I. Policy: Osteochondral Autograft Transplant

II. Purpose/Objective:
   To provide a policy of coverage regarding Osteochondral Autograft Transplant

III. Responsibility:
   A. Medical Directors
   B. Medical Management

IV. Required Definitions
   1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
   2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
   3. Devised – the date the policy was implemented.
   4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
   5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions
Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;

b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;

c. in accordance with current standards of good medical treatment practiced by the general medical community.

d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and

e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment
Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:

(i) The service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.

(ii) The service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.

(iii) The service or benefit will assist the Member to achieve or maintain maximum functional
capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

**DESCRIPTION:** Osteochondral autograft transplant involves the placement of viable hyaline cartilage grafts into a cartilage defect. The grafts are harvested from peripheral non-weight bearing region of the joint and transplanted into a cartilage defect to restore the articular surface of the bone. Osteocarticular Transplant System (OATS) refers to the use of a single plug, while Mosaicplasty refers the use of multiple plugs. In both techniques, harvesting and transplantation are performed during the same procedure.

**INDICATIONS:** The Plan considered Osteochondral autograft transplantation, either osteochondral autograft transplant (OATS) or mosaicplasty, to treat cartilaginous defects of the knee *medically necessary* when ALL of the following criteria are met:

- Documentation to prove that the patient is skeletally mature and the growth plates are closed and also too young to be a candidate for total knee arthroplasty (typical age range falls between 15 -55); and
- size of the cartilage defect is between 1.0 to 2.5 cm squared in total area; and
- condition involves a focal, full thickness, (grade III or IV) isolated defect of the knee involving the weight bearing surface of the medial or lateral femoral condyles or trochlear region caused by acute or repetitive trauma; and
- Persistent symptoms of disabling localized knee pain for at least 6 months, which has failed to respond to conservative treatment and prior surgical procedure such as debridement or microfracture

**EXCLUSIONS:** The Plan does NOT provide coverage for osteochondral autograft transplantation (e.g. OATS procedure and Mosaicplasty) as a treatment for joints other than the knee because it is considered *experimental, investigational or unproven*. The Geisinger Technology Assessment Committee evaluated this technology and concluded that there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this test on health outcomes when compared to established tests or technologies.

**Note:** A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

**CODING ASSOCIATED WITH:** Osteochondral Autograft Transplantation

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements

- 29866 Arthroscopy, knee, surgical; osteochondral autografts (e.g. Mosaicplasty) (includes harvesting of the autograft)
- 27416 Osteochondral autograft(s), knee, open (eg, mosaicplasty) (includes harvesting of autograft[s])
- 28446 Open osteochondral autograft, talus, (includes obtaining graft[s])
- 27599 Unlisted procedure, femur or knee [when specified as implantation of minced cartilage chondral autograft or allograft of the knee, or the use of resorbable synthetic bone filler materials (including but not limited to plugs and granules) to repair osteochondral defects of the knee]
- 29885 Arthroscopy, knee, surgical; drilling for osteochondritis dissecans with bone grafting, with or without internal fixation (including debridement of base of lesion)
- J7330 Autologous cultured chondrocytes, implant [except minced articular cartilage (whether synthetic, allograft or autograft)]


**LINE OF BUSINESS:**

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD’s and NCD’s will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

**REFERENCES:**


This policy will be revised as necessary and reviewed no less than annually.

Devised: 4/06

Revised: 7/10, 8/13 (added indication)

Reviewed: 8/11, 8/12, 8/14, 8/15, 7/16, 7/17, 6/18, 7/19