Joint replacement surgery, also known as arthroplasty, has proved to be an important medical advancement. Arthroplasty surgery is most commonly performed for diseases which affect the function of the hip joint and knee joint, but is also performed on ankles, shoulders, and phalanges. In addition, the arthroplasty may be total (involving the entire joint) or partial (involving less than the entire joint).

**Note:** This local coverage determination (LCD) only addresses total hip and knee replacement surgery. The indications outlined in this LCD are not to be applied for unicompartamental knee replacement surgery. Failed previous unicompartamental joint replacement is an indication for performing a total knee arthroplasty.

**Total Knee Arthroplasty (TKA)**

The knee joint includes the lower end of the femur, the upper end of the tibia and the patella. The knee joint has three compartments, the medial, the lateral and the patellofemoral. The surfaces of these compartments are normally covered with articular cartilage and are bathed in synovial fluid. The most common reason for knee arthroplasty is arthritis of the knee joint. Arthritis may cause pain, stiffness, or other symptoms which limit normal activities such as walking, squatting, and climbing stairs. Additional indications for knee arthroplasty include osteonecrosis, malignancy, and other degenerative conditions. The goal of knee arthroplasty is to relieve pain and improve or increase patient function.

**Total Hip Arthroplasty (THA) (TKA)**

The hip joint is made up of two components: a ball (femoral head) and socket (acetabulum). These components are covered with articular cartilage and are bathed in synovial fluid produced by a synovial membrane. Hip arthroplasty is most often performed due to symptoms arising from arthritis, osteonecrosis, malignancy, and degenerative conditions.
The goal of hip arthroplasty is to relieve pain and improve or increase patient function.

Revision Arthroplasty

Revision arthroplasty is performed on an individual who has had a prior hip or knee arthroplasty. Revision arthroplasty may be needed when pain or other symptoms occur as a result of failure of the prior surgery. Failure may occur as a result of infection of the joint, bone loss in the structures supporting the prosthesis, fracture, aseptic loosening of the components, wear of the prosthetic components, and for other reasons.

Indications:

Total Knee Arthroplasty (TKA)

TKA is considered reasonable and necessary for individuals with one or more of the following*:

1. Advanced Joint disease and all of the following (a,b,c):
   a. The joint disease is evidenced by conventional radiography, or magnetic resonance imaging (MRI)*; and
   b. Pain or functional disability attributable to the advanced joint disease; and
   c. Unsuccessful non-surgical medical management*, when appropriate, and attempted for a minimum of 3 months. (When non-surgical medical management is not appropriate, the medical record must clearly document the basis for that conclusion); or

2. Failure of a previous osteotomy; or
3. Distal femur fracture; or
4. Malignancy of the distal femur, proximal tibia, knee joint or adjacent soft tissues; or
5. Failure of previous unicompartmental knee replacement; or
6. Avascular necrosis of the knee; or
7. Proximal tibia fracture

*See Documentation Requirements section for additional information.

Replacement/Revision Knee Arthroplasty

Replacement/Revision knee arthroplasty is considered reasonable and necessary for individuals with one or more of the following*:

- Loosening of one or more component; or
- Fracture or mechanical failure of one or more components, or
- Infection, or
• Periprosthetic fracture of distal femur, proximal tibia or patella, or
• Progressive or substantial periprosthetic bone loss, or
• Bearing surface wear with symptomatic synovitis, or
• Implant or knee misalignment, or
• Knee stiffness/arthrofibrosis, or
• Tibiofemoral instability, or
• Extensor mechanism instability

*See Documentation Requirements section for additional information.

**Total Hip Arthroplasty (THA)**

THA is considered reasonable and necessary for individuals with one or more of the following*:

1. Advanced Joint disease and all of the following (a,b,c):
   a. The joint disease is evidenced by conventional radiography, or magnetic resonance imaging (MRI) *; and
   b. Pain or functional disability attributable to the advanced joint disease; and
   c. Unsuccessful non-surgical medical management*, when appropriate and attempted for a minimum of 3 months. (When non-surgical medical management is not appropriate, the medical record must clearly document the basis for that conclusion); or

2. Malignancy of the joint involving the bones or soft tissues of the pelvis or proximal femur; or

3. Avascular necrosis (osteonecrosis of femoral head); or

4. Fracture of the femoral neck; or

5. Acetabular fracture; or

6. Non-union or failure of previous hip fracture surgery; or

7. Mal-union of acetabular or proximal femur fracture

*See Documentation Requirements for additional information.

**Replacement/Revision Hip Arthroplasty**

Replacement/Revision knee arthroplasty is considered reasonable and necessary for individuals with one or more of the following*:

• Loosening of one or both components; or
• Fracture or mechanical failure of the implant; or
• Recurrent or irreducible dislocation; or
• Infection; or
- Treatment of a displaced periprosthetic fracture; or
- Clinically significant leg length inequality not amenable to conservative management; or
- Progressive or substantial bone loss; or
- Bearing surface wear leading to symptomatic synovitis or local bone or soft tissue reaction; or
- Clinically significant audible noise; or
- Adverse local tissue reaction.

*See Documentation Requirements section for additional information.

**Bilateral Surgery**

When bilateral TKA or bilateral THA is performed, the criteria listed above and documentation requirements below apply to the each joint upon which surgery is performed.

**Limitations**

TKA or THA is not considered reasonable or necessary when none of the criteria above are met.

TKA or THA is not considered reasonable or necessary when one or more of the following contraindications are present:
- Active infection of the hip or knee joint or active systemic bacteremia; and/or
- Active skin infection (exception recurrent cutaneous staph infections) or open wound within the planned surgical site of the hip or knee; and/or
- Rapidly progressive neurological disease except in the clinical situation of a concomitant displaced femoral neck fracture

**CPT/HCPCS Codes**

**Group 1 Paragraph:** Total Hip Arthroplasty

**Group 1 Codes:**

27130  ARTHROPLASTY, ACETABULAR AND PROXIMAL FEMORAL PROSTHETIC REPLACEMENT (TOTAL HIP ARTHROPLASTY), WITH OR WITHOUT AUTOGRaFT OR ALLOGRAFT

27132  ARTHROPLASTY, WITH OR WITHOUT AUTOGRaFT OR ALLOGRAFT
**Group 2 Paragraph: Revision of Total Hip Arthroplasty**

**Group 2 Codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>27134</td>
<td>REVISION OF TOTAL HIP ARTHROPLASTY: BOTH COMPONENTS, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT</td>
</tr>
<tr>
<td>27137</td>
<td>REVISION OF TOTAL HIP ARTHROPLASTY: ACETABULAR COMPONENT ONLY, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT</td>
</tr>
<tr>
<td>27138</td>
<td>REVISION OF TOTAL HIP ARTHROPLASTY: FEMORAL COMPONENT ONLY, WITH OR WITHOUT ALLOGRAFT</td>
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**Group 3 Paragraph: Total Knee Arthroplasty**

**Group 3 Codes:**

<table>
<thead>
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<th>Code</th>
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<tbody>
<tr>
<td>27445</td>
<td>ARTHROPLASTY, KNEE, HINGE PROSTHESIS (EG, WALLDIUS TYPE)</td>
</tr>
<tr>
<td>27447</td>
<td>ARTHROPLASTY, KNEE, CONDYLE AND PLATEAU; MEDIAL AND LATERAL COMPARTMENTS WITH OR WITHOUT PATELLA RESURFACING (TOTAL KNEE ARTHROPLASTY)</td>
</tr>
</tbody>
</table>

**Group 4 Paragraph: Revision of Total Knee Arthroplasty**

**Group 4 Codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>27486</td>
<td>REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT: 1 COMPONENT</td>
</tr>
<tr>
<td>27487</td>
<td>REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT: FEMORAL AND ENTIRE TIBIAL COMPONENT</td>
</tr>
</tbody>
</table>

**Documentation Requirements**

In order to qualify for coverage of both Medicare Part A inpatient services and Part B provider services the medical record must contain documentation that fully supports the medical necessity and justification of the procedure performed and must be made available to National Government Services upon request. When the documentation does not meet the
criteria for the service(s) rendered or the documentation does not establish the medical necessity for the service(s), such service(s) will be denied as not reasonable and necessary under Section 1862(a)(1)(A) of the Social Security Act.

A history and physical, discharge summary, physician progress notes and an operative report are typically in the hospital record for the procedures in this LCD. Other relevant information addressing coverage criteria related to the patient’s episode of care prior to the hospitalization, should be included in the hospital record (see below). Failure to include this information in the hospital record may result in denial of coverage for Part A services and trigger a review of the Part B provider claim to determine whether the Part B service rendered was reasonable and necessary.

When the procedure is indicated for advanced joint disease, the following should be documented in the medical record:

- Arthritis of the knee or hip supported by X-ray or MRI. The X-ray or MRI should demonstrate one of the following:
  - subchondral cysts,
  - subchondral sclerosis,
  - periarticular osteophytes,
  - joint subluxation,
  - joint space narrowing,
  - avascular necrosis, or
  - bone on bone articulations

- The extent to which pain or functional disability interferes with ADLs (functional disability), increases with activity or increases with weight bearing. ADLs include, but are not limited to, dressing, feeding, toileting, grooming, physical ambulation (including balance/risk of falls), and bathing.

- Documentation of unsuccessful non-surgical medical management. Documentation should establish a history of a reasonable attempt at conservative therapy as appropriate for the patient in their current episode of care. Clinically appropriate non-surgical medical management typically includes one or more of the following:
  - anti-inflammatory medications and/or analgesics; and/or
  - flexibility and muscle strengthening exercises; and/or
  - supervised physical therapy; and/or
  - assistive device use; and/or
  - reasonable activity restrictions; and/or
  - weight reduction as appropriate; and/or
  - therapeutic injections into the joint as appropriate.

Non-surgical medical management may be inappropriate, ineffective or counterproductive when one or more of the following is present:

- bone on bone articulation; and/or
- severe deformity; and/or
Severe pain (particularly at rest) and significant disabling interference with activities of daily living (ADL).

- For patients with significant conditions or co-morbidities, such as coronary artery disease or obstructive pulmonary disease, the risk/benefit of the TKA or THA should be appropriately addressed in the medical record.

Medical record documentation for other TKA and THA indications outlined in the LCD should include the following, when indicated:

- Supporting evidence (e.g., pathology reports and referral from an Oncologist for a malignancy of the joint or X-ray of a fracture).
- The extent to which pain or functional disability interferes with ADLs (functional disability), increases with initiation of activities or weight bearing.
- For patients with significant conditions or co-morbidities, such as coronary artery disease or obstructive pulmonary disease, the risk/benefit of the TKA or THA should be appropriately addressed in the medical record.
- When infection is the reason for revision TKA or THA surgery, laboratory and/or pathology reports must be in the medical record and all documentation regarding treatment of the infection and a physician note indicating that it is appropriate to proceed with surgery should be in the medical record as well.

In order to meet Medicare’s reasonable and necessary (R&N) threshold for coverage of a procedure, the documentation should clearly support both the diagnostic criteria for the indication (standard test results and/or clinical findings as applicable) and the medical need (the procedure does not exceed the medical need, is at least as beneficial as existing alternatives, and is furnished within accepted standards of medical practice in a setting appropriate for the patient’s medical needs and condition). Lacking compelling arguments for an exception in the supporting documentation, the hospital (FISS claim) and physician services (MCS claim) may be denied.

If the required criteria outlined in the Indications section above are not met, but the treating physician feels that performing the procedure is within the current standards of care, then the documentation must include, in addition to the above, other information which confirms that the services performed clearly were appropriate. This may include, for example, evidenced based clinical practice guidelines or published and peer reviewed literature in support. For example, if certain conservative measures are not necessary or appropriate for a given patient, it should be directly noted in the pre-procedure documentation. The clinical judgment of the treating physician is always a consideration if clearly addressed in the pre-procedure record and if consistent with the episode of care for the patient as documented in patient records and claim history.

In addition to the medical necessity of the procedure itself, the medical necessity of the site of service should also be evident from review of the medical record.