Washington State Health Care Authority

Health Technology Clinical Committee
FINAL Findings and Decision

Topic: Treatments for chondral defects of the knee
Meeting date: September 20, 2024
Final adoption: January 31, 2025

Number and coverage topic:
20240920A – Treatments for chondral defects of the knee

HTCC coverage determination:
Treatments for chondral defects of the knee with matrix-induced autologous chondrocyte implantation (MACI) and other FDA-approved 3rd generation autologous chondrocyte implantation (ACI), osteochondral autologous transplantation (OATS), and osteochondral allograft transplantation (OCA) are **covered benefits with conditions.**

Treatments for chondral defects of the knee with cell-free implants and autologous matrix-induced chondrogenesis (AMIC) are **not covered benefits**.

HTCC reimbursement determination:
Limitations of coverage:

- MACI, OATS, and OCA:
  - Symptomatic, single or multiple full-thickness (Outerbridge Classification of Grade III or IV) articular cartilage defects of the femoral condyle (medial, lateral, or trochlea) and/or patella;
  - Documented closure of growth plates in adolescent individuals;
  - Age <50, older at the discretion of the agency;
  - Body mass index <35; AND
  - Excluding malignancy, degenerative arthritis (Kellgren-Lawrence Grade 3 or 4), or inflammatory arthritis in the joint.
  - For MACI, articular cartilage lesions ≥3cm² in size;
  - For OATS, articular cartilage lesions 2cm² - 4cm² in size;

Non-covered indicators:

- Uncorrected malalignment or ligamentous deficiency, unless a corrective procedure is performed prior to or concomitantly.
- Cell-free implants and autologous matrix-induced chondrogenesis (AMIC) are not covered benefits.

Related documents:

- Final key questions
- Final evidence report
- Meeting materials and transcript

Agency contact information:

Agency	Phone Number

Final

Labor and Industries	1-800-547-8367
Public and School Employees Health Plan	1-800-200-1004
Washington State Medicaid	1-800-562-3022

HTCC coverage vote and formal action:

Committee decision

Based on the deliberations of key health outcomes, the committee decided that it had the most complete information: a comprehensive and current evidence report, public comments, and state agency utilization information. The committee discussed and voted separately on the evidence for the use of matrix-induced autologous chondrocyte implantation (MACI), osteochondral autologous transplantation (OATS)/osteochondral allograft transplantation (OCA), and cell-free implants and autologous matrix-induce chondrogenesis (AMIC) for the treatment of chondral defects of the knee. The committee decided that the current evidence on MACI and OATS/OCA is sufficient to determine coverage with conditions. The committee considered the evidence, public comment, and expert input, and gave greatest weight to the evidence it determined, based on objective factors, to be the most valid and reliable.

Based on these findings, the committee voted to cover with conditions MACI and OATS/OCA for the treatment of chondral defects of the knee. Separately, the committee voted not to cover cell-free implants and AMIC.

	Not covered	Covered under certain conditions	Covered unconditionally
Matrix-induced autologous chondrocyte implantation (MACI)	0	7	0
Osteochondral autologous transplantation (OATS)/ osteochondral allograft transplantation (OCA)	0	7	0
Cell-free implants and autologous matrix-induce chondrogenesis (AMIC)	7	0	0

Discussion

The committee reviewed and discussed the available studies for MACI, OATS/OCA, cell-free implants, and AMIC for treatments of chondral defects of the knee. Conditions for coverage were discussed, drafted, and voted on. All committee members present supported the conditions of coverage of MACI and OATS/OCA. Details of study design, inclusion criteria, outcomes, cost, cost-effectiveness, and other factors affecting study quality were discussed as well as clinical application.

Decision

Treatments for chondral defects of the knee are covered with conditions for the following:

- MACI (and other FDA-approved 3rd generation ACI) for the treatment of chondral defects of the knee is a covered benefit with conditions:
    - Symptomatic, single or multiple full-thickness (Outerbridge Classification of Grade III or IV) articular cartilage defects of the femoral condyle (medial, lateral, or trochlea) and/or patella at least 3cm² in size;
    - Documented closure of growth plates in adolescent individuals;

    - Age <50, older at the discretion of the agency;
    - Body mass index less than 35; and
    - Excluding malignancy, degenerative (Kellgren-Lawrence Grade 3 or 4) and inflammatory arthritis in the joint,
- OATS/OCA for the treatment of chondral defects of the knee is a covered benefit with conditions:
    - Symptomatic, single or multiple full-thickness (Outerbridge Classification of Grade III or IV) articular cartilage defects of the femoral condyle (medial, lateral, or trochlea) and/or patella;
    - For OATS, articular cartilage lesions that are between 2cm² and 4cm² in size;
    - Documented closure of growth plates in adolescent individuals;
    - Age <50, older at the discretion of the agency;
    - Body mass index less than 35; and
    - Excluding malignancy, degenerative (Kellgren-Lawrence Grade 3 or 4) and inflammatory arthritis in the joint
- Not covered with:
    - Uncorrected malalignment, unless a corrective procedure done prior to, or concomitantly
    - Uncorrected ligamentous deficiency, unless a corrective procedure is done prior to, or concomitantly

Cell-free implants and autologous matrix-induce chondrogenesis (AMIC) are not a covered benefit for treatments of chondral defects of the knee.

Action

The committee checked for availability of a Centers for Medicare and Medicaid Services (CMS) national coverage decision (NCD). Based on the information provided in the systematic review, there is no NCD for treatments reviewed for chondral defects of the knee.

The committee discussed clinical guidelines identified from the following organizations:

- Knee Pain and Mobility Impairments: Meniscal and Articular Cartilage Lesions Revision 2018: Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability and Health from the Orthopaedic Section of the American Physical Therapy Association (2018)
- Consensus Guidelines on Interventional Therapies for Knee Pain (STEP Guidelines) from the American Society of Pain and Neuroscience (2022)
- Mosaicplasty for symptomatic articular cartilage defects of the knee: National Institute for Health and Care Excellence (NICE) (2018)

The recommendations of the guidelines vary. The committee's determination is consistent with the noted guidelines.

HTA staff will prepare a findings and decision document on treatments for chondral defects of the knee for public comment to be followed by consideration for final approval at the next committee meeting.

Health Technology Clinical Committee Authority:

Washington State's legislature believes it is important to use a science-based, clinician-centered approach for difficult and important health care benefit decisions. Pursuant to chapter 70.14 RCW, the legislature has directed the Washington State Health Care Authority (HCA), through its Health Technology Assessment (HTA) program, to engage in an evaluation process that gathers and assesses the quality of the latest medical evidence using a scientific research company that takes public input at all stages.

Pursuant to RCW 70.14.110, a Health Technology Clinical Committee (HTCC) composed of eleven independent health care professionals reviews all the information and renders a decision at an open public meeting. The Washington State HTCC determines how selected health technologies are covered by several state agencies (RCW 70.14.080-140). These technologies may include medical or surgical devices and procedures, medical equipment, and diagnostic tests. HTCC bases its decisions on evidence of the technology's safety, efficacy, and cost effectiveness. Participating state agencies are required to comply with the decisions of the HTCC. HTCC decisions may be re-reviewed at the determination of the HCA Director.