SUBJECT: **Total Knee Replacement/Arthroplasty**
INDEX TITLE: **Medical Management**
ORIGINAL DATE: **January 2013**

This policy applies to the following lines of business: (Check those that apply.)

COMMERCIAL	[ ] HMO	[ ] PPO	[ ] Fully Insured	[ ] Individual Product	[ ] Marketplace (Exchange)	[X] All
GOVERNMENT PROGRAMS	[ ] MA HMO	[ ] MA PPO	[ ] MA C-SNP	[ ] MA D-SNP	[X] MA All	
	[ ] Medicaid					
OTHER	[X] Self-funded/ASO					

I. POLICY

It is the policy of MedStar Health, Inc. to cover Total Knee Replacement/Arthroplasty (TKR/TKA) when it is medically necessary and covered under the member's specific benefit plan.

All denials are based on medical necessity and appropriateness as determined by a MedStar Health Medical Director (Medical Director).

II. DEFINITIONS

N/A

III. PURPOSE

The purpose of this policy is to define the medically necessary indications for TKR and TKA.

IV. SCOPE

This policy applies to various MedStar Health departments as indicated by the Benefit and Reimbursement Committee. These include but are not limited to Medical Management, Benefit Configuration and Claims Departments.

V. PROCEDURE

A. Medical Background

Osteoarthritis (OA) of the knee, one of the most common causes of disability, continues to increase in prevalence as the older adult and obese populations grow. Often, the general practitioner is the first to evaluate a patient with a painful knee that has arthritis. Evidence-based evaluation and treatment guidelines recommend

the use of nonoperative treatments before surgical treatment options such as total knee arthroplasty (TKA) are considered. Understanding available nonoperative treatment options is critical for physicians who first encounter patients with OA of the knee. Nonoperative treatment options for patients with OA, include weight loss, exercise, physical therapy, assistive devices such as canes walkers or braces, nonsteroidal anti-inflammatory drugs, and corticosteroid injections

Total Knee Replacement/ (TKR) / Total Knee Arthroplasty (TKA) is a surgery that is performed primarily for severe arthritis (osteoarthritis, rheumatoid arthritis, and post-traumatic arthritis) of the knee joint. The American Academy of Orthopedic Surgeons defines a knee replacement as "the resurfacing of the worn out surfaces of the knee and replacing the lost cartilage and diseased bone with metal and plastic." The most common reason for a knee replacement is due to arthritis and more specifically osteoarthritis.

Knee revision surgery, which is also known as revision total knee **arthroplasty** , is a procedure in which the surgeon removes a previously implanted artificial knee joint, or prosthesis, and replaces it with a new prosthesis. Knee revision surgery may also involve the use of bone grafts. The bone graft may be an autograft, which means that the bone is taken from another site in the patient's own body; or an allograft, which means that the bone tissue comes from another donor

B. Specific Indications

Total knee replacement is medically necessary when the member meets **all** of the following indications (1-4):

1. The member has one (1) of the following conditions::
   - Arthritis, osteoarthritis (primary and secondary), inflammatory arthritidies including rheumatoid arthritis,
   - Osteonecrosis/ avascular necrosis (tibial plateau/femoral condyle) or post-traumatic arthritis
   - Evidence of fracture or non-union/malunion fracture
   - Failure of prior knee joint replacement.

   AND
2. Persistent knee pain with **all** of the following
   - Pain that interferes with activities of daily living
   - Pain that increases with weight bearing and/or standing
   - Limited range of motion
   - Crepitus, or effusion or swelling of knee joint on physical examination
   - Pain with passive range of motion

AND

3. Symptoms continue after 12 weeks of Conservative Management*****(as described below in this policy) as follows:

AND

4. Radiological evidence of at least two (2) of the following:
   - Subchrondral cysts
   - Subchrondal sclerosis
   - Periarticular osteophytes
   - Joint subluxation
   - Joint space narrowing
   - Malalignment

Note: EXCLUSIONARY CONDITIONS to conservative management (as indicated by imaging when applicable):

- Knee fractures
- Rapid deterioration of symptoms with severe disability
- Bone tumor involving the knee
- Complete loss of joint space or bone-on-bone contact

*** CONSERVATIVE MANAGEMENT**

For purpose of this policy, conservative management is defined as:

- Prescription strength analgesics and/or anti-inflammatory medications for **six (6) weeks** if not contraindicated.
  AND
- **12** weeks or more of:
  - External joint support (i.e. use of a cane, walker, brace, etc.) and member education on joint protection and self-management with assistive devices
  - Activity modification; and
  - Weight reduction as appropriate; and
  - Therapeutic injections into the knee (*required for persons with relative Contraindications to joint replacement, optional for others)

* Relative contraindicaitons to joint replacement include the following: morbid obesity (BMI greater than 40), age less than 50 years). Members with relative contraindications should exhaust all nonsurgical treatment options

OR

Physical therapy for knee dysfunction or arthritis (or documentation as to why the member was not able to tolerate physical therapy)

C. <u>Exclusions/ Contraindications</u>

Exclusions include the following:

Prosthetic devices without FDA approval are **not covered**

<u>Contraindications:</u>

Total joint replacement is considered **not medically necessary** in persons with any of the following **absolute contraindications:**

1. active infection of the joint or active systemic bacteremia that has not been totally eradicated; *or*
2. active skin infection (exception recurrent cutaneous staph infections) or open wound within the planned surgical site of the knee; *or*
3. rapidly progressive neurological disease; *or*
4. allergy to components of the implant (e.g., cobalt, chromium or alumina).

Relative Contraindications:

Morbid Obesity (BMI greater than 40)

Age less than 50

* Members with relative contraindications should exhaust all nonsurgical treatment options before surgery is considered

Revision of total knee replacement is medically necessary when ANY of the following conditions are met

• recurrent disabling knee pain, stiffness and functional limitation that has not responded to appropriate nonsurgical management

• instability of the components

• fracture of one or more of the components of the prosthesis or worn or dislocated plastic insert

• aseptic loosening of one or more of the prosthetic components

• deep infection, with or without symptoms of systemic toxicity

• periprosthetic fractures of the distal femur,proximal tibia or patella

D. Information Required for Review

In order for medical necessity to be established, adequate information must be furnished by the treating physician. Necessary information includes the following:

1. Member's age, clinical history, physical and functional status
2. Diagnosis, signs and symptoms, including dates and treatment history.
3. Dates and details of conservative management, including:
   - Pain and functional ability documentation.
   - Documentation of member education and health professional intervention

- External joint support (i.e. use of a cane, walker, brace, etc.) used and results
- Physical and/or occupational therapy notes (when applicable).
  OR
  Documentation as to why the member was not able to tolerate physical therapy
- Medication (including prescription and over-the-counter (OTC) medications) doses, duration and results

4. Progress notes that support worsening symptoms not relieved with conservative treatments
5. Radiologist/orthopedic MD confirmation of the diagnosis on radiology report.
6. Lab results when indicated
7. FDA approval for the device being used

E. Review Process

1. The Medical Management staff assigned to review obtains the clinical information, to determine if there is adequate clinical information. If the case does not meet the established criteria, it is referred to a MedStar Health, Inc. Medical Director.
2. If referred, the Medical Director determines if the requested service is medically necessary and appropriate.
3. The Medical Management staff completes the review process and communicates the review decision according to the Timeliness of UM Decisions policy for the member's benefit plan.

F. Variations

N/A

G. Records Retention

Records Retention for documents, regardless of medium, are provided within the MedStar Health Policy and Procedure CORP.028.MH Records Retention.

Unless otherwise mandated by Federal or State law, or unless required to be maintained for litigation purposes, any communications recorded pursuant to this Policy are maintained for a minimum of ten (10) years from the date of recording.

H. Codes

The following codes for treatments and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in

effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Applicable CPT Codes:

27438	Arthroplasty, knee with prosthesis
27445	Arthroplasty, knee, hinge prosthesis (e.g., Walldius type)
27446	Arthroplasty, knee, condyle and plateau; medial OR lateral compartment
27447	Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty)
27486	Revision of total knee arthroplasty, with or without allograft; one component
27487	Revision of total knee arthroplasty, with or without allograft; femoral and entire tibial component

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