5 COMMON CONUNDRUMS IN CODING KNEE SURGERY

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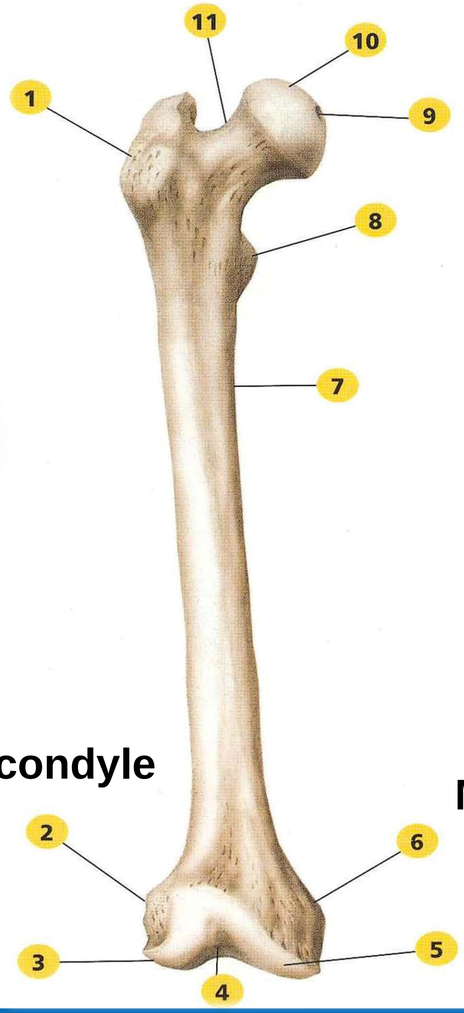
DISCLAIMER

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.

Knee Anatomy

- Skeletal anatomy
  - Femur
    - Condyles-medial and lateral
    - Epicondyles-medial and lateral
  - Patella
  - Tibia
    - Plateau
    - Tibial spine
  - Fibula

FEMUR



Lateral epicondyle

Medial epicondyle

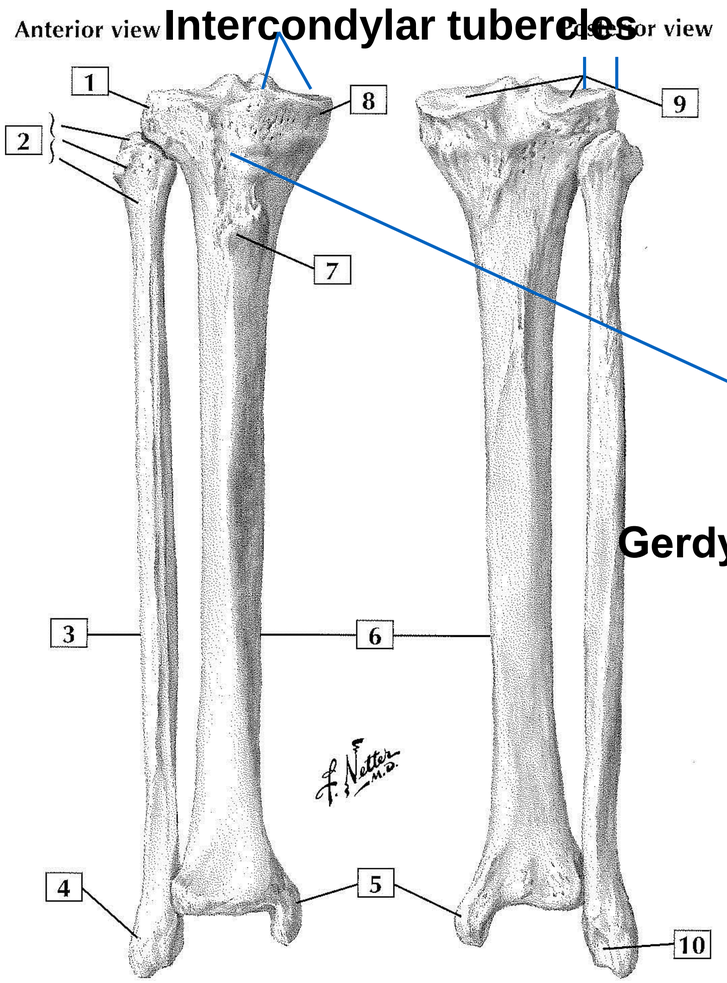
Lateral condyle

Medial condyle

Patellar surface

TIBIA AND FIBULA

1. Lateral condyle
2. Fibula Apex
   Fibula Head
   Fibula Neck
3. Fibula
6. Tibia
7. Tibial tuberosity
8. Medial condyle
9. Medial and lateral facets (superior articular surfaces



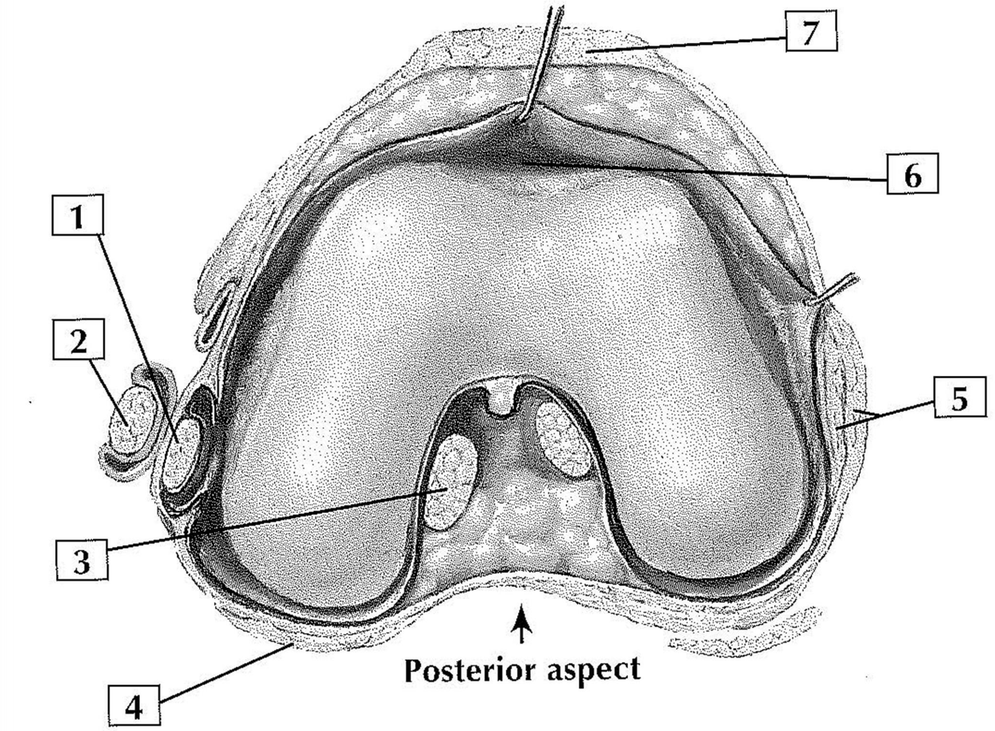
Intercondylar tubercles

Intercondylar eminence

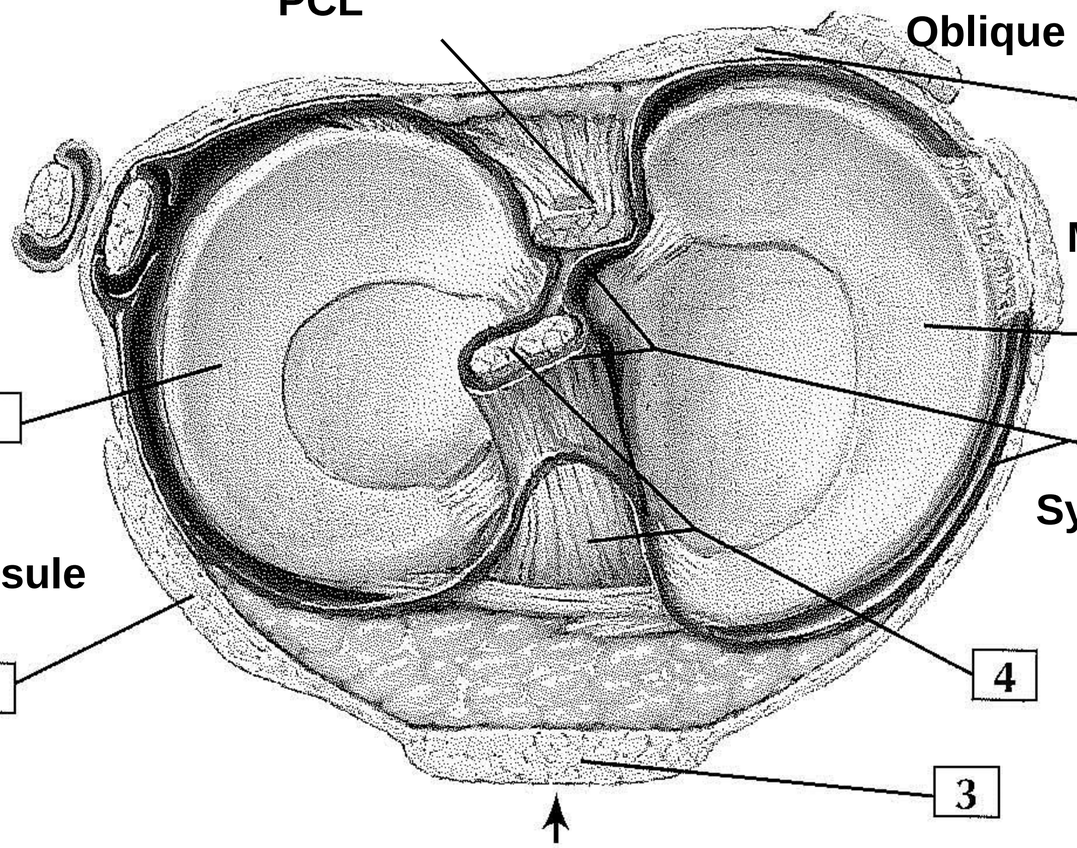
Gerdy's Tubercle-insertion of iliotibial tract

KNEE JOINT

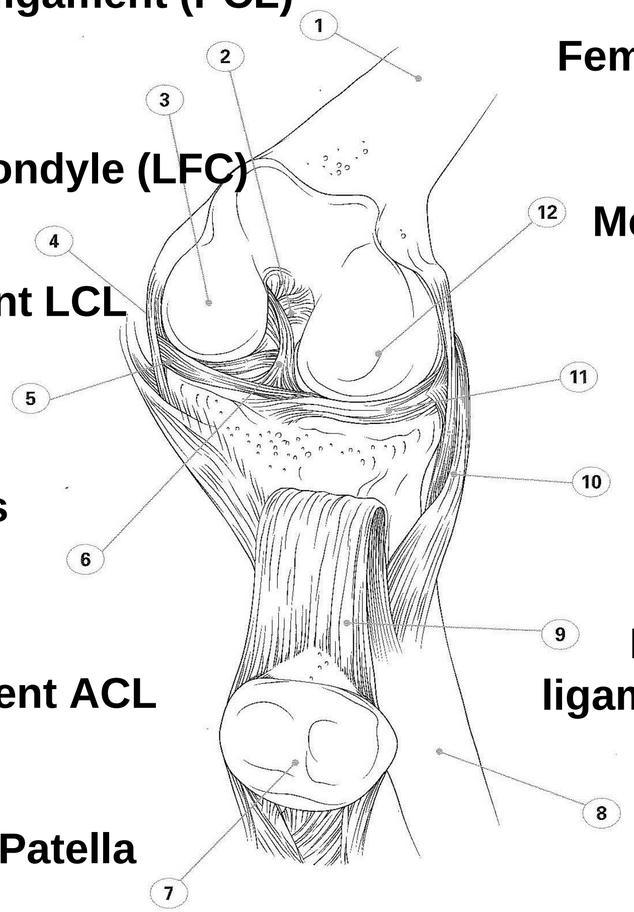
1. Popliteus tendon
2. Fibular collateral ligament (lateral collateral)
3. Anterior cruciate
4. Arcuate popliteal ligament
5. Tibial collateral ligament
6. Suprapatellar bursa
7. Patella ligament/tendon



KNEE JOINT


PCL
Oblique Popliteal Ligament
7
Lateral Meniscus
Medial meniscus
6
1
5
Synovial membrane
Iliotibial tract & capsule
2
4
ACL
3
Anterior aspect

KNEE JOINT



Posterior cruciate ligament (PCL)

Femur

Lateral femoral condyle (LFC)

Medial femoral condyle (MFC)

Fibular (lateral)collateral ligament LCL

Medial meniscus

Lateral meniscus

Tibial (medial)collateral ligament MCL

Patellar ligament/tendon

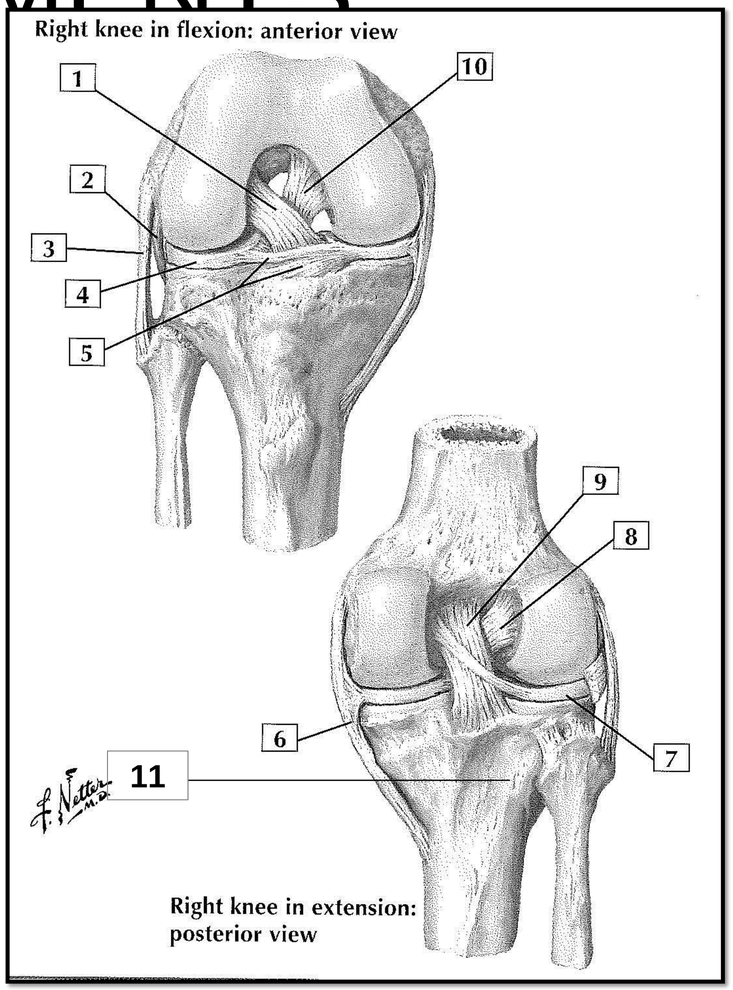
Anterior cruciate ligament ACL

Patella

Tibia

Cruciate and Collateral Ligaments

1. Anterior cruciate ligament
2. Popliteus tendon
3. Fibular collateral ligament
4. Lateral meniscus
5. Transverse ligament
6. Tibial collateral ligament
7. Lateral meniscus
8. ACL
9. Posterior cruciate ligament
10. Posterior cruciate ligament
11. Posterior meniscofemoral ligament (ligament of Wrisberg)



Ligaments

- Intracapsular
  - ACL
    - Weaker
    - Tightens in extension, preventing hyperextension
    - Attachment intercondylar tibia to LFC
    - Tears occur when foot planted and knee rotates in hyperextension
  - PCL
    - Shorter and stronger than ACL
    - Tightens during flexion
    - Prevents anterior displacement of femur on tibia or posterior displacement tibia on femur
    - Attachment posterior intercondylar tibia to MFC

Ligaments

- Intracapsular
  - Meniscii
    - Medial is larger than lateral
    - Medial semicircular; lateral more circular
    - Medial lies over the medial facet of tibia, attached to MCL
    - Lateral lies over lateral facet of tibia
  - Transverse ligament
    - Binds and stabilizes meniscii
    - Attaches anterior aspect of meniscii
  - Posterior meniscofemoral
    - Strong
    - Attaches posterior lateral meniscus to MFC

Ligaments

- Extracapsular
  - MCL
    - Limits extension and abduction of the leg
    - Attached to the medial meniscus
    - Attached medial femoral epicondyle to medial tibial condyle
  - LCL
    - Limits extension and adduction of the leg
    - Attached lateral femoral epicondyle to fibular head

Ligaments

- Extracapsular
  - Patellar
    - Acts in extension of quadriceps
    - Also called patellar tendon
    - Attaches patella to tibial tuberosity
  - Arcuate popliteal
    - Prevents posterior slipping of femur on tibia
    - Torn in hyperextension
    - Attaches fibular head to capsule
  - Oblique popliteal
    - Limits hyperextension and lateral rotation
    - Attached semimembranosus tendon to posterior knee

Hamstring-Biceps Femoris

- Origin: Long head(2)- ischial tuberosity; Short head(1)- linea aspera
- Insertion: Head of fibula lateral side
- Action: Long head-extension of hip; Both heads-flexion of knee, lateral rotation of flexed knee
- Innervation: Long head-sciatic nerve tibial division (L5, S1,2); Short head-sciatic nerve peroneal division (L5, S1,2)
- Long head is one of 3 making up hamstrings which cross both the hip and knee joints
- Short head does not cross two joints

Hamstring-Semitendinosus

- Origin: Ischial tuberosity
- Insertion: Anterior proximal tibial shaft
- Action: Flexes leg @ knee, when knee flexed medially rotates tibia; thigh extensor @ hip joint; when hip & knee both flexed, extends trunk
- Innervation: Sciatic nerve tibial division L5, S1,2
- Has a long tendon of insertion @ knee

Hamstring-Semimembranosus

- Origin: Ischial tuberosity
- Insertion: Posterior medial tibial condyle
- Action: Flexes leg @ knee, rotates flexed leg medially; extends thigh @ hip; with hip & knee flexed extends trunk
- Innervation: Sciatic nerve tibial division L5, S1,2
- *Note Biceps femoris inserts laterally @ knee; semitendinosus & semimembranosus insert medially*

Tensor Fasciae Latae

- Origin: Anterior iliac crest & ASIS
- Insertion: Into iliotibial tract which inserts on lateral condyle of femur
- Action: flexes, abducts & medially rotates thigh @ hip; w/ gluteus maximus stabilizes hip joint; stabilizes extended knee
- Innervation: Superior gluteal nerve L4,5
- Braces the knee when walking
- *Also known as the Iliotibial Band (ITB)*

Sartorius

- Origin: ASIS
- Insertion: Upper medial tibial shaft
- Action: Flexor, abductor & lateral rotator of thigh @ hip joint; flexor of leg @ knee joint; helps balance pelvis; not powerful
- Innervation: Femoral nerve L2,3
- Longest muscle in the body
- Most superficial thigh muscle. Forms the lateral border of the femoral triangle
- Latin for tailor
- Crosses hip and knee joint

Rectus Femoris

- Origin: Two heads; anterior inferior iliac spine and ilium superior to acetabulum
- Insertion: Combines to insert into quadriceps tendon which inserts into base of patella & tibial tuberosity via patellar ligament
- Action: Action on knee is through patellar ligament; extends leg @ knee joint; helps iliopsoas flex thigh @ hip
- Innervation: Femoral nerve L2,3,4
- Only muscle of quadriceps group that crosses both the hip and knee joint

Vastus Lateralis

- Origin: Posterior aspect femur @ greater troch to lateral lip of linea aspera
- Insertion: Lateral patella & tendon of rectus femoris
- Action: Extension leg @ knee
- Innervation: Femoral Nerve L2,3,4
- *Vastus=immense*
- Covers entire lateral portion of thigh

Vastus Intermedius

- Origin: Anterior & lateral aspect femoral shaft & lateral intermuscular septum
- Insertion: Posterior surface upper border patella; forms part of quadriceps tendon; inserts into tibial tuberosity via patella ligament
- Action: Extension leg @ knee joint
- Innervation: Femoral nerve L2,3,4

Vastus Medialis

- Origin: Intertroch line & medial lip linea aspera
- Insertion: Medial border of quadriceps tendon, some fibers insert directly into medial side of patella; tibial tuberosity via patella tendon
- Action: Extension of leg @ knee joint
- Innervation: Femoral nerve L2,3,4
- Only muscle on the back of the upper arm

Extensor Mechanism

- Quadriceps tendon
- Patella
- Medial and lateral retinaculum
- Patellar tendon (ligament)

Medial & Lateral Retinculum

"The **medial retinaculum** is far thinner than its lateral counterpart and is not felt to be as significant with respect to patella position and tracking. Deep to the medial retinaculum are patello-femoral, patello-meniscal and patello-tibial ligaments.

- The **lateral retinaculum th**is thick structure lies along the lateral border of the patella and represents the confluence of many structures including the iliotibial band and lateral patellofemoral ligament. The superior geniculate artery and vein course in a medial-lateral direction along the ventral surface of the retinaculum near the superior pole of the patella."

  http://www.patellapain.com/anatomy.htm

Patellar realignment

- If the operation involves structures at or above the kneecap, it is called a proximal realignment. If the operation involves structures below the kneecap, it is called a distal realignment

- **Elmslie Trillat Procedure -** distal realignment procedure re-aligning the attachment of the patellar tendon (the tendon under the kneecap) to the underlying tibial tubercle. Also known as TTT or tibial tubercle transfer procedures 27418

- **Fulkerson osteotomy** (or Fulkerson 'procedure') is an operation to re-align the tibial tuberosity (lower bony attachment of the patellar tendon on the shinbone 27420 or 27418

Patellar Realignment

Feb 2010 Assistant

Question: *An orthopaedic surgeon performs a "FULKERSON procedure." May code 27418 be reported?*

Answer: Yes. Code 27418, *Anterior tibial tubercleplasty (eg, Maquet type procedure)* may be reported with the Modifier 22, *Increased procedural services*. Modifier 22 is used to reflect the additional procedural work involved with the FULKERSON procedure, compared to the Maquet technique. While both procedures involve elevating the tubercle, the Maquet retains the distal part of the tubercle intact, which is then bent upward. The FULKERSON detaches the tubercle, moves it medially and elevates it."

MPFL Repair/Reconstruction

- 27422 Reconstruction of dislocating patella; with extensor realignment and/or muscle advancement or release (e.g., Campbell, Goldwaite type procedure)
- There is no scope code it would be 29999

Arthroscopy

- 29870 Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)
  - Included in ALMOST ALL Knee procedures
- 29873 Arthroscopy, knee, surgical; with lateral release
  - If reconstruction/repair codes state include lateral release does not matter if open or scope it is included

Arthroscopy

- Just THREE compartments
  - Medial
  - Lateral
  - Patellofemoral
    - ACL considered patellofemoral
    - Lateral release considered patellofemoral
- Must describe in operative note which one they are in

Arthroscopy

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Arthroscopy

- Synovectomy 29875 (partial)
  - Must be unrelated to other procedures
  - Compartment doesn’t matter
  - Separate procedure
- Synovectomy 29876 (major)
  - Need to be in at least 2 compartments and need to be different compartments
  - Need to support major/extensive

Arthroscopy

Chapter 1 CCI

J. CPT "Separate Procedure" Definition - If a CPT code descriptor includes the term "separate procedure", the CPT code may not be reported separately with a related procedure. CMS interprets this designation to prohibit the separate reporting of a "separate procedure" when performed with another procedure in an anatomically related region often through the same skin incision, orifice, or surgical approach.

Arthroscopy

Syovectomy partial AAOS January 2013

"CPT code **29875**, limited synovectomy, is described as a “separate procedure.” This means that the work associated with this procedure is inclusive to more extensive procedures performed in the same anatomic site (the knee) and is not separately reportable. This code should only be reported if it is the only procedure performed; separate compartment rules do not apply.”
http://www.aaos.org/news/AAOSnow/jan13/managing2.asp

Arthroscopy

Synovectomy, MAJOR 29876 CCI

"*CPT code 29876 may be reported for a medically reasonable and necessary synovectomy with another arthroscopic knee procedure on the ipsilateral knee if the synovectomy is performed in two compartments on which another arthroscopic procedure is not performed. For example,* ***CPT code 29876 should never be reported for a major synovectomy with CPT code 29880*** *(knee arthroscopy, medial AND lateral meniscectomy) on the ipsilateral knee since knee arthroscopic procedures other than synovectomy are performed in two of the three knee compartments."*

Arthroscopy

Synovectomy, MAJOR 29876

- Both AAOS and AMA believe you should be able to report 29880 and 29876 if a major synovectomy was done as long as there is documentation of underlying pathology

- Check with payer/carrier Indicator of “0” in CCI

Arthroscopy

- 29877 debridement/chondroplasty and 29874 loose body
- Medicare not to be reported with these codes at the same time as any other knee arthroscopic procedure
- Created G0289 *Arthroscopy, knee, surgical, for removal of loose body, foreign body, debridement/shaving of articular cartilage (chondroplasty) at the time of other surgical knee arthroscopy in a different compartment of the same knee*

Arthroscopy Loose Body

- G0289 reads separate compartment
  - Size >5mm, separate incision is only AAOS
    - Cannot override edit for Medicare and government payors based upon size or separate incision
    - Separate incision is not enlarging the portal

G0289 with 29880/29881

- *"With two exceptions* HCPCS code G0289 (Surgical knee arthroscopy for removal of loose body, foreign body, debridement/shaving of articular cartilage at the time of other surgical knee arthroscopy in a different compartment of the same knee) may be reported *with other knee arthroscopy codes. Since CPT codes 29880 and 29881 (Surgical knee arthroscopy with meniscectomy including debridement/shaving of articular cartilage of same or separate compartment(s)) include debridement/shaving of articular cartilage of any compartment, HCPCS code G0289 may be reported with CPT codes 29880 or 29881 only if reported for removal of a loose body or foreign body from a different compartment of the same knee.*
  - *Requires 59 modifier*
- *HCPCS code G0289 should not be reported for removal of a loose body or foreign body or debridement/shaving of articular cartilage from the same compartment as another knee arthroscopic procedure.*

Arthroscopy G0289

- Must be separate compartment
- Per AMA may be reported more than once as long as different compartments
- Not for chondroplasty when done at the same operative session on the same knee as meniscectomy

Arthroscopy chondroplasty

- Describe it
  - Where, tools used, condition of articular cartilage
    - Frayed, flaked, exposed bone, Grade I, II, III

Arthroscopy

- **29879** – Abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture – Debriding down to bleeding bone
  - Includes –Chondroplasty AND Lysis of Adhesions AND Synovectomy in same compartment
- August 2001 CPT assistant “For example, when smoothing down the cartilage and/or drilling holes to create microfractures is also performed in addition to removal of foreign bodies or loose bodies of the bone or cartilage within the knee joint, code 29879 may be reported in addition to code 29874 only if performed in a separate knee compartment. Modifier -59 should be appended to indicate that a separate compartment was involved.”

Arthroscopy 29879

August 2001 CPT Assistant

- "Abrasion arthroplasty is usually performed to promote cartilage regeneration by creating access to blood and nutrients by smoothing down the cartilage and/or drilling holes to create microfractures.
- Code 29879 includes chondroplasty performed as part of the abrasion arthroplasty, so code 29877 should not be separately reported. If, however, chondroplasty is performed in a separate knee compartment, then code 29877/G0289 may be reported separately. Modifier -59, Distinct Procedural Service, should be appended to indicate that a separate compartment was involved.
- This code also includes resection of osteophytes and removal of loose or foreign bodies when performed in the same compartment."

Arthroscopy

- Meniscectomy and meniscal repair can be billed at same operative session if different meniscus with clear documentation of such
- Aetna policy
- “Aetna considers arthroscopic partial meniscectomy medically necessary for traumatic meniscal tears. Aetna considers arthroscopic partial meniscectomy experimental and investigational for degenerative meniscal tears."
- http://www.aetna.com/cpb/medical/data/600_699/0673.html

Revision ACL

CPT Assistant November 2016

Question: Our surgeon performed a revision arthroscopic anterior cruciate ligament reconstruction. The patient previously had an arthroscopic anterior cruciate ligament reconstruction performed by another surgeon and sustained another injury that ruptured the graft. As part of the revision procedure, our surgeon removed the graft and fixation screws that were implanted by the other surgeon. In addition to reporting code 29888, Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction, for the revision reconstruction, is it appropriate to report code 20680, Removal of implant; deep (eg, buried wire, pin, screw, metal band, nail, rod or plate), for removal of the screws?

Answer: Yes, code 20680 may be separately reported for removal of the screws in addition to code 29888.

Revision ACL

- AAOS states either unlisted or 29888-22
- If done by thermal shrinkage unlisted 29999
- Harvesting and inserting the graft included in 29888, regardless of whether the graft is a patellar tendon or a hamstring tendon. If, however, the tendon is obtained from a distant site, such as the opposite leg, you may report the harvesting separately, using the most appropriate graft harvesting code (such as 2902X)
- Harvesting bone from the proximal tibia (e.g., from the bone tunnel) and grafting it to the patellar bone defect considered a local bone graft -included in the base procedure, and should not be reported. Reporting this as a harvest and transplant would be considered unbundling. AAOS April 2005 Bulletin

Open ACL

CPT Assistant April 2009

Question: *If a surgeon is reconstructing both the anterior cruciate ligament and the posterior cruciate ligament in the same knee, is it correct to report code 27428 x 2, or does the code take into account multiple ligamentous reconstructions? If the medial cruciate ligament also was reconstructed, would it be appropriate to report CPT code 27429 x 3 to represent each ligament reconstructed?*

Answer: It would be appropriate to report CPT code *27428, Ligamentous reconstruction (augmentation), knee; intra-articular (open)*, for the anterior cruciate ligament, code 27428 with modifier 59 for the posterior cruciate ligament, and code *27405, Repair, primary, torn ligament and/or capsule, knee; collateral*, for the medial cruciate ligament. Both the second reporting of code 27428 and code 27405 are subject to modifier 51 to indicate multiple procedures.

Sometimes, when repairing an ACL, the surgeon may chose to combine an intra-articular repair (i.e., bone-patella-bone) with an extra-articular repair (i.e., hamstrings). In that case code *27429, Ligamentous reconstruction (augmentation), knee; intra-articular, (open) and extra-articular*, is the correct code to report

Cyclops Lesion

- Cyclops lesion=arthrofibrosis following ACL reconstruction
- CPT 29884 Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)
- ICD-10 M24.66- ankylosis, knee

Trephination

- CPT Assistant 2011

“Question 3: *What is the appropriate code to report arthroscopic trephination of the meniscus?*

Answer 3: Currently, there is no specific CPT code that describes arthroscopic trephination of the meniscus. Therefore, unlisted code 29999, *Unlisted procedure, arthroscopy*, should be reported. It is not appropriate to report either code 29882 or 29883 for the arthroscopic trephination of the meniscus procedure because these codes describe repair performed by a different technique.”

Meniscal Transplant

- CPT 29868
- Includes:
  - Preparation of defected area
  - Removal of damaged portion of meniscus
  - Tibial tunnels or a bone trough created as stabilizing structures for the implant
  - Insertion of the meniscal graft via arthrotomy
  - Joint exploration
  - Synovial biopsy
  - Lavage – drainage – removal loose bodies
  - Synovectomy
  - Lysis of adhesions

Posterolateral Corner

Question: *What is the correct coding for a posterolateral corner repair/reconstruction of the knee involving the repair of the fibular collateral ligament (lateral collateral ligament), popliteus muscle, the popliteofibular ligament, and occasionally part of the posterolateral capsule?*

Answer: Code 27405, *Repair, primary, torn ligament and/or capsule, knee; collateral,* should be reported once when repair is performed. Code 27427, *Ligamentous reconstruction (augmentation), knee; extra-articular,* should be reported once when reconstruction is performed.

The descriptor language of both codes 27405 and 27427 indicate that repair of the capsule is an inclusive component and is not reported separately. The posterolateral corner (PLC) of the knee is a complex area of the knee formed by the interaction of multiple structures. The arcuate complex, a component of the posterolateral corner, is composed of the arcuate ligament, the fibular collateral ligament, and the popliteus muscle and tendon.

Posterolateral Corner

Additional elements of the posterolateral corner include the biceps femoris muscle and tendon (outside hamstring muscle), lateral collateral ligament, popliteofibular ligament, fabellofibular ligament, and posterolateral joint capsule. Because the open repair of multiple ligaments may occur, documentation of the specific ligaments should be described in detail to differentiate between *repair* and *reconstruction* and to help with accurate code choice.

Dec 2012 CPT Assistant

Subchondroplasty

- What is it? Not fracture treatment!
- Minimally invasive surgery designed to treat subchondral defects associated with chronic bone marrow edema (BME) by filling them with a hard-setting, biomimetic bone void filler
- http://www.subchondroplasty.com/about_subchondroplasty/what_is_subchondroplasty
- http://www.faqs.org/patents/app/20110125156
- Coding unlisted 27599

Subchondroplasty

CPT Assistant January 2014

Question: *What Current Procedural Terminology (CPT®) code should be reported for a* subchondroplasty procedure of the knee?

Answer: The subchondroplasty procedure is a minimally invasive repair designed to treat subchondral bone defects associated with chronic bone marrow lesions by filling them with a bone-substitute material. There is no specific CPT code that accurately describes this service; therefore, unlisted code **27599**, *Unlisted procedure, femur or knee,* should be reported.

When reporting an unlisted code to describe a procedure or service, it is necessary to submit supporting documentation (e.g., procedure report) along with the claim to provide an adequate description of the nature, extent, and need for the procedure, and the time, effort, and equipment necessary to provide the service."

Subchondroplasty

- At this point, the diagnostic arthroscopy was completed. We turned our attention to the sub-chondroplasty. We utilized fluoroscopic imaging to obtain adequate radiographs to localize the entry point in AP and lateral planes. The AccuFill trocar and cannula were positioned appropriately. We used fluoroscopic imaging to position the femoral cannula, approximately 5 mm to 10 mm proximal to the joint line and centered over the bone marrow edema that was notable on the MRI scan which was essentially the weightbearing portion of the medial femoral condyle. We turned our attention to the positioning of tibial trocar as well. This was also centered in the weightbearing portion of the condyle and we advanced this with fluoroscopic imaging such that the fenestrations on the cannula were appropriately positioned within the bone. This was confirmed with both femoral and tibial cannulas. We then mixed the AccuFill appropriately and 5 mL of AccuFill were injected in a sequential manner in the femur with occasional repositioning and redirection of the cannula in order to distribute the AccuFill appropriately. Care was taken to confirm that there was no extrusion of any of the injected AccuFill. We then reinjected the plunger, distributing the remaining AccuFill within the cannula. In a similar manner, the tibia was treated with the same technique. During injection of the AccuFill, we were able to monitor the diffusion of the AccuFill within the medial femoral condyle and medial tibial plateau using fluoroscopic imaging. After allowing the femoral AccuFill to set for about 15 minutes and the tibia AccuFill to set for about 10 minutes, we were able to remove the trocars and cannulas and confirmed that there was no further extrusion of any of the AccuFill material. The **knee** was re-scoped and we noted no debris or AccuFill present. We turned our attention to closure. The portal sites were injected with Sensorcaine as was the AccuFill site. We then closed the **small incisions** with nylon suture. Dressings of Xeroform, fluffs, Kerlix, and Ace wrap were applied. The patient was awoken from anesthesia and transferred to the recovery room in stable condition.

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

Arthroplasty-Types

- Resection
- Without prosthetic replacement
- With partial prosthetic replacement
- With full prosthetic replacement
- Conversion
- Revision

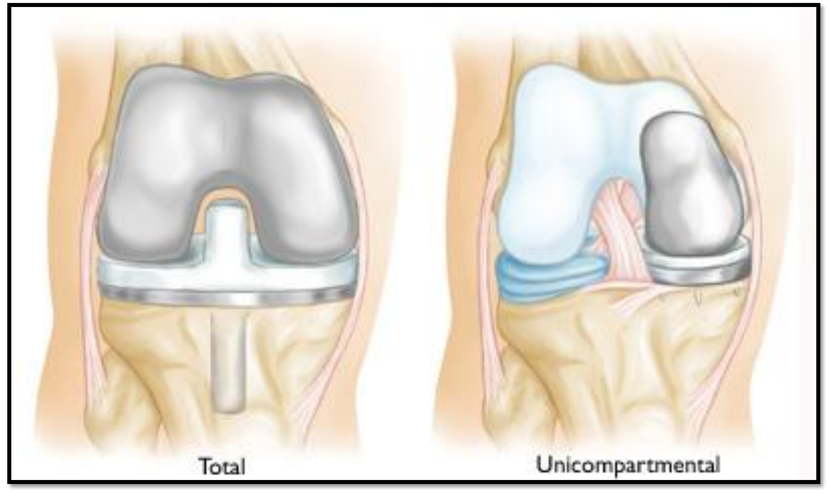
Arthroplasty

- Without mention of joint prosthesis
  - If no indication of placement of a joint prosthesis in op report look for CPT codes stating (arthro)plasty without notation of implant
    - 27437, *Arthroplasty patella, without prosthesis*
    - 27440, *Arthroplasty, knee, tibial plateau*
    - 27442, *Arthroplasty, femoral condyles or tibial plateau(s), k*If no option look for ostectomy codes, excision bone cyst/benign tumors since arthroplasty is a resurfacing procedure of an arthritic/diseased joint
  - 2012 CPT Assistant <u>exostosis</u> considered benign bone tumors; exostosis ≠ osteophyte

Types-Partial

Uniarthroplasty

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



Types-Partial

- Uniarthroplasty Knee-MakoPlasty
  - One joint compartment is replaced with an artificial material
    - Uses robotic arm, bone resection, implant placement
    - Pre-op 3-D CT(inclusive in procedure)
      - Determines prosthesis size, placement, alignment
    - Reduces amount of bone resection
    - Outpatient, improved ROM, lower revision rate
    - Done primarily in the medial compartment of the knee
    - 27446 *Arthroplasty, knee, condyle and plateau, medial OR lateral compartment plus 0055T computer assisted surgical navigation for musculoskeletal procedures, with image-guidance based upon CT/MRI images or 20985 computer assisted surgical navigation procedure imageless or S2900 surgical techniques requiring use of robotic surgical systems*
    - *Check health plans for coverage*
    - *www.makosurgical.com*

Types-Partial

- Resurfacing Patella 27438 *Arthroplasty patella with prosthesis*
  - Only if no placement of femoral component
- Patellofemoral Compartment Arthroplasty-unlisted 27599 vs 28238
  - Check healthplan policies for coverage
  - AHA Coding Clinics 2016 Q1 advises 28238
  - CPT Assistant advises 27442 *arthroplasty. Femoral condyles or tibial plateau(s), knee* and 27599

Patellofemoral

Question: When the physician performs a “patellofemoral” arthroplasty in which the prosthesis is inserted into the trochlear groove (and not into the femoral condyles), is it still appropriate to report code 27442, Arthroplasty, femoral condyles or tibial plateau(s), knee? Or would code 27599, Unlisted procedure, femur or knee, be reported because there is no CPT code that describes trochlear replacement?

Answer: Yes, it is still appropriate to report code 27442 for the patellofemoral arthroplasty. Also, unlisted code 27599 may be reported for the trochlear resurfacing. When reporting an unlisted code to describe a procedure or service, it will be necessary to submit supporting documentation (eg, procedure report) along with the claim to provide an adequate description of the nature, extent, and need for the procedure; as well as the time, effort, and equipment necessary to provide the service

Neither the femoral condyles nor the tibial plateaus are part of this procedure

This doesn’t address the patella

Types-Partial

- Bicompartmental knee arthroplasty
  - Medial and patellofemoral compartments-Journey Deuce
  - Lateral and patella less common
  - AMA instructs to use 27599
  - Check payer policies

Types-Partial

Hemicap

- Femoral condyle
- 35-75 year olds with isolated cartilage lesion
- Uses preoperative imaging
- Not covered by most healthplans
- Unlisted

Arthroplasty

- What is included?
  - Synovectomy, joint debridement
  - Removal loose body
  - Tenotomy iliopsoas
  - Acetabular reaming
  - Excision of acetabular osteophytes
  - Manipulation hip
  - Trochanteric osteotomy and attachment
  - Capsular release, repair, and/or reconstruction
  - Insertion of femoral components with or without methylmethacrylate

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, 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
- Based upon which components are removed and replaced

Revision Arthroplasty

- 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

- 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

Staged Revision

Stage one report using removal of prosthesis complicated

- 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.

Revision Arthroplasty

- 27486 *Revision of total knee arthroplasty, with or without allograft; 1 component*
- 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

Staged Revision

Stage two

- Removal of spacer/temporary implant, joint debridement
- 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
- Nonbiodegradable means they eventually need to be removed

Staged Revision

Final stage-infection resolved and final prosthesis to be inserted

- 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*
- 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.

ICD-10-CM Diagnosis

- Osteoarthritis/DJD M17.
  - Primary = wear and tear, no prior trauma or disease
  - Post-traumatic **degenerative**= occurs as a result of trauma around the joint
    - Must be documented as post-traumatic degenerative/osteoarthritis
    - Not the same as post-traumatic arthritis M12.5-
  - Secondary = other causation such as AVN, infection
  - Secondary due to hip dysplasia-hip only
  - Laterality 1=right, 2=left
    - 5th character
  - Bilateral 4th character zero

ICD-10-CM Diagnosis

- Rheumatoid arthritis M05.- to M06.-
  - Joint and laterality
  - Comorbidities
  - Presence of rheumatoid factor
    - Based upon guidelines default is without therefore if not documented code to RA without and body part
- AVN M87.-
  - Laterality 1=right, 2=left
  - Causation

ICD-10-CM Diagnosis

- Include codes for genu valgum/varum M21.06-/ M21.12- as these can impact the difficulty of the procedure
  - Requires laterality

ICD-10-CM Diagnosis

- Uncomplicated Post-surgery encounters
- Aftercare following joint replacement Z47.1
  - Plus Z96.64-
    - Requires laterality
- If submitting claims for PT/OT post joint replacement, remember to add the Z96.6- series

ICD-10 Diagnosis Revision

- Revision arthroplasty= Complication
  - Mechanical internal joint prosthesis
    - T84.01- broken internal joint **prosthesis**
    - T84.02- dislocation/instability/subluxation
    - T84.03- mechanical loosening/aseptic loosening

ICD-10 Diagnosis Revision

Revision arthroplasty= Complication

- T84.04- peri-prosthetic fracture
  - i.e. fracture around the prosthesis
  - If a result of trauma use S series code in addition to T84.04-
  - October 2016 code revisions moves peri-prosthetic fracture codes to M97-
    - M97.1- knee
    - Joint specific require laterality

ICD-10 Diagnosis Revision

Revision arthroplasty= Complication

- Mechanical internal joint prosthesis
  - T84.05- peri-prosthetic osteolysis
    - + addl code for major osseous defect if present (M89.7-)
  - T84.06- wear articular bearing surface
  - T84.09- other mechanical complication/prosthetic failure
- Laterality
- 7th character A
- PLUS Z96.6- code to define type of joint replaced
  - Per Coding Clinics Q1 2015
  - Manual only notes to append for “other”

ICD-10 Diagnosis Revision

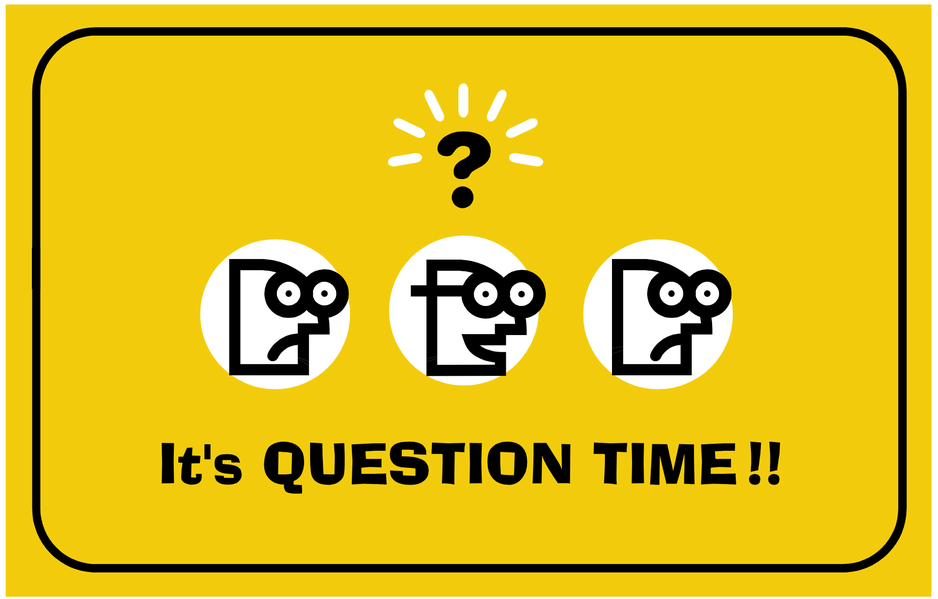
Revision arthroplasty= Complication

- Other specified complications of internal joint prosthesis
  - T84.81- embolism
  - T84.82- fibrosis
  - T84.84- pain
  - T84.85- stenosis
  - T84.86- thrombosis
  - T84.89- other specified
- No joint specificity
- No laterality
- 7th character A
- Used for prosthesis, implants and graft complications
- PLUS Z96.6- code to define type of joint replaced

ICD-10 Diagnosis Infected/Staged

Infected

- Stage One T84.5- Infection and inflammatory reaction due to internal knee prosthesis
  - Laterality
  - Z96.6- series to define joint
  - Use additional code to identify infection
  - 7th character A
- Aftercare and subsequent stages INCLUDING encounter for reinsertion of prosthesis **Z47.3** aftercare following explantation of joint prosthesis
  - Subdivided for laterality and site (shoulder, hip, knee only)
- Should not use Z89.- series acquired absence of knee joint
  - Excludes 1 note with Z47.3-
  - Used if explanted but no plan for staged revision
  - 4th quarter 2011 Coding Clinic instructed to use
  - 2015 Webinars did not include the use of Z89.- in revision instructions



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