Arthroplasty

Ruby O’Brochta-Woodward, BSN, CPC, COSC, CSFAC
April 16, 2014
AAPC National Conference
Nashville, TN.

Objectives
- Definition of arthroplasty
- Terminology
- Primary vs. revision procedures
- Conversion procedures
- Spacer exchange
- Diagnosis
Disclaimer

This presentation is for education purposes only. The information presented is not intended to be legal advice. The information presented was current at the time presented and when applicable, based upon guidelines published by the AMA, CMS, and NCCI. Due to the time limitations, the CPT and ICD-9 codes and scenarios are not all inclusive.

What is an arthroplasty?

- **Arthro**=joint +
- **-plasty**=repair or restoration of a part or function
- Combined simply means surgical repair of a joint in order to relieve pain, restore function, restore motion
- Generally done for arthritis, joint ankylosis
- ≠ always mean prosthetic placement
- Can involve partial removal of bone (osteophytes) to complete excision of bone(s) or joint surfaces
- Listed under Repair, Revision and/or Reconstruction subsection
What is an arthroplasty?

As with any surgical procedure, coding should be based upon what is documented in the body of the operative report. This will be imperative to properly report joint arthroplasty.

Types

- Fascial/membrane
- Interposition
- Resection
- Specific joint arthroplasty
  - Without mention of prosthesis
  - With partial prosthetic replacement
  - With full prosthetic replacement
- Revision
- Conversion
Types-Fascial/membrane

- Osteophytes are removed from the joint surface and a fascial membrane is placed over the joint surface
  - tissue can be autograft from the patient (often the skin of the abdomen)
  - Becoming more common to use skin substitute and matrix grafts
  - Check healthplan coverage
  - No existing code for many of the joints

Types-Interposition

- Removal of all of part of a joint with placement of a soft tissue spacer (fascia, tendon, silicone)
  - The tissue fills the space between the bones creating a fibrous joint
  - Most common in the carpometacarpal joints of the wrist, particularly the thumb
    - 25447 arthroplasty, interposition intercarpal or carpometacarpal joints
    - 25332 arthroplasty, wrist, with or without interposition, with or without internal or external fixation
Types-Interposition

- Includes arthrotomy, synovectomy, capsulotomy, ostectomy, placement of internal fixation
- Per CPT Assistant January 2005
  - If a tendon graft is used as the interposition material, and harvested from a different site through a separate incision, may also bill 20924 *tendon graft, from a distance*. Requires -59 modifier.
  - If tendon graft is local and harvested from the same incision as the arthroplasty it is included in the base procedure. Incisions just to free the tendon do not constitute a separate incision.
  - Commonly known as an anchovy procedure

Types-Interposition

- Suspension arthroplasty
  - Variation of interposition arthroplasty where the 1st MC is suspended to the 2nd MC to prevent migration and provide joint stability
  - FCR is harvested from the forearm, through a separate incision(s), part of the tendon still attached to the muscle belly is attached to the base of the 2nd MC creating a ligament suspension. Often the rest is then placed as the interposition graft.
  - CPT Assistant 2005 indicates to use either 26480 *Transfer of transplant of tendon, CMC area or dorsum of hand without free graft, each tendon* or 25310 *Tendon transplantation or transfer, flexor or extensor, forearm and/or wrist, single; each tendon*
    - ASSH believes the code selected should be based upon WHERE being transferred TO not FROM
Types-Interposition

- Becoming more common in the Metatarsophalangeal joints of the foot
  - Currently no CPT code, therefore must use unlisted 28899
  - Can compare it to 25447

Types-Resection

- Excision of a portion of a joint surface (not restricted to the foot)
  - Femoral head 27122
  - Metatarsal-phalangeal
  - Duvries interphalangeal
  - Examples
    - need to read operative report to determine what part of the bone is being removed and how much
    - 28112-28113 metatarsal head resection
      - 28114 involves resection of MTH AND base of proximal phalanx
    - 28288-condylectomy metatarsal head
    - 28160-hemiphalanectomy/interphalangeal joint excision
    - 28285-if done for hammertoe
Types-Joint Specific

- Without mention of prosthesis insertion (implant)
- With implant
  - Partial
    - Hemiarthroplasty
    - Uniarthroplasty
    - Resurfacing
  - Total
    - Primary
    - Revision
    - Conversion

Without mention of prosthesis insertion

- If operative report does not indicate placement of a joint prosthesis, select CPT codes stating arthroplasty without notation of implant when available
- If no option available, review the operative report for proper code selection, often this will be an ostectomy code.
- Since arthroplasty is a resurfacing procedure of an arthritic joint, look at codes for excision bone cyst/benign tumor since CPT has stated that exostosis are considered benign bone tumors (CPT Assistant April 2012)
Types-Joint Specific

- Without mention of prosthesis insertion a few examples
  - 24365, Arthroplasty, radial head
  - 26530, Arthroplasty metacarpophalangeal joint, each joint
  - 26535, Arthroplasty interphalangeal joint, each joint
  - 27437, Arthroplasty patella, without prosthesis
  - 27440, Arthroplasty, knee, tibial plateau
  - 27442, Arthroplasty, femoral condyles or tibial plateau(s), knee
  - 27700, Arthroplasty ankle

Types-Partial

- Hemiarthroplasty
  - One joint section is replaced with an artificial material
  - Shoulder 23470 Arthroplasty glenohumeral joint, hemiarthroplasty
    - Currently considered just humeral portion only
    - AAOS GSD states “preparation of humeral canal for prosthetic device”
    - For management of diseased/arthritic joint only
    - If for treatment of proximal humerus fracture use 23616 Open treatment proximal humeral (surgical or anatomical neck) fracture, …with proximal humeral prosthetic replacement not 23470
**Types-Partial**

- **Hemiarthroplasty**
  - Hip 27125
    - *Hemiarthroplasty, hip, partial (e.g., Femoral stem prosthesis, bipolar arthroplasty)*
    - Monopolar or Bipolar prosthesis
    - Monopolar has a fixed ball attached to the stem (Austin Moore)
    - Bipolar has a double ball allowing for rotation of the ball on the stem

**Bipolar prosthesis**

---

**Types-Partial**

- **Hemiarthroplasty hip**
  - If for treatment of femoral neck fracture use 27236
    - *Open treatment femoral fracture, proximal end, neck, internal fixation or prosthetic replacement*
    - not 27125
Types-Partial

Uniarthroplasty
- One joint compartment is replaced with an artificial material
  - Also referred to as a hemiarthroplasty for the knee
  - Done in the medial or lateral compartment of the knee
  - 27446 Arthroplasty, knee, condyle and plateau, medial OR lateral compartment

Types-Partial

Resurfacing
- Cap like covering is placed over the end of the joint surface.
- May or may not involve both surfaces.
- Ball and socket joints only (shoulder and hip)
- Hip: Per AAOS and AMA this is considered a variant of a total hip
  - Check Healthplan policies for coverage and accepted codes
  - 27125 if no acetabular liner inserted
  - 27130 if femoral cap and acetabular liner
  - S2118 acetabular and femoral components
  - Some still say to use unlisted hip 27299
Types-Partial

- Resurfacing Patella 27438 Arthroplasty patella with prosthesis
  - Only if no placement of femoral component
- Resurfacing Shoulder
  - Currently no information from AMA or AAOS for shoulder
  - Follow same guidelines as for the hip
  - Check healthplan policies, many consider experimental

Types-Partial

Other partial joint implant codes

- Elbow
  - 24361 Arthroplasty elbow with distal humeral prosthetic replacement
  - 24366 Arthroplasty radial head with implant (not for fracture)
- Wrist
  - 25441-25445 Arthroplasty with prosthetic replacement; distal radius/distal ulna/scaphoid/lunate/trapezium
Types - Total Primary

- Replacement of native joint surfaces with artificial surface
- No prior prosthesis has been placed
- Shoulder - 23472 Arthroplasty shoulder, glenohumeral, total shoulder (glenoid and proximal humerus)
- Elbow - 24363 Arthroplasty elbow, with distal humerus and proximal ulnar prosthetic replacement (total elbow)
- Wrist - 25446 Arthroplasty with prosthetic replacement, distal radius and partial or entire carpus (total wrist)
- Hand - 26351 Arthroplasty metacarpophalangeal joint with prosthetic implant, each joint
- Hand - 26356 Arthroplasty interphalangeal joint with prosthetic implant, each joint
- Hip - 27130 Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty) with or without autograft or allograft
- Knee - 27447 Arthroplasty, knee, condyle and plateau, medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty)
- Ankle - 27702 Arthroplasty, ankle, with implant

Types - Total Primary

- Reverse Total Shoulder according to AMA and AAOS should be billed the same as a standard primary TSA
- Patellofemoral Compartment Arthroplasty - unlisted 27599
  - Check healthplan policies for coverage
- Bicompartment Knee Arthroplasty (medial and patella/lateral and patella) - unlisted
Included in procedures

- No additional compensation for minimally invasive technique
- No additional compensation for anterior approach or two incision approach for the hip
- Capsulotomy, synovectomy, contracture release, lateral release, joint debridement, removal of loose bodies
- Reattachment of the greater trochanter, reattachment of any ligaments or tendons cut to perform the procedure
- Excision of osteophytes, reaming, manipulation
- Insertion of prosthesis, methyl methacrylate
- Cruciate sparing, constrained, rotating platform, are still simply total joint arthroplasty
- Bone grafting except from different site

Computer Assisted Navigation

- 20985 Computer assisted surgical navigation procedure for musculoskeletal procedures; imageless
- 0054T with image-guidance based on fluoroscopic images
- 0055T with image-guidance based upon CT/MRI images
  - Add on codes
  - 0054T and 0055T carrier priced
  - Coverage varies by healthplan
Revision Arthroplasty

- Revision arthroplasty requires removal of previously placed prosthetic components and reinsertion of new components in a single surgical procedure.
- Revision codes exist for shoulder, elbow, wrist, hip, knee, and ankle.
- Removal of the previously inserted prosthesis is included.
- Previous primary procedure was total joint.
- No time interval between primary arthroplasty and revision other than can't be billed on the same day.
- Wrist 25449 and ankle 27703 revision codes do not specify components.
- No revision codes for MCP or IP implant.
  - Use primary code w/22 modifier if documentation supports.

Revision Arthroplasty

- Shoulder, elbow, hip, and knee revision codes are based upon which components are removed and replaced.
- Shoulder-23473 Revision of total shoulder arthroplasty including allograft when performed; humeral or glenoid component.
- Shoulder-23474 Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component.
  - Do not report 23472, 23474 in conjunction with 23334, 23335 if a prosthesis [i.e. humeral and/or glenoid component] is being removed and replaced in the same shoulder.
Revision Arthroplasty
Shoulder

- 2014 deleted CPT 23331, 23332 for removal foreign body
- Added 23333 Removal prosthesis, *includes debridement and synovectomy*, when performed; humeral *or* glenoid component
- Added 23334 Removal prosthesis, *includes debridement and synovectomy*, when performed humeral *and* glenoid component
- Parenthetical to use 23330, 23333 for removal foreign body
- Parenthetical to use 20680 for removal of hardware other than humeral and/or glenoid prosthesis

Revision Arthroplasty
Elbow

- Elbow-24370 *Revision of total elbow arthroplasty including allograft when performed humeral or ulnar component*
- Elbow-24371 *Revision of total elbow arthroplasty including allograft when performed humeral and ulnar component*

  “►Do not report 23470, 23471 in conjunction with 24160 if a prosthesis [i.e. humeral and/or ulnar component] is being removed and replaced in the same elbow.◄”
Revision Arthroplasty

Elbow

- 2014 changed description 24160 Removal prosthesis, includes debridement and synovectomy, when performed; humeral and ulnar components
- Changed description 24164 Removal prosthesis, includes debridement and synovectomy, when performed radial head
- Parenthetical to use 24200, 24201 for removal foreign body
- Parenthetical to use 20680 for removal of hardware other than humeral and ulnar prosthesis

Revision Arthroplasty

Hip

- Hip-27134 Revision of total hip arthroplasty, both components, with or without autograft or allograft.
- Hip-27137 Revision of total hip arthroplasty, acetabular component only, with or without autograft or allograft
- Hip-27138 Revision of total hip arthroplasty, femoral component only, with or without allograft
  - Allows for harvesting and insertion of bone graft from distant site
  - GSD allows for adductor tenotomy
  - Includes removal of prosthesis
  - Includes trochanteric osteotomy and repair
  - Includes iliopsoas tenotomy
Revision Arthroplasty

Knee

- Knee-27486 *Revision of total knee arthroplasty, with or without allograft; 1 component*
- Knee-27487 *Revision of total knee arthroplasty, with or without allograft femoral and entire tibial component*
  - Includes removal of component
  - Includes lateral release
  - Includes manipulation, release of scar tissue
  - Allows for bone grafting if harvested from a different site

Conversion

- Currently only exists for the hip
  - 27132 *Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft*
  - Must have been an open procedure
  - Any previously placed hardware is bundled
Conversion

What about conversion of Knee UKA to Total?

- Conversion of a unicompartmental knee arthroplasty to a total knee should be coded as revision two components 27487-52  CPT Assistant July 2013

Poly Exchange/Head Exchange

- Dependent upon reason for procedure
  - If problem is due to a mechanical issue with prosthesis (e.g., Instability) report using revision one component with modifier -52 (hip or knee)
  - If however the problem is to potential infection or other intraarticular pathology, report using the appropriate arthrotomy code (e.g. synovectomy, exploration and removal loose/foreign body, etc.)
  - Spacer/poly/head exchange in this instance was needed to completely visualize the joint
Infected Total Joints

- What is being done?
  - If removal and reinsertion during the same operative session use the appropriate revision code
  - If removing and planning for staged procedure(s) do not use the revision codes

Staged Revision (Infection)

Stage one report using removal of prosthesis complicated

- Hip-27091 *Removal of hip prosthesis complicated, including total hip prosthesis methylmethacrylate with or without insertion of spacer*
- Knee-27488 *Removal of prosthesis, including total knee prosthesis, methylmethacrylate with or without insertion of spacer*
- If non-biodegradable antibiotic beads are also inserted may also bill 11981
- AMA considers temporary devices placed as a spacer (e.g., PROSTLAC) as a spacer even if shaped like a prosthesis. Spacer is bundled into the prosthesis removal code and is NOT separately reportable.
- Note that there is no consistency for where removal of joint prosthesis are found in CPT. Some are under Removal others under Repair.
Staged Revision (Infection)

Stage two (if done)
- Removal of spacer/temporary implant, joint debridement
- Hip-27033-58 Arthrotomy hip, including exploration or removal of loose or foreign body
- Knee-27310-58 Arthrotomy, knee, with exploration, drainage or removal of foreign body (e.g., Infection)
- If non-biodegradable antibiotic beads are removed and reinserted also may bill 11983 (no global period)
- If reinsertion of antibiotic impregnated spacer w/o previously placed beads 11981

Staged Revision (Infection)

Final stage—infection resolved and final prosthesis to be inserted
- Hip-27132-58 Conversion of previous hip surgery to total hip arthroplasty with or without autograft or allograft
  - Removal of spacer is included
  - May report 11982 if separate placement of antibiotic impregnated beads
- Knee-27447-58 Arthroplasty, knee, condyle and plateau, medial AND lateral compartments, with or without patella resurfacing (total knee arthroplasty)
  - No conversion code exists for total knee arthroplasty
  - Removal of spacer is included
  - May report 11982 if separate placement of antibiotic impregnated beads
Staged Revision (Infection)

Final stage - infection resolved and final prosthesis to be inserted

- AMA states that the reinsertion should not be billed as a revision arthroplasty since revision arthroplasty includes removal of the primary prosthesis. This step has already been done.
- -22 modifier may be appended if documentation supports significantly increased work

Staged Revision (Infection)

What about shoulders, elbows, ankles?

- There is currently no specific guidance on staged revision for these joints however based upon the consistency between the hip and knee, my suggestion is the same thought process should be followed for other joints.
ICD-9 Diagnosis

➢ Osteoarthritis/DJD not specified as generalized should be coded as 715.3x not 715.9x
   ▪ Involvement of bilateral joints is not considered generalized
➢ Don’t forget your secondary DJD codes and late effect
➢ Include codes for genu valgum/varum 736.4x as these can impact the difficulty of the procedure
➢ Include code for protrusio acetabulum 718.65 if documented
➢ Aftercare following joint replacement V54.81
   ▪ Plus V43.6x for type of joint replaced
   ▪ If submitting claims for PT/OT post joint replacement, remember to add the V43.6x series

ICD-9 Diagnosis Revision

Revision arthroplasty= Complication

➢ Mechanical internal ortho device
   ◦ Prosthetic joint
     ➢ 996.41 loosening
     ➢ 996.42 dislocation/instability/subluxation
     ➢ 996.43 broken (prosthesis not bone)
     ➢ 996.44 peri-prosthetic fracture
       ◦ i.e. fracture around the prosthesis
       ◦ If a result of trauma use 800 series code in addition to 996.44
     ➢ 996.45 osteolysis
       ◦ + addl code for major osseous defect if present (731.3)
     ➢ 996.46 wear articular bearing surface
     ➢ 996.47 prosthetic failure/other mechanical complication
   ▪ PLUS V43.6x code to define type of joint replaced
ICD-9 Diagnosis Infected/Staged

Infected

- Stage One 996.66 Infection and inflammatory reaction due to internal joint prosthetic device, implant, and graft...due to internal joint prosthesis
  - PLUS V43.6x code to define type of joint replaced

- Aftercare and subsequent stages INCLUDING encounter for reinsertion of prosthesis **V54.82** aftercare following explantation of joint prosthesis
  - PLUS V88.21 acquired absence of hip joint
  - Or V88.22 acquired absence of knee joint
  - Or V88.29 acquired absence of other joint

ICD-10

- Osteoarthritis further subdivided for laterality and site
  - Separate diagnosis for bilateral
  - New code for post-traumatic osteoarthritis in addition to secondary osteoarthritis and traumatic arthritis
    - Post-traumatic degenerative arthritis = arthritis that is a result of trauma around the joint
      - M16.4 bilateral hip; M16.5-RT/LT/I don’t know hip
      - M17.2 bilateral knee; M 17.3-RT/LT/I don’t know knee
      - M 19.1- shoulder, elbow, wrist, hand, ankle& foot plus laterality; no bilateral
    - Post-traumatic arthritis=arthritis that develops as a result of trauma directly to the joint surface M12.5-
      - Shoulder, elbow, hand, wrist, hip, knee foot plus laterality
ICD-10

- AVN expanded to include more sites, laterality and cause M87
- After care codes remain and further subdivided for laterality Z47.1; Z96.6-
- Explantation status Z89.- and aftercare codes continue Z47.3-
  - Status subdivided for laterality and site (shoulder, hip, knee only)
Thank You

rubywoodward@tcomn.com
rubywdwrd@gmail.com

W: 952 345-7708
C: 952 210-4847

NVL123