



Autologous Chondrocyte Implantation (MACI)

I. Policy

University Health Alliance (UHA) will reimburse for autologous chondrocyte implantation for focal articular cartilage lesions when it is determined to be medically necessary and when it meets the medical criteria guidelines (subject to limitations and exclusions) indicated below.

II. Criteria/Guidelines

- A. Autologous chondrocyte implantation with Matrix-induced chondrocyte implantation (MACI) is covered (subject to limitations and exclusions below) for the treatment of disabling full-thickness articular cartilage defects of the knee caused by acute or repetitive trauma in patients who have had an inadequate response to a prior surgical procedure, when all of the following criteria are met:
1. Adolescent patients are skeletally mature with documented closure of growth plates, or adult patients are too young to be considered an appropriate candidate for total knee arthroplasty or other reconstructive knee surgery (e.g., younger than 55 years)
 2. Focal, full-thickness (grade III or IV) unipolar lesions on the weight bearing surface of the femoral condyles or trochlea are at least 1.5 cm² in size
 3. Documentation of minimal to absent degenerative changes in the surrounding articular cartilage (Outerbridge Grade II or less) and normal-appearing hyaline cartilage surrounding the border of the defect
 4. Normal knee biomechanics or alignment and stability that can be achieved concurrently with ACI
 5. BMI less than or equal to 35

NOTE:

This UHA payment policy is a guide to coverage, the need for prior authorization and other administrative directives. It is not meant to provide instruction in the practice of medicine and it should not deter a provider from expressing his/her judgment.

Even though this payment policy may indicate that a particular service or supply is considered covered, specific provider contract terms and/or members' individual benefit plans may apply, and this policy is not a guarantee of payment. UHA reserves the right to apply this payment policy to all UHA companies and subsidiaries.

UHA understands that opinions about and approaches to clinical problems may vary. Questions concerning medical necessity (see Hawaii Revised Statutes §432E-1.4) are welcome. A provider may request that UHA reconsider the application of the medical necessity criteria in light of any supporting documentation.

III. Limitations/Exclusions

- A. For smaller lesions (e.g., smaller than 4 cm²), if debridement is the only prior surgical treatment, consideration should be given to marrow-stimulating techniques before MACI is performed.
- B. Misalignment and instability of the joint are contraindications. Therefore, if normal knee biomechanics or alignment and stability cannot be achieved concurrently with MACI, the patient is not considered a good candidate for this surgery. Additional procedures such as repair of ligaments or tendons or

creation of an osteotomy for the realignment of the joint may be performed concurrently. In addition, meniscal allograft transplantation may be performed in combination, either concurrently or sequentially, with MACI.

- C. The charges for the culturing component of the procedure are submitted as part of the hospital bill.
- D. MACI for all other joints, including patellar and talar, and any indications other than those listed above do not meet payment determination.
- E. Treatment of focal articular cartilage lesions with autologous minced cartilage does not meet payment determination criteria.
- F. Treatment of focal articular cartilage lesions with allograft, either allogeneic minced cartilage (DeNovo Natural Tissue Graft) or allogeneic cartilage cells (e.g., DeNovo Engineered Tissue Graft), does not meet payment determination criteria.

IV. Administrative Guidelines

- A. Prior authorization is required.
- B. To request prior authorization, please submit via UHA's online portal.
- C. Documentation must include advanced imaging or arthroscopy results, and show evidence of the following:
 1. Focal, full-thickness (grade III or IV) unipolar lesions on the weight bearing surface of the femoral condyles or trochlea at least 1.5 cm² in size
 2. Closed growth plates
 3. Healthy articular and hyaline cartilage of the affected knee
 4. Condition of knee biomechanics

CPT Code	Description
27412	Autologous chondrocyte implantation, knee

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

V. Policy History

Policy Number: MPP-0042-120301

Current Effective Date: 10/18/19

Original Document Effective Date: 03/01/2012

Previous Revision Dates: 07/01/2013, 01/01/2017, 9/19/18

PAC Approved Date: 03/01/2012