examination demonstrates meniscal findings or loss of terminal extension;
 4. Symptomatic meniscal tear after unsuccessful conservative management
 - a. Physical examination is consistent with a meniscal tear;
 - b. Clinical findings include ONE (1) or more:

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- i. Joint-line pain with forced hyperextension;
 - ii. Joint-line pain with maximal flexion; or
 - iii. Catching or locking symptoms;
 - D. Failure of conservative therapy to improve symptoms of pain or stiffness that contribute to loss of function or functional status, and treatment includes ALL the following:
 - 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - 2. At least one (1) of the following treatments:
 - a. Activity modification, protected weight-bearing, brace, or orthotic use;
 - b. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - c. Intra-articular corticosteroid injection;
 - E. Imaging performed within the previous 3 to 6 months demonstrates EITHER:
 - 1. Mild, minimal, or no arthritic change on weight-bearing radiographs; or
 - 2. MRI-confirmed meniscal tear with mild or absent degenerative findings and ALL the following:
 - a. No full-thickness cartilage loss;
 - b. No moderate or severe cartilage thinning;
 - c. No meniscal extrusion;
 - d. No greater than mild osteophyte formation;
 - e. No subchondral cystic change or bone edema.
- XIX. Arthroscopic meniscal repair is medically necessary when ALL the following are met:
 - A. Weight-bearing radiographs do not demonstrate advanced osteoarthritis (Kellgren-Lawrence grade III or IV);
 - B. ALL age-based criteria are met:
 - 1. Individual younger than eighteen (18) years:
 - a. MRI demonstrates a meniscal tear with physical examination supporting meniscal pathology; including ANY of the following:
 - i. Meniscal root tear;
 - ii. Peripheral tear involving the vascular zone;
 - iii. Other repairable meniscal tear and compartment-specific pain is present on

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examination;

2. Individual is 19-40 years:
 - a. Examination demonstrates ONE (1) or more:
 - i. Joint-line pain with hyperextension;
 - ii. Joint-line pain with maximal flexion;
 - iii. Catching or locking symptoms;
3. Imaging performed within the previous 3 to 6 months demonstrates EITHER:
 - a. Mild, minimal, or no arthritic change on weight-bearing radiographs; or
 - b. MRI-confirmed meniscal tear with mild or absent degenerative findings and ALL the following:
 - i. No full-thickness cartilage loss;
 - ii. No moderate or severe cartilage thinning;
 - iii. No meniscal extrusion;
 - iv. No greater than mild osteophyte formation;
 - v. No subchondral cystic change or bone edema;
4. Individual is 41 years of age or older:
 - a. Examination demonstrates ONE (1) or more:
 - i. Joint-line pain with hyperextension;
 - ii. Joint-line pain with maximal flexion; or
 - iii. Catching or locking symptoms;
 - b. Imaging requirements outlined above are satisfied;
 - c. EITHER criterion regarding conservative therapy are met:
 - i. No Conservative therapy required when ANY of the following are present:
 - a) Acute traumatic unstable meniscal tear with mechanical symptoms;
 - b) Displaced bucket-handle tear;
 - c) Extension block or inability to fully extend the knee;
 - d) Obstructing meniscal fragment producing loss of motion;
 - e) True mechanical locking of the knee;

OR

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- ii. Conservative therapy is not contraindicated but failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a) A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b) At least ONE (1) of the following treatments:
 - 1) Activity modification, protected weight-bearing, brace, or orthotic use;
 - 2) Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - 3) Intra-articular corticosteroid injection.

XX. Arthroscopic meniscectomy or meniscal repair is contraindicated when ANY of the following are present:

- A. Intra-articular corticosteroid injection administered within four weeks prior to the planned procedure;
- B. Advanced osteoarthritis including EITHER:
 - 1. Kellgren-Lawrence grade IV osteoarthritis when meniscectomy is requested; or
 - 2. Kellgren-Lawrence grade III or IV osteoarthritis when meniscal repair is requested;
- C. Degenerative, non-traumatic meniscal pathology when partial meniscectomy is proposed.

Meniscal Allograft Transplantation

XXI. Meniscal allograft transplantation is medically necessary when ALL the following are met:

- A. BMI is less than 40kg/m²;
- B. Individual is less than 40 years of age and is skeletally mature;
- C. Weight-bearing radiographs do not demonstrate EITHER of the following:
 - 1. Moderate-to-severe articular degeneration corresponding to Modified Outerbridge grade III or IV;
 - 2. Moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
- D. Lower extremity alignment demonstrates no significant varus or valgus deformity;
- E. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - 1. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics);

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2. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 3. At least ONE (1) of the following treatments:
 - a. Activity modification, protected weight-bearing, brace, or orthotic use; or
 - b. Intra-articular corticosteroid injection;
 - F. Ligamentous stability has been established before transplantation or will be addressed concurrently;
 - G. MRI demonstrates a meniscal-deficient compartment or prior diagnostic evaluation confirms subtotal or total meniscectomy.
- XXII. Meniscal Allograft Transplantation is not medically necessary for ANY of the following:
- A. Intra-articular corticosteroid injection within 4 weeks of the proposed procedure; or
 - B. ANY of the following conditions, which have not been corrected, either before or in conjunction with the planned procedure:
 1. Full-thickness articular cartilage defects, including advanced focal chondral lesions (e.g., International Cartilage Repair Society Grade III or IV or Outerbridge Grade IV);
 2. Ligamentous insufficiency resulting in joint instability;
 3. Coronal plane malalignment greater than 5 degrees of varus or valgus; or
 4. Severe osteoarthritis (Kellgren-Lawrence grade IV).

Patellar Realignment

- XXIII. Patellar realignment is medically necessary when documentation supports ONE (1) of the following:
- A. Symptomatic patellar maltracking or malalignment and ALL the following:
 1. Imaging demonstrates abnormal patellofemoral alignment or patellar maltracking;
 2. Imaging does not identify an associated fracture or intra-articular loose body;
 3. Physical examination demonstrates BOTH:
 - a. Patellofemoral pain; and
 - b. Patellar instability findings, including apprehension or a positive J-sign;
 4. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 3

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months in the past 6 months; and

- b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - iii. Intra-articular corticosteroid injection;

B. Recurrent patellar instability and BOTH of the following:

- 1. Two (2) or more documented patellar dislocations or subluxation events; and
- 2. EITHER of the following are met:
 - a. Imaging demonstrates medial patellofemoral ligament insufficiency; or
 - b. Physical examination confirms patellar instability with a positive apprehension test;

C. Acute traumatic patellar dislocation with associated structural injury demonstrated on imaging, including ONE (1) or more of the following:

- 1. Intra-articular fracture;
- 2. Osteochondral fracture; or
- 3. Loose body.

XXIV. Lateral retinacular release is medically necessary for EITHER of the following:

- A. Diagnostic imaging demonstrates confirms patellar tilt and physical examination identifies isolated patellofemoral pain that is reproduced with patellar tilt testing;

OR

B. Symptomatic lateral patellofemoral cartilage pathology and ALL the following are met:

- 1. Weight-bearing radiographs show no evidence of moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
- 2. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 - b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - iii. Intra-articular corticosteroid injection; and

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3. Imaging findings or intraoperative assessment confirm a cartilage lesion involving the lateral trochlear surface of the femur or the lateral patellar facet.

Knee Lysis of Adhesions

XXV. Knee arthroscopy with lysis of adhesions is medically necessary when EITHER of the following is met:

- A. Post-surgical stiffness following ligament reconstruction or knee joint reconstruction, and ALL the following:
 1. At least 12 weeks have elapsed since the prior procedure;
 2. Physical examination demonstrates EITHER:
 - a. Knee flexion is less than 105 degrees; or
 - b. Flexion contracture greater than 10 degrees;
 3. A physical therapy program (including telehealth-based rehabilitation when appropriate) provided by a physical therapist or chiropractor has been completed for at least 6 weeks within the 6 months without meaningful improvement in symptoms or function'
- B. Arthrofibrosis associated with prior knee trauma or resolved knee infection, and BOTH of the following:
 1. At least 12 weeks have passed since the traumatic event or resolution of infection; and
 2. Manipulation under anesthesia is planned in conjunction with the lysis of adhesions procedure.

Manipulation Under Anesthesia (MUA)

XXVI. Manipulation under anesthesia of the knee is medically necessary when ALL the following criteria are met:

- A. Failure of conservative therapy to improve symptoms of pain or stiffness that contribute to loss of function or functional status, and treatment includes ALL the following:
 1. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past 6 months; and
 2. At least ONE (1) of the following treatments:
 - a. Activity modification, protected weight-bearing, brace, or orthotic use; or
 - b. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics);
- B. Diagnostic evaluation performed within the previous 3 to 6 months includes BOTH the following:

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1. Computed tomography (CT) imaging;
2. Knee radiographs confirming BOTH:
 - a. Intact surgical hardware when present; and
 - b. Absence of a mechanical cause for restricted motion (e.g., component malposition or fracture);
- C. Clinical findings demonstrate ALL the following:
 1. Flexion contracture greater than ten (10) degrees;
 2. Knee flexion less than 90 degrees;
 3. Pain and stiffness has resulted in functional impairment and interferes with activities of daily living.

Restorative Cartilage Procedures of the Knee

Restorative cartilage procedures include osteochondral autograft transfer, osteochondral allograft transplantation, autologous chondrocyte implantation, mosaicplasty, microfracture, abrasion arthroplasty, subchondral drilling, or similar cartilage restoration techniques.

XXVII. Restorative cartilage procedures are medically necessary when documentation supports EITHER of the following:

- A. Focal Chondral or Osteochondral Defect, when ALL the following are met:
 1. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
 2. Individual is skeletally mature and younger than 50 years of age;Requests for older individuals may be considered when activity demands and clinical circumstances support intervention;
3. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a. A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least six weeks in the past six months; and
 - b. At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - iii. Intra-articular corticosteroid injection;
4. MRI confirms ONE (1) of the following:

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- a. Full-thickness weight-bearing cartilage lesion measuring less than 2.5 cm²;
 - b. Single full-thickness grade III or IV Outerbridge lesion measuring between 1.0 cm² and 2.0 cm² and involving only one articular surface;
 - c. Full-thickness chondral or osteochondral lesion involving the femoral condyle or trochlea measuring less than 2.5 cm²;
5. Localized knee pain has been present for at least 6 months and results in significant functional limitation;
6. Physical examination demonstrates restricted range of motion and/or mechanical symptoms including clicking, popping, catching, or locking;
7. Physical examination or imaging confirms BOTH:
 - a. ligamentous stability; and
 - b. Intact meniscal integrity;
- B. Patellofemoral Chondrosis, when ALL the following are met:
 1. Examination demonstrates pain localized to the patellofemoral compartment;
 2. Imaging demonstrates patellofemoral chondrosis classified as Outerbridge grade III or IV;
 3. Weight-bearing radiographs do not demonstrate moderate-to-severe osteoarthritis (Kellgren-Lawrence grade III or IV);
 4. Anterior knee pain results in functional impairment that interferes with activities of daily living;
 5. Symptoms correlate with the documented patellofemoral chondral abnormality;
 6. Conservative therapy failed to improve symptoms that contribute to loss of function or functional status, and treatment includes ALL the following:
 - a) A physical therapy program (including telehealth-based rehabilitation when appropriate) that is provided by a physical therapist or chiropractor for at least 6 weeks in the past six 6 months; and
 - b) At least ONE (1) of the following treatments:
 - i. Activity modification, protected weight-bearing, brace, or orthotic use;
 - ii. Pharmacologic treatment for pain management (e.g., NSAIDs or analgesics); or
 - iii. Intra-articular corticosteroid injection.

RELATED POLICIES

Corporate Medical Policy

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Not Applicable

POLICY GUIDELINE(S)

- I. Nicotine-free status is documented by EITHER of the following:
 - A. No history of smoking; or
 - B. Cotinine testing (serum, urine, or saliva) results less than or equal to 10 ng/mL, confirming the individual has refrained from nicotine use (e.g., smoking, use of smokeless tobacco products, or nicotine replacement therapy) for a minimum of six (6) weeks prior to the planned surgery.

DESCRIPTION

Osteochondral autografting and allografting have been investigated for full-thickness cartilage defects of weight-bearing surfaces due either to trauma or conditions such as osteochondritis dissecans. Overall, the goal of osteochondral grafting procedures is to re-establish the cartilage matrix with chondrocytes and supporting bone, to improve joint function and decrease pain. The procedure entails the harvesting of one or more small grafts of bone and cartilage from either the patient's non-weight-bearing or less-weight-bearing surfaces (autograft) or from a cadaver joint (fresh or cryopreserved allograft). The base of the defect is then abraded or curetted down to subchondral bone, and the grafts are implanted in the defect. Use of autografting is associated with repairing smaller defects, whereas allografts are utilized for larger defects. The advantages of using autograft material include graft availability, the absence of possible disease transmission risk, and the ability to perform the procedure in a single stage. Disadvantages include donor site morbidity and limit available graft volume. In addition, tissue may have to be harvested from two different donor sites, to provide enough material for a large defect without compromising the donor site. The use of allograft cartilage has the advantages of providing osteochondral segments that are able to survive transplant, the ability to heal to the recipient-site tissue, and no associated donor site morbidity. Application of osteochondral allografting is limited, because cryopreserved allografts do not contain an acceptable level of cartilage viability, and cryopreservation may decrease the viability of the cartilage cells. Fresh, osteochondral allografts must be implanted within 72 hours of donor death, may be difficult to obtain (due to scarcity), and may transmit disease. A well-organized transplant program is required, and the surgery cannot be done on an elective basis.

Several systems are available for performing this procedure: the Mosaicplasty System (Smith and Nephew), the OATS, (Arthrex, Inc.), and the COR and COR2 systems. The OATS procedure involves use of larger plugs, usually filling the entire defect with a single plug, while mosaicplasty uses multiple, small, cylindrical plugs. It is suggested that mosaicplasty reduces the possibility of donor site morbidity and produces a more congruent surface. In both of these techniques, harvesting and transplantation is performed during the same surgical procedure. The COR and COR2 systems can be utilized for autograft or allograft transplantation.

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Filling defects with minced articular cartilage (autologous or allogeneic) is another single-stage procedure that is being investigated for cartilage repair. The Cartilage Autograft Implantation System (CAIS; Johnson and Johnson; phase 3 trial) harvests cartilage and disperses chondrocytes on a scaffold in a single-stage treatment. BioCartilage (Arthrex) consists of a micronized allogeneic cartilage matrix that is intended to provide a scaffold for microfracture. DeNovo NT Graft (Natural Tissue Graft) is produced by ISTO Technologies, with exclusive distribution rights by Zimmer. DeNovo NT consists of manually minced cartilage tissue pieces obtained from juvenile allograft donor joints. The tissue fragments are mixed intra-operatively with fibrin glue before implantation in the prepared lesion. It is thought that mincing the tissue helps both with cell migration from the extracellular matrix and with fixation.

Manipulated (decellularized) human tissue graft products (e.g., Chondrofix osteochondral allograft) are made of bone and cartilage tissue that has been harvested from a cadaveric donor and processed, to remove blood, cells, and fat from the tissue. It is sterilized to kill bacteria and other microorganisms, and purportedly promotes bone integration and remodeling, while reducing the risk of inflammation, in repair of Grade III and Grade IV osteochondral lesions. While this product does not require U.S. Food and Drug Administration (FDA) approval, it does require handling and processing from an FDA-accredited tissue bank (LifeNet Health). It also comes in a variety of sizes to treat different defect sizes.

Synthetic grafts are being investigated as alternatives to allografts and autografts. It has been proposed that synthetic grafts could provide a substrate, encouraging bony in-growth and surface repair. Synthetic resorbable polymers (e.g., PolyGraft, TruGraft, and TruFit plugs) are polymer scaffolds that are being proposed for the repair of osteochondral articular cartilage defects. The implant functions as a scaffold for chondral and osteogenic cells, with the synthetic polymer being resorbed as the cells produce their normal matrices. TruFit plugs are synthetic polymer scaffolds that are inserted into an articular surface, to provide a stable scaffold to encourage the regeneration of a full thickness of articular cartilage to repair chondral defects. The clinical value of TruFit plugs for osteochondral allografts of the knee has not been established. The bone graft substitute implant can be used to backfill harvest sites. At this time, the literature is insufficient to support their use.

ProChondrix (AlloSource) and Cartiform (Arthrex) are wafer-thin allografts in which the bony portion of the allograft has been reduced. The discs are laser-etched or porated and contain hyaline cartilage with chondrocytes, growth factors, and extracellular matrix proteins. ProChondrix is available in dimensions from 7 to 20 mm and is stored fresh for a maximum of 28 days. Cartiform is cut to the desired size and shape and is stored frozen for a maximum of two years. The osteochondral discs are typically inserted after microfracture and secured in place with fibrin glue and/or sutures.

Hybrid Autologous Chondrocyte Implantation (ACI) is combined with other surgical repair techniques of cartilage defects (e.g., osteochondral autograft transfer).

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:

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- 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.

Kissing lesion is an articular cartilage defect on opposing joint surfaces of the knee that are in contact between either the patella and distal femur or the distal femur and tibia (e.g., bipolar lesion).

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 as viewed on MRI, 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 cm²);
- Grade III – fragmentation and fissuring greater than one square centimeter (1 cm²);
- Grade IV – subchondral bone exposed.

Mosaicplasty (or osteochondral cylinder transplantation) is a surgical technique that 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 of 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.

Non-Surgical Management (with regard to the treatment of knee lower extremity joint pain) is any provider-directed non-surgical treatment that has been demonstrated in scientific literature as efficacious and/or is considered reasonable care in the treatment of lower extremity joint knee pain. The types of treatment involved can include, but are not limited to, the following: ice; relative rest/activity modification; acupuncture; weight loss; supervised physiotherapy modalities and therapeutic exercises; prescription and non-prescription medications; assistive devices; and/or intra-articular injections.

Osteochondral Allograft Transplantation (OATS) is a procedure that is similar to mosaicplasty, involving the use of a larger, single plug that usually fills an entire defect. It is often performed to

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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.

The 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 as viewed by direct visualization intraoperatively, 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 cm²);
- Grade III – fragmentation and fissuring greater than one square centimeter (1 cm²);
- Grade IV – subchondral bone exposed.

SUPPORTIVE LITERATURE

Evidence is sufficient to consider osteochondral allografting medically appropriate as a technique to repair large (e.g., 10 cm²), full-thickness chondral defects of the knee caused by acute or repetitive trauma.

Several systematic reviews of randomized controlled trials (RCTs) have evaluated autologous osteochondral transplantation for cartilage repair of the knee in the short- and mid-term. When compared with abrasion techniques (e.g., microfracture, drilling), there is evidence that autologous osteochondral transplantation decreases failure rates and improves outcomes in patients with medium-size lesions (e.g., 2-6 cm²) when measured at longer follow-up. This is believed to be due to the improved durability of the natural hyaline cartilage compared with the fibrocartilage that is obtained with abrasion techniques. Factors shown to affect success in observational studies are male sex, younger age, and lesions smaller than 3 cm². Thus, there is a relatively narrow range of lesion size for which autologous osteochondral transplantation is most effective. In addition, the best results have been observed with lesions on the femoral condyles, although treatment of trochlea and patella lesions also improves outcomes. Correction of malalignment is important for the success of the procedure.

Zamborsky and colleagues (2020) completed a systematic review and network meta-analysis that evaluated the most appropriate surgical interventions for patients with knee articular cartilage defects. A total of 21 articles (from 12 RCTs) were analyzed with a total population of 891 patients. Follow-up varied widely among the included studies, ranging from 12 months to 15 years. Of the surgical interventions evaluated, microfracture was associated with significantly higher failure rates compared to autologous chondrocyte implantation at 10 years of follow-up. No significant differences in failure rates were seen between microfracture and osteochondral autograft transplantation, matrix-induced autologous chondrocyte implantation, or characterized chondrocyte implantation at 2, 5, and 10 years of follow-up. Osteochondral autograft transplantation was associated with significantly more

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excellent or good results at >3 years of follow-up as compared to microfracture, whereas microfracture was associated with significantly poorer results as compared to autologous chondrocyte implantation and matrix-induced autologous chondrocyte implantation. No significant differences between the interventions were noted regarding reintervention, biopsy types, or adverse events. Based on efficacy and safety, autologous chondrocyte implantation was ranked as the best intervention for failure outcome at 10 years of follow-up, followed by osteochondral autograft transplantation, then microfracture. Microfracture was consistently ranked worse than cartilage repair techniques for other outcomes including quality of tissue repair and return-to-activity rates.

Minced or Particulated Cartilage

Early results from case series appear to show similar outcomes compared with other treatments for cartilage defects, but these case series do not permit conclusions regarding the effect of this treatment on health outcomes (Tompkins 2013, Farr 2014, Dawkins 2021). Further studies with a larger number of patients and longer follow-up are needed, especially randomized, controlled trials that directly compare particulated juvenile articular cartilage with other established treatments.

Decellularized Osteochondral Allografts or Reduced Allograft Discs

For individuals with full-thickness articular cartilage lesions who receive decellularized osteochondral allograft plugs or reduced osteochondral allograft discs, the evidence includes one small case series on decellularized osteochondral allograft plugs. Relevant outcomes of the case series were symptoms, functional outcomes, quality of life, and treatment-related morbidity. The researchers reported delamination of the implants, with a high failure rate. No studies have been identified with reduced osteochondral allograft discs. The evidence is insufficient to determine the effects of the technology on health outcomes.

The first report on the use of decellularized osteochondral allograft plugs (Chondrofix) was published by Farr and colleagues in 2016. Review of records for 32 patients identified a high failure rate. Failure was defined as structural damage of the graft identified by MRI or arthroscopy, or any reoperation resulting in removal of the allograft, and 23 of 32 (72%) knees were considered failures.

Johnson and colleagues (2017) examined records from an institutional registry of 34 patients who, following a discussion of alternative cartilage repair options, chose treatment with a decellularized osteochondral allograft plug. Patient-reported outcomes along with MRI results were recorded at 6 months, 1 year, and 2 years by independent observers. At a mean follow-up of 15.5 months, 10 (29%) patients required revision surgery with removal of the implant. Failure rates were higher for females and larger lesions ($p=.005$).

Synthetic Products

Verhaegen and colleagues (2015) performed a systematic search in five databases for clinical trials in which patients were treated with a TruFit plug for osteochondral defects. To be included, studies had to report clinical, radiological, or histological outcome data. The included studies were assessed for quality. A total of five studies described clinical results, all indicating improvement at follow-up of 12

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months, compared to pre-operative status. However, two studies reporting longer follow-up showed deterioration of early improvement. Radiological evaluation indicated favorable MRI findings regarding filling of the defect and incorporation with adjacent cartilage at 24-month follow-up, but conflicting evidence existed on the properties of the newly formed cartilage surface. None of the included studies showed evidence for bone in-growth. The few histological data available confirmed these results. The authors concluded that there are no data available that support superiority or equality of TruFit, compared to conservative treatment or mosaicplasty/micro-fracture. They stated that further investigation is needed, to improve synthetic biphasic implants as therapy for osteochondral lesions; randomized, controlled trials comparing TruFit plugs with an established treatment method are needed, before further clinical use can be supported.

There is sufficient data published in the peer-reviewed literature to conclude that autologous chondrocyte transplantation results in relief of symptoms and improved function in patients who had failed conservative management and arthroscopic or other surgical treatments. Several studies include reports of histological examinations of the graft site showing stable hyaline cartilage after surgery. Studies in the United States enrolled patients between the ages of 15 and 45 years.

K. Zaslav and colleagues (2009) aimed to assess the effectiveness of ACI in patients who failed prior treatments for articular cartilage defects of the knee. STAR was a prospective, open-label, four-year study of 154 patients (mean age: 35 years; 69% male) from 29 clinical centers. Each patient served as the patient's own control, undergoing ACI after having failed or experienced an inadequate response to a prior cartilage repair procedure. Outcomes included change from baseline in knee function, knee pain, quality of life, and overall health. Duration of benefit after ACI was compared with the failed prior non-autologous chondrocyte implantation procedure. A total of 126 patients (82%) completed the protocol. Seventy-six percent of patients were treatment successes at study-end, while 24% were deemed treatment failures. Preoperative mean knee pain score was 3.0 (SD, 1.8; 0 = severe, 10 = normal). Mean improvements were observed from baseline to all time points ($P < .001$) for all outcome measures. Preoperative to 48-month values, respectively, were as follows: On the Knee injury and Osteoarthritis Outcome Score (KOOS) subscales of pain: 48.7 to 72.2; other symptoms: 51.8 to 70.8; sports/recreation: 25.8 to 55.8; knee quality of life: 20.9 to 52.2; and activities of daily living: 58.6 to 81.0. On the Modified Cincinnati Overall Knee Score: 3.3 to 6.3; on the Visual Analog Scale: 28.8 to 69.9; and on the SF-36 Overall Physical Health Score: 33.0 to 44.4. Seventy-six patients (49%) had subsequent surgical procedure(s), predominantly arthroscopic. The authors concluded that patients with moderate-to-large chondral lesions with failed prior cartilage treatments can expect sustained and clinically meaningful improvement in pain and function after ACI.

Migliorini and colleagues conducted a systematic review of the literature in 2022 to evaluate the safety and efficacy of ACI for chondral defects of the knee in skeletally immature patients. A total of 9 studies (three prospective and six retrospective studies) representing 251 procedures were analyzed for patient reported outcome measures and complications. The mean age of the patients was 16.4 ± 0.7 years, and the mean length of follow up was 44.2 ± 29.4 months. Studies with follow up less than 12 months were not included in the review. Authors analyzed the KOOS score, Visual

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Analog Scale (VAS), Tegner Activity Scale, Lysholm Knee Score, and the International Knee Document Committee (IKDC) Score. Increases were identified in the KOOS (+41.9/100 [P=0.003]), IKDC (+33.2/100 [P=<0.0001]), and Lysholm (+20.6/100 [P=0.02]). The VAS score was reduced by 3.6/10 (P=0.004) points. There was no statistically significant improvement noted in the Tegner scale. Authors expressed concern with the rate of complications. More than 12% of patients demonstrated graft hypertrophy and 5.6% of procedures were considered failures. It is believed that these numbers were underestimated given an unclear reporting of complications in several of the studies. Several other limitations of the studies were noted, including the lack of control groups creating a moderate risk of bias. There was also a limited sample size, and lack of quantitative data to conduct analyses. Further, there was a difference in the method of membrane application (suture versus fibrin glue) between studies which may have negatively impacted the results. Authors concluded that ACI of chondral defects in the knees of skeletally immature patients is effective in improving patient reported outcome measures, however the review was granted a level of evidence of III, noting that the safety profile of ACI in skeletally immature patients is controversial and requires further investigation.

MACI

The approval of MACI is based on the SUMMIT study (Superiority of MACI implant versus Microfracture Treatment in patients with symptomatic articular cartilage defects in the knee). In the open-label, multi-center Phase 3 SUMMIT study, 144 patients with symptomatic articular cartilage defects in the knee were randomized to receive treatment with MACI implant or microfracture bone marrow stimulation (MFX) and followed for two years (Saris et al 2014). The study found that treatment with MACI was clinically and statistically significantly better, as measured by greater improvement in KOOS pain and function (SRA) scores in the MACI group compared to the MFX groups (p=0.001) with similar structural repair tissue and safety. The SUMMIT study investigators concluded that "MACI offers a more efficacious alternative to MFX, with a similar safety profile for the treatment of symptomatic articular cartilage defects of the knee." Patients from the two-year SUMMIT study had the option to enroll in a three-year follow-up study (extension study). A majority of the patients who completed the SUMMIT study also participated in the extension study. Overall efficacy data supports a long-term clinical benefit from the use of MACI in patients with cartilage defects of the knee.

Three-year follow-up results of the SUMMIT extension study were presented at the 2015 American Academy of Orthopaedic Surgeons (AAOS) annual meeting. In the SUMMIT extension trial, 128 patients (men and women aged 18 to 55 years) from the original SUMMIT study continued to be followed. The co-primary endpoints of the extension study are change in KOOS pain and function scores at year three, the same primary endpoint from the two-year SUMMIT trial. Patients treated with MACI versus MFX continue to show a statistically significant improvement from baseline in the co-primary endpoint of KOOS pain and function at year three (p = 0.046), with higher responder rates in the MACI group (81.5%) than in the MFX group (66.7%). Patients treated with MACI versus MFX also showed significant improvement in knee-related quality of life and other measures. The authors concluded that "the co-primary endpoints of pain and function showed significant

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improvement with MACI, which was statistically significantly better than with MFX." The incidence of treatment-emergent adverse events and serious adverse events was similar between treatment groups at year three, and no unexpected safety findings were reported.

Based on mid-term outcomes that approximate those of first-generation ACI and the lack of alternatives, second-generation ACI may be considered an option for large, disabling, full-thickness cartilage lesions of the knee. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

ACI for Joints Other than the Knee

The evidence reported on ACI for individuals who have focal articular cartilage lesions in joints other than the knee is limited. Relevant outcomes are symptoms, functional outcomes, implant survival, quality of life, and resource utilization. The evidence is insufficient to determine the effects of the technology (ACI for joints other than knee) on health outcomes.

A study conducted by Viglione and colleagues published in 2024 assessed the long-term efficacy of ACI for osteochondral lesions of the talus to demonstrate durability by comparing the American Orthopedic Foot and Ankle Society (AOFAS) ankle-hindfoot score, numeric rating scale (NRS), and Tegner scores for 11 patients who were evaluated at 1, 3, 10, and at a minimum a final follow-up of 20 years. There was a significant improvement in AOFAS score from baseline through the last follow-up, with 40.4 ± 19.8 to 89.3 ± 15.2 at 1 year ($p < 0.0005$), 94.4 ± 6.8 at 3 years ($p < 0.0005$), 94.7 ± 6.4 at 10 years ($p < 0.0005$), and 82.7 ± 12.9 at the final follow up ($p < 0.0005$). The NRS also showed significant improvements compared to baseline-from 7.8 ± 0.7 to 4.8 ± 2.1 ($p < 0.0005$). None of the patients underwent arthrodesis or joint replacement surgeries following ACI. Authors concluded that ACI is an effective treatment option for patients with osteochondral lesions of the talus, with long term clinical improvements noted. The small patient sample did not allow for an analysis of other factors that may have impacted the study outcomes, including sex, age, and previous surgical interventions. Further studies are warranted.

In a 2025 systematic review, Mahatme and colleagues aimed to investigate the outcomes of patients who had been treated with MACI during arthroscopy of the hip for the treatment of acetabular chondral lesions caused by femoroacetabular impingement syndrome. The review included a query of studies including patient reported outcomes of MACI during hip arthroscopy, as well as lesion classification, surgical treatment, revision arthroscopy, and conversion to total hip arthroplasty. A qualitative sub-analysis compared patients who were treated with MACI with those treated with microfracture. A total of four studies met the required inclusion criteria which was representative of 209 hips, which had undergone MACI. The mean post-operative follow-up timeframe was between 1 and 8 years, with a mean patient age from 34.3 to 45 years. Three of four studies reported the modified Harris Hip Score, all of which reported statistically significant improvements at follow-up. Of the four studies, two compared MACI with microfracture alone. Authors noted that there were no conversions to total hip arthroplasty in the MACI groups, while rates of conversion were variable among microfracture groups, reporting anywhere from two to 32.6%. Authors concluded that the use of MACI for the treatment of femoroacetabular impingement syndrome and acetabular chondral

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lesions improves patient reported outcomes and lowers rates of secondary surgeries required. The study was granted an IV for level of evidence given included studies also were considered low levels of evidence (III and IV). Significant heterogeneity between studies in terms of follow up periods and surgical techniques, as well as an overall small sample size contributed to the limitations.

Hybrid Technique

A review conducted by Duif and colleagues in 2015 included a search of PubMed based literature using the terms mosaicplasty, osteochondral transplantation or OATS AND autologous chondrocyte transplantation or ACI OR matrix-associated autologous chondrocyte implantation or MACI and combination. Only two relevant publications were identified. Although both publications reported satisfying results on the postoperative functional outcome, the authors determined that the simultaneous use of different techniques for cartilage repair may provide alternate solutions, but statistically valid data and prospective studies are required to make a general recommendation.

In 2019, Jones and colleagues, in a technical note, describe a ACI “sandwich technique” in which MACI is paired with autologous bone grafting for osteochondral lesions of the femoral trochlea. The authors noted successful early results for small segmental defects, but also that few studies have evaluated outcomes, and that further reporting is forthcoming.

PROFESSIONAL GUIDELINE(S)

In 2017, The National Institute for Health and Care Excellence (NICE) published guidance on autologous chondrocyte implantation for treating symptomatic articular cartilage defects of the knee, recommending it be used as an option only if:

- The person has not had previous surgery to repair articular cartilage defects;
- There is minimal osteoarthritic damage to the knee (as assessed by clinicians experienced in investigating knee cartilage damage using a validated measure for knee osteoarthritis;
- The defect is over 2cm²;
- The procedure is done at a tertiary referral centre.

In 2023, the American Academy of Orthopaedic Surgeons (AAOS) published guidelines on the diagnosis and treatment of osteochondritis dissecans. The guidelines do not specifically address a recommended cartilage repair technique in patients who have unsalvageable osteochondritis dissecans lesion or those with an unsalvageable fragment.

In 2018, the National Institute for Health and Care Excellence (NICE) issued new guidance on mosaicplasty for symptomatic articular cartilage defects of the knee (IPG607). The guidance states that the evidence for the safety and efficacy of mosaicplasty for knee cartilage defects is adequate to support the use of the procedure.

In 2022, the American Society of Pain and Neuroscience (ASPN) published the Consensus Guidelines on Interventional Therapies for Knee Pain (STEP Guidelines) (Hunter 2022). These guidelines were

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developed by a multidisciplinary panel of experts, including specialists in pain management, anesthesiology, orthopedic surgery, and rehabilitation medicine. The guideline makes the following recommendation statements:

- "Mosaicplasty is an effective long-term treatment option for patients 18–50 years old with hyaline cartilage lesions 2–5 cm² (Level I, Grade A, Consensus Moderate)."
- OAT is an effective knee joint preservation technique (Level II, Grade C, Consensus Weak).
- For larger lesions, autograft osteochondral harvesting carries a great of risk of morbidity and as such osteochondral allograft transplantation (OAT) has traditionally been used. Laboratory studies demonstrate superior chondrocyte viability with fresh allografts; however, good results and chondrocyte viability have still been demonstrated with frozen grafts implanted within 28 days from harvest."

In 2023, the American Academy of Orthopedic Surgeons (AAOS) issued an updated clinical practice guideline for the diagnosis and treatment of osteochondritis dissecans (OCD) of the knee. The AAOS was unable to recommend for or against a specific cartilage repair technique in symptomatic skeletally immature or skeletally mature patients with unsalvageable fragment. This recommendation was made based on a systematic review for the following cartilage repair techniques: abrasion arthroplasty, autologous chondrocyte implantation (ACI), osteochondral allograft and autograft, chondroplasty, microfracture, mosaicplasty and osteochondral autograft transplantation (OAT).

REGULATORY STATUS

The U.S. Food and Drug Administration (FDA) regulates vaccines, blood and blood products, and biologics via the Center for Biologics Evaluation and Research (CBER) which ensures the safety, efficacy, and quality of these products. Refer to the FDA vaccines/blood/biologics website. Available from: <https://www.fda.gov/vaccines-blood-biologics> [accessed 2026 May 19]

The FDA maintains information for consumers and health professionals on vaccine, blood and biologics warnings and other safety information. Available from: [Recalls \(Biologics\) | FDA](#) [accessed 2026 May 19]

Carticel received FDA approval in 1997 through a biologics license application for the culturing of chondrocytes. The approval restricted Carticel to use for the repair of symptomatic cartilaginous defects of the femoral condyle (medial, lateral, or trochlear), caused by acute or repetitive trauma in patients who have had an inadequate response to a prior arthroscopic or other surgical repair procedure. The product was phased out with the development of MACI.

In December 2016, the FDA approved MACI (autologous cultured chondrocytes on porcine collagen membrane) for the repair of symptomatic single or multiple full-thickness cartilage defects of the knee, with or without bone involvement, in adults. MACI is the first FDA-approved, cellularized, scaffold product that applies tissue engineering processes to grow cells on scaffolds using healthy cartilage tissue from the patient's own knee. The package insert includes the following contraindications: known history of hypersensitivity to gentamicin, other aminoglycosides, or products

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of porcine or bovine origin, severe osteoarthritis of the knee, inflammatory arthritis, inflammatory joint disease, or uncorrected congenital blood coagulation disorders, prior knee surgery (within 6 months), excluding surgery to procure a biopsy or a concomitant procedure to prepare the knee for a MACI implant, inability to cooperate with a physician-prescribed post-surgical rehabilitation program.

CODE(S)

- Codes may not be covered under all circumstances.
- Code list may not be all inclusive (AMA and CMS code updates may occur more frequently than policy updates).
- (E/I)=Experimental/Investigational
- (NMN)=Not medically necessary/appropriate

CPT Codes

Code	Description
27310	Arthrotomy, knee, with exploration, drainage, or removal of foreign body (e.g., infection)
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)
27365	Radical resection of tumor, femur or knee
27455	Osteotomy, proximal tibia, including fibular excision or osteotomy (includes correction of genu varus [bowleg] or genu valgus [knock-knee]); before epiphyseal closure
27466	Osteoplasty, femur; lengthening
27495	Prophylactic treatment (nailing, pinning, plating, or wiring) with or without methylmethacrylate, femur
27516	Closed treatment of distal femoral epiphyseal separation; without manipulation
27517	Closed treatment of distal femoral epiphyseal separation; with manipulation, with or without skin or skeletal traction
27519	Open treatment of distal femoral epiphyseal separation, includes internal fixation, when performed
27412	Autologous chondrocyte implantation, knee
27415	Osteochondral allograft, knee, open

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Code	Description
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
27472	Repair, nonunion or malunion, femur, distal to head and neck; with iliac or other autogenous bone graft (includes obtaining graft)
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 auto-graft[s])
29867	Arthroscopy, knee, surgical; osteochondral allograft (e.g., mosaicplasty)
29887	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion with internal fixation

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Code	Description
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
29889	Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction

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HCPCS Codes

Code	Description
J7330	Autologous cultured chondrocytes, implant
S2112	Arthroscopy, knee, surgical for harvesting of cartilage (chondrocyte cells)

ICD10 Codes

Code	Description
M12.561-M12.569	Traumatic arthropathy, knee (code range)
M17.0-M17.9	Osteoarthritis of knee (code range)
M22.40-M22.42	Chondromalacia patella, knee (code range)
M23.8x1-M23.92	Other and unspecified internal derangement of knee (code range)
M25.861-M25.869	Other specified joint disorders, knee (code range)
M85.9	Disorder of bone density and structure, unspecified
M89.8X6	Other specified disorders of bone, lower leg
M89.9	Disorder of bone, unspecified
M93.261-M93.269	Osteochondritis dessicans knee (code range)
M94.261-M94.269	Chondromalacia of knee (code range)

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SEARCH TERMS

Not Applicable

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CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

[Total Joint Arthroplasty \(LCD L36039\)](#) [accessed 2026 Sept 12]

PRODUCT DISCLAIMER

- Services are contract dependent; if a product does not cover a service, medical policy criteria do not apply.
- If a commercial product (including an Essential Plan or Child Health Plus product) covers a specific service, medical policy criteria apply to the benefit.
- If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.
- If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.
- If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY HISTORY/REVISION

Committee Approval Dates

09/17/26

Date

Summary of Changes

01/01/27

- [Original Effective Date.](#)

09/17/26

- New Policy