

Autologous chondrocyte implantation (ACI)

These services may or may not be covered by your HealthPartners plan. Please see your plan documents for your specific coverage information. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage.

Administrative Process

This policy applies to HealthPartners Self Insured Commercial plans, except for the level funded block of business. Contact Member Services for help understanding if this policy applies to your plan.

Prior authorization is required for autologous chondrocyte implantation (ACI), and for the autologous cultured chondrocytes implant.

Coverage

Autologous chondrocyte implantation (ACI) is generally covered subject to the indications listed below and per your plan documents.

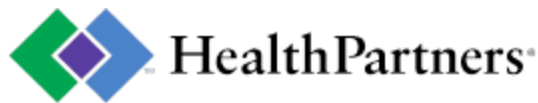
Indications that are covered

Autologous chondrocyte implantation (ACI) using matrix-induced autologous chondrocyte implantation (MACI) implant is considered medically necessary for treatment of an articular cartilage defect of the knee when **all** of the following criteria (1.A.-G. and 2.A.-E.) are met:

1. Member has the following characteristics:
 - A. Is experiencing symptoms such as persistent pain, swelling, catching, or locking in the knee; and
 - B. Is age 15 to 55
 - i. (ages 15-18 should be skeletally mature with documented growth plate closure); and
 - C. BMI is less than or equal to 35; and
 - D. No knee surgery within the past 6 months, excluding surgery to procure a biopsy; and
 - E. No evidence of osteoarthritis or inflammatory arthritis; and
 - F. Has tried at least 3 months of provider-directed non-surgical management which failed to fully resolve symptoms; and
2. Member has the following clinical findings:
 - A. An isolated, focal articular cartilage defect that is
 - i. Full-thickness (Outerbridge grade III or IV*); and
 - ii. 1-10 cm² in size; and
 - iii. Localized to the femoral condyles (medial, lateral, or trochlear) or the patella; and
 - B. No corresponding lesion on opposing surface; and
 - C. No evidence of arthritis on the articular surface of the corresponding tibia; and
 - D. No evidence of genu valgus alignment or genu varus alignment, or
 - i. corrective procedures can be achieved prior to ACI (e.g., osteotomy) or
 - ii. corrective procedures can be achieved concurrently with ACI (e.g., osteotomy); **and**
 - E. Normal ligamentous stability (no evidence of medial collateral ligament (MCL), anterior cruciate ligament (ACL), posterior cruciate ligament (PCL), or posterolateral corner injuries and resulting instability), or
 - i. corrective procedures can be achieved prior to ACI (e.g., ligament reconstruction), or
 - ii. corrective procedures can be achieved concurrently with ACI (e.g., ligament reconstruction).

Indications that are not covered

1. Autologous chondrocyte implantation (ACI) using the MACI implant is considered experimental and investigational in the following circumstances:
 - A. When member is not skeletally mature
 - B. When member has had a total meniscectomy
 - C. To treat osteochondritis dissecans or other degenerative conditions
 - D. To treat cartilage defects in joints other than the knee
 - E. A repeat ACI/ MACI procedure on the same defect.



Definitions

Autologous chondrocyte implantation (ACI) is a procedure which uses a person's own cartilage cells to repair a defect or tear to the articular cartilage of the knee. The cartilage cells are removed from the body, grown in the manufacturer's lab, and implanted into the affected knee. The goal is that the implanted cartilage will be similar to the knee's normal hyaline cartilage, which has the durability to withstand the wear and tear of the knee movement. The newest ACI technique is referred to as matrix-induced autologous chondrocyte implantation (MACI) and uses a collagen membrane (proprietary name: MACI®) that has been seeded with chondrocytes before implantation.

Cartilage defects can be classified as chondral (cartilage loss) or osteochondral (cartilage plus bone loss) fractures. Chondral defects are categorized further into partial thickness or full thickness. Full thickness defects extend to, but not into, the bone.

Focal defect: When the cartilage defect is localized to one specific area within the joint, then it is referred to as a focal articular cartilage defect.

Genu valgum, also known as knock-knees, is a knee misalignment that turns the knees inward. This places an abnormal amount of stress and pressure on the outer portion of the knee joint.

Genu varum, or varus knee, is commonly referred to as being bowlegged. It is a knee misalignment that turns the knees outward. Over time, untreated varus knee can cause joint pain, especially when walking. It also causes unusual wear and tear on the cartilage in the knee, which can lead to osteoarthritis.

Ligament reconstruction is a surgical procedure to repair or replace a damaged ligament.

Osteotomy is a type of surgery done to correct the alignment of the knee joint.

*Outerbridge Classification System for Cartilage Defects

Grade	Description
I	Softening or swelling of cartilage
II	Fragmentation or fissuring in an area ≤0.5 inch in diameter
III	Same as grade II but an area >0.5 inches in diameter
IV	Erosion of cartilage down to bone

Codes

If available, codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive.

The services associated with these codes require prior authorization:

CPT Code	Description
27412	Autologous chondrocyte implantation, knee

HCPSC Code	Description
J7330	Autologous cultured chondrocytes, implant

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Products

This information is for most, but not all, HealthPartners plans. Please read your plan documents to see if your plan has limits or will not cover some items. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage.

Approved Medical Directors Committee 07/01/97; Revised 3/1/04, 9/27/17, 8/14/18, 6/27/19, 4/27/22, 8/15/24, 9/5/2025; Annual Review 3/1/04, 6/1/05, 7/1/06, 8/1/07, 7/1/08, 6/1/09, 5/11/10, 5/2011, 4/2013, 5/2014, 5/2015, 8/2017, 8/2018, 8/2019, 8/2020, 8/2021, 8/2023, 8/2024, 8/2025

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