2013 CODING, DOCUMENTATION, AND COMPLIANCE UPDATE
Joint Reconstruction – Inpatient Facility and Physician

Presented by:
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IMPACT!

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Faculty and Planner Disclosure

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INPATIENT FACILITY REIMBURSEMENT OVERVIEW

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Inpatient DRG Determination

- Principal diagnosis
- Secondary diagnoses
- Procedure codes
- Gender
- Age
- Discharge Disposition

Chief Complaint vs. Principal Diagnosis

- The **CHIEF COMPLAINT** can be defined as the ‘presenting problem’ for which the patient presents to the hospital or other site for care.

- The **PRINCIPAL DIAGNOSIS** is defined in the Uniform Hospital Discharge Data Set (UHDDS) as “that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.”
Guidelines for Reporting Diagnoses

- Report all conditions that coexist at the time of admission, that develop subsequently, or that affect the treatment received and/or the length of stay.

- Conditions documented at discharge as uncertain (e.g., rule out, possible, probable or suspected) are coded as if they exist, in anticipation that further diagnostic studies may be performed.

- Report conditions affecting patient care
  - clinical evaluation
  - therapeutic treatment
  - diagnostic procedures
  - extended LOS
  - increased nursing care or monitoring

Inpatient “CC’s” -- Complications & Comorbidities

- Complication – A condition that arises during the hospital stay that extends the length of stay by at least one day in 75% of the cases.

- Comorbidity – Pre-existing condition that will extend the length of stay by at least one day in 75% of the cases because it coexists with the principal diagnosis.

- The MS-DRG system recognizes both CC and major CC (MCC).
Inpatient “CC’s” -- Complications & Comorbidities

<table>
<thead>
<tr>
<th>Examples of Vague Language</th>
<th>More Specific Documentation Which May Affect DRG Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes poorly controlled</td>
<td>Uncontrolled diabetes, specific manifestations</td>
</tr>
<tr>
<td>Anemia</td>
<td>Specific type of anemia (eg, acute blood loss)</td>
</tr>
<tr>
<td>Respiratory insufficiency</td>
<td>Respiratory failure, and acute vs. chronic</td>
</tr>
<tr>
<td>NA = 120</td>
<td>Hyponatremia, and cause if known</td>
</tr>
<tr>
<td>Renal insufficiency</td>
<td>Severity of chronic kidney disease</td>
</tr>
<tr>
<td>Tachycardia</td>
<td>Specific type of tachycardia</td>
</tr>
<tr>
<td>Pressure ulcer</td>
<td>Pressure ulcer stage, site, and if pre-existing</td>
</tr>
<tr>
<td>Obesity</td>
<td>Morbid obesity, and Body mass index</td>
</tr>
</tbody>
</table>

CMS Focus on Patient Safety

- Hospital Acquired Conditions (HAC) -- Secondary diagnoses must be reported with an appropriate POA (Present on Admission) indicator. Relevant HACs to orthopaedic care include:
  - pressure ulcer stages III and IV;
  - surgical site infection following certain orthopedic procedures;
  - deep vein thrombosis and pulmonary embolism following certain orthopaedic procedures.

- "Never Events"

<table>
<thead>
<tr>
<th>Type of Error</th>
<th>Inpatient Remarks Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong Surgery on Patient</td>
<td>MX</td>
</tr>
<tr>
<td>Surgery on Wrong Body Part</td>
<td>MY</td>
</tr>
<tr>
<td>Surgery on Wrong Patient</td>
<td>MZ</td>
</tr>
</tbody>
</table>
MS-DRG Assignment

• The relationships between principal diagnosis, secondary diagnoses, and valid O.R. procedures drive MS-DRG assignment.

• The MS-DRG titles do not necessarily reflect all of the elements of an individual patient’s course of care.

• *Code according to the documented facts and coding guidelines.*

New Coverage Criteria Trends

• Healthcare payor entities have been adopting increasingly stringent coverage criteria.

• These guidelines may be more conservative than the clinical standards of care developed by specialty medical societies.

• The stricter criteria lead to a need for more specific documentation of patient history and other findings to support medical necessity.
Facility / Physician Coding Issues

Facilities may report procedures using one of two different coding systems:

- For inpatient services -- ICD-9-CM Volume III
- For outpatient services -- CPT® / HCPCS Codes

Physicians report procedures in all settings with CPT®.

These two coding systems do not directly “translate” on a code by code basis.

The payment methodologies and bundling issues are not the same, even when both facility and physician report with CPT® codes.
Documentation Drives Coding

In all circumstances, documentation indicates the services which may be reported. The importance of consistent, complete documentation in the medical record cannot be overemphasized.

Coding is case and patient specific. It is important for the coder and physician to communicate to ensure accurate documentation and coding.

Continued monitoring of complex cases which may arise will help ensure accurate coding.

Basic ICD-9-CM Procedure Coding

- If the descriptor for the procedure code does not include “bilateral,” the service may be coded twice to designate both left and right.
- In most circumstances, the operative approach is not reported separately from the procedure. There is usually an instructional note of “omit code.”
- When a procedure is initiated, but not fully completed, code only to the extent of services provided.
- The Principal procedure is that performed for definitive treatment rather than one performed for diagnostic or exploratory purposes, or necessary to take care of a complication, according to sequencing hierarchy.
Coding Arthroplasty

- Anatomic site
- Partial versus total replacement
- Initial versus revision / removal procedure
- For knee and hip revisions, add-on codes to identify component(s) replaced
- For hip replacements, type of bearing surface
- Insertions of other devices and substances -- recombinant bone morphogenetic protein, bone void filler, or cement spacer
- New technologies for guidance assistance
  - Computer assisted surgery (00.31 00.39)
  - Robotic assisted procedures (17.41-17.49)

Case Study #1: Right Knee Partial Arthroplasty

PREOPERATIVE DIAGNOSIS: Medial osteoarthritis, right knee.

POSTOPERATIVE DIAGNOSIS: Medial osteoarthritis, right knee. 715.36

NAME OF PROCEDURE: Right partial knee arthroplasty, medial.

IMPLANT: (Brand) medial partial knee replacement with a 6mm poly.

CLINICAL DATA: The patient is a 72-year-old female with severe medial osteoarthritis presents now for partial knee replacement. All risks and benefits of the procedure were explained in detail. 27446
Case Study #1: Right Knee Partial Arthroplasty

DESCRIPTION OF PROCEDURE: After informed consent was obtained, the patient was taken to the Operating Suite and given spinal anesthesia and a Foley catheter. She was then given (antibiotic). The right lower extremity was prepped and draped in the appropriate sterile manner. The leg was exsanguinated with an Esmarch tourniquet inflated to 250 mm of mercury. An anterior incision was made. A medial parapatellar arthrotomy was made. The meniscus, retropatellar and fat pad were sharply excised. The femoral component was then applied to the femur and the anterior limits of the implant were identified. The cartilage then was removed using a ring curette. The cartilage and meniscus were removed from the tibia. A size C tibial shim was placed and once this was done the tibial alignment guide was placed. The tibial guide was then pinned in place and using both the sagittal saw and regular saw the tibia was cut. The tibia was removed.

The wound was pulsatile irrigated out. After placing the trials in, the trials fit nicely. The cancellous bone was dried and the components were cemented in place with a 6 mm trial placed at 45 degrees and flexion until the cement hardened. Once the cement hardened, excess cement was removed using an inferior elevator. The final insert was placed with good stability at 0 and 90 degrees. The tourniquet was let down and hemostasis was obtained with (brand) cautery.
Case Study #1: Right Knee Partial Arthroplasty

The retinaculum was then closed with #2 (brand) suture and injected with 0.25 percent bupivacaine HCl with epinephrine and #2-0 (brand) suture for the subcutaneous tissue. The skin was closed using skin staples. The wound was dressed with sterile 4 x 4, absorbent dressing, and an elastic bandage.

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>CPT PROCEDURE CODES</th>
<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthroplasty, knee replacement, medial compartment</td>
<td>27446</td>
<td>81.54</td>
<td>715.36</td>
</tr>
</tbody>
</table>

CASE NOTES: The ICD-9-CM code 81.54 for total knee replacement lists bicompartamental; partial knee replacement; tricompartmental; and unicompartmental (hemijoint) as inclusive terms. There is not a separate code for a partial knee replacement.

Customized Instrumentation

For some knee arthroplasty procedures, customized instrumentation can be personalized to the patient’s individual anatomy:

- Scheduling to allow adequate lead time for manufacture
- Pre-operative CT scan to develop virtual 3-D model, reported separately from the DRG for joint arthroplasty:
  - 73700 Computed tomography, lower extremity, without contrast material
- While there is no carve-out or additional DRG or case reimbursement, customized instrumentation may potentially improve operative efficiency.
Case Study #2: Total Hip Arthroplasty

PREOPERATIVE DIAGNOSIS: Osteoarthritis left hip.
POSTOPERATIVE DIAGNOSIS: Osteoarthritis left hip. 715.35

IMPLANT: A (brand) (metal bearing surface), size #11 stem, -2 neck, 36 mm head; a #58 (brand) acetabular cup and +4 lateraled (brand) (polyethylene) liner. 00.74

NAME OF PROCEDURE: Left total hip arthroplasty, anterior approach (cementless).

CLINICAL DATA: This is a 73-year-old gentleman with severe osteoarthritis of the left hip. He has failed nonoperative treatment and presents now for total hip arthroplasty. All risks and benefits were explained in detail.

DESCRIPTION OF FINDINGS AND PROCEDURE: After informed consent was obtained, the patient was taken to the Operating Room Suite and given a spinal, a Foley catheter, and 2 gram of intravenous (antibiotic). The left lower extremity was prepped and draped in the appropriate sterile manner.

A 10 cm incision was drawn out 4 cm lateral and 1 cm inferior to the anterior superior iliac spine. This was taken down to the anterolateral thigh after infiltrating with 0.25% bupivicaine with epinephrine. A #10 blade was used to incise in line with the incision. The fascia of the tensor fascia lata was split in line with the incision. The muscle was bluntly retracted laterally, and the anterior capsule exposed. An anterior capsulotomy was made and the capsule tagged. A retractor was placed deep to the capsule.
Case Study #2: Total Hip Arthroplasty

Fluoroscopy was brought in and confirmed the position of the neck cut using (brand) cautery. The neck was cut medially with a saw and laterally with an osteotome. The head and neck were removed.

The femur was retracted posteriorly and the acetabulum circumferentially exposed and the soft tissue removed. Sequential reaming down the medial wall and going in 45 degrees of abduction and 20 degrees of anteversion up to a size #57, which was confirmed under fluoroscopy. A #58 reamer was used to touch it up and a #58 cup was placed with good purchase and a +4 lateralized liner was placed based off of preoperative templating.

Case Study #2: Total Hip Arthroplasty

The femur was retracted out of the wound using extension, external rotation and adduction. The neck remnant was removed. The lateral capsule was released. Sequential broaching, parallel to the posterior cortex, was done up to a size #11 with good torsional stability. The calcar was planed. The head and neck trials were placed and with the -2 and the coxa vera, it appeared to recreate the offset and slightly increase the leg length, which was our goal because he had osteoarthritis of the right hip to increase his leg length by a mm. It was very stable to extension and external rotation. It was then packed a little bit tight going in. The trials were removed and the final components were placed. They were retrialed and found to be stable.
Case Study #2: Total Hip Arthroplasty

The wound was pulsatile irrigated out. The capsule was closed using #2 orthopaedic suture and then injected with a 0.25% bupivacaine with epinephrine. The fascia was closed over a drain using #0 (brand) suture, #2-0 (brand) suture for the subcutaneous tissue, and the skin was closed using skin staple and liquid skin adhesive. The wound was dressed with sterile 4 x 4s, absorptive dressing, and a foam tape.

PLAN: For the patient to remain in-house for intravenous antibiotics and physical therapy.

### Case Study #2: Total Hip Arthroplasty

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total hip arthroplasty</td>
<td>27130</td>
<td>81.51</td>
<td>715.35</td>
</tr>
<tr>
<td>Hip bearing surface, metal-on-polyethylene</td>
<td>N/A</td>
<td>00.74</td>
<td></td>
</tr>
</tbody>
</table>

**CASE NOTES:** ICD-9-CM distinguishes total hip replacement (81.51) from partial hip replacement (81.52), so identification of all implanted components is needed.

Code also type of bearing surface (00.74 – 00.77), if known.
Case Study #2: Total Hip Arthroplasty

Clinical Indication:

“This is a 73-year-old gentleman with severe osteoarthritis of the left hip. He has failed nonoperative treatment and presents now for total hip arthroplasty.”

Is this sufficient?

1. Yes
2. No
Example – Florida Medicare LCD

Total hip or knee replacement requires documentation of one or more of the following:

- Advanced joint disease demonstrated by:
  - Radiographic or MRI evidence; and
  - Disabling pain and functional disability; and
  - Failure of a minimum of 3 months conservative age appropriate therapy.
- Failure of a previous osteotomy
- Displaced femoral fracture
- Malignancy of the joint
- Avascular necrosis
- Failure of previous partial joint replacement


Case Study #3: Revision of Knee Replacement

PREOPERATIVE DIAGNOSIS: Failure of unicompartmental knee replacement, left knee.

POSTOPERATIVE DIAGNOSIS:
1. Failure of unicompartmental knee replacement, left knee.
2. Partial tear of the patella tendon.

OPERATIONS:
1. Revision, left total knee replacement, conversion of unicompartmental knee replacement to a total knee replacement.
2. Repair of patella tendon tear.

IMPLANTS USED: (Brand) posterior stabilized total knee replacement system, size 3 left femoral component with posterior augmentation on the medial side which was the site of the previous unicompartmental knee replacement. A cross linked, stabilized 8 mm insert and a size 2 tibial tray and a (brand) anchor.
Case Study #3: Revision of Knee Replacement

PROCEDURE: After induction of anesthesia and administration of antibiotics, the patient was positioned supine. The left leg was isolated and prepped and draped in the usual sterile fashion. Sterile tourniquet was placed on the upper leg and the leg was exsanguinated and tourniquet inflated to 300 mmHg. Any exposed skin was covered with a drape.

A standard anterior approach to the knee was performed through the previous scar, extended proximally and distally for additional exposure. Sharp dissection was carried through the skin. Electrocautery was used to complete dissection down through the prepatellar bursa. It was reflected medially to expose the medial parapatellar retinaculum. A medial parapatellar arthrotomy was then created and mid vastus proximal extension. The patella was slid off the lateral aspect of the knee, the knee bent up to expose the unicompartmental knee and there was no purulence. There was some synovitis that was debrided.

Case Study #3: Revision of Knee Replacement

The retractors were placed and the unicompartmental components were very loose and basically the unicompartmental component could be pushed off with the fingers which left some noticeable damaged bone underneath. Synovectomy was completed. Bone was debrided back to some stable edges and proceeded with revision knee replacement by making a drill hole in the distal femur. The extramedullary and intramedullary alignment guide was used to place a distal femoral cutting block. The distal femur was cut, removing 10 mm off of the uninvolved side which left just a little bit of a gap on the distal femur on the unicompartmental side and then the tibia was cut to accept an 8 mm spacer. This again left a slight, small gap on the unicompartmental side, again that could be augmented with cement.
Case Study #3: Revision of Knee Replacement

The distal femur was then sized as a size 3 and then anterior, posterior and chamfer cuts were completed. It was noted that there was deficiency of the posterior condyle that would require an augment. This was added to the trial and the trial femur was placed. The knee came into full extension with the 8 mm insert, equal flexion gap and then the patella was resurfaced with a 32 mm oval dome, 3 peg patella which tracked well with the rule of no thumbs.

Trial components were removed. The tibia was prepared with a drill and punch. The cement was mixed while the tourniquet was deflated. Hemostasis was achieved and then the tourniquet was reinflated for cementing. Cut bony surfaces were cleaned thoroughly and dried completely and then cement was pressurized into the cut bony surfaces.

The components were impacted into position and the knee was held in full extension until the cement was hot and hard. Excess cement was removed. Final insert chosen was an 8 mm insert which locked in full extension nicely; was stable and had smooth flexion. The final poly insert was locked into position and then the tourniquet was deflated a final time. A deep drain was placed exiting proximally. The mid vastus was repaired with 0 (brand) sutures and then the arthrotomy was repaired with #2 (brand) suture. The bursa layer was closed with a (brand) suture and then inverted 3-0 (brand) sutures for subcuticular layer and staples on the skin. A sterile dressing was applied and the patient was taken to the recovery room having tolerated the procedure well.
Case Study #3: Revision of Knee Replacement

<table>
<thead>
<tr>
<th>PROCEDURES</th>
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<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision of knee replacement, total knee</td>
<td>27487</td>
<td>00.80</td>
<td>996.41 V43.65</td>
</tr>
<tr>
<td>Suture of infrapatellar tendon</td>
<td>27380-51</td>
<td>83.64</td>
<td>727.66</td>
</tr>
<tr>
<td>Synovectomy of knee (debridement)</td>
<td>Bundled</td>
<td>80.76</td>
<td>727.00</td>
</tr>
</tbody>
</table>

CASE NOTES: A revision of unicompartment knee replacement to total knee arthroplasty is reported with the code encompassing all new components implanted. Any time a component of a joint has previously been replaced, the procedure would still be considered a revision, even though part of the component is being replaced for the first time.

Case Study #3: Revision of Knee Replacement

• Circumstances that may lead to the need for a revision total hip or knee are continued disabling pain / continued decline in function which can be attributed to failure of the primary joint replacement.

• Failure can be due to infection involving the joint, substantial bone loss in the structures supporting the prosthesis, fracture, aseptic loosening of the components and wear of the prosthetic components.

“The retractors were placed and the unicondylar components were very loose and basically the unicondylar component could be pushed off with the fingers which left some noticeable damaged bone underneath.”

Is this sufficient?

1. Yes  2. No
Case Study #4: Left Wrist Fusion and Elbow Arthroplasty

PREOPERATIVE DIAGNOSIS: Left wrist rheumatoid arthritis and left elbow rheumatoid arthritis with rheumatoid nodules left elbow.

POSTOPERATIVE DIAGNOSIS: Left wrist rheumatoid arthritis and left elbow rheumatoid arthritis with rheumatoid nodules left elbow with findings of atresia of the left EPL tendon and atretic ruptures of the left EIP tendon and EBC to the index finger.

PROCEDURES:
1. Buddy transfers of left EIP and EDC to the index finger to the EDC to the middle finger.
2. Left wrist fusion with autograft.
3. Left total elbow arthroplasty with excision of multiple rheumatoid nodules x 3, the largest measuring 6 x 8 x 10 cm.

INDICATIONS: Patient is a 70-year-old gentleman with severe rheumatoid arthritis. He is status post right total elbow arthroplasty in the past complicated by periprosthetic fracture necessitating revision. He is admitted for elective procedure as described above.

DESCRIPTION OF PROCEDURE: After adequate induction of anesthesia, the left upper extremity was prepped and draped in sterile fashion. We first began by performing the wrist fusion. A longitudinal incision was marked out. We exposed the compartmental contents and found that the EIP and EDC units had complete atretic ruptures. These ends were freshened in preparation for later buddy transfers as described below.
Case Study #4: Left Wrist Fusion and Elbow Arthroplasty

We then performed the buddy transfer of the EIP and EDC units to the EDC to the middle finger. The skin was closed with staples. Findings were of a moderate amount of distal ulnar joint rheumatoid arthritis as well as arthritis motile-ends type deformities of the fingers. There was marked atresia of the EPL tendon, however, we felt this would be best served by waiting for another operative time before performing surgery here.

We then prepared the distal end of the radius and midcarpal joints using the sagittal saw for wrist fusion. We chose a straight AO wrist fusion plate and bent this in a 30 degree dorsiflexion angle. This was placed in a locking technique. We harvested a good deal of autograft bone from the distal radius as well as the wrist tubercle area and this was used to pack the defect with a good deal of cortical cancellous bone.

We then performed the buddy transfer of the EIP and EDC units to the EDC to the middle finger. The skin was closed with staples. Findings were of a moderate amount of distal ulnar joint rheumatoid arthritis as well as arthritis motile-ends type deformities of the fingers. There was marked atresia of the EPL tendon, however, we felt this would be best served by waiting for another operative time before performing surgery here.

Case Study #4: Left Wrist Fusion and Elbow Arthroplasty

We directed our attention toward the left elbow. A posterior incision was made. We removed three rheumatoid nodules from the extensor surface of the elbow with the smallest measuring 1 x 1 x 3 cm and the largest measuring 6 x 8 x 10 cm. We then made incisions on both sides of the triceps. We began to prepare the humerus after skeletonizing the distal end with a series of appropriate broaches, reamers, etc. to accept a 6 x 150 component. We then prepared the proximal ulna with appropriate broaches, reamers, etc. During the preparation of this and insertion of trial implant, the proximal ulna split and a cerclage wiring was performed intraoperatively using 18 gauge wire. We then mixed antibiotic cement and placed it in the appropriate canals followed by components.
Case Study #4: Left Wrist Fusion and Elbow Arthroplasty

Excess cement was trimmed. The spherical bearings and set screws were placed after reduction. We were able to achieve a range of motion of approximately 25 degrees to 140 degrees of motion.

The triceps was closed with (brand) suture. The skin was closed with staples. A bulky dressing was placed on the elbow and a cock-up plaster splint on the wrist. The patient tolerated the procedure well and was returned to the recovery room in stable condition.

<table>
<thead>
<tr>
<th>PROCEDURES</th>
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<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total elbow replacement</td>
<td>24363</td>
<td>81.84</td>
<td>714.0</td>
</tr>
<tr>
<td>Carporadial fusion</td>
<td>25821</td>
<td>81.25</td>
<td>714.0</td>
</tr>
<tr>
<td>Tendon transfer or transplantation</td>
<td>26480-51 26480-51-59</td>
<td>83.75</td>
<td>727.63</td>
</tr>
<tr>
<td>Excision of lesion of other soft tissue, elbow</td>
<td>24071</td>
<td>83.39</td>
<td>714.4</td>
</tr>
<tr>
<td>Bone graft, wrist</td>
<td>Bundled</td>
<td>(78.04) 77.73</td>
<td>714.0</td>
</tr>
</tbody>
</table>

**CASE NOTES:** Although bone graft harvesting from distal radius is noted, this is stated as included in the wrist fusion procedure for CPT. For ICD-9-CM, placement likely also bundled, although it is not directly stated as an "omit code"; however, harvesting should be reported additionally.
Case Study #5: Shoulder Arthroplasty

PREOPERATIVE DIAGNOSIS: Recurrent anterior dislocating left shoulder.

POSTOPERATIVE DIAGNOSIS: Recurrent anterior dislocating left shoulder.

PROCEDURE PERFORMED: Arthroscopic debridement of the left shoulder with attempted arthroscopic Bankart repair followed by open Bankart arthroplasty of the left shoulder.

PROCEDURE: The patient was taken to OR, administered general anesthetic after ineffective interscalene block had been administered in the preop area. The patient was positioned in the modified beach chair position utilizing the Mayfield headrest. The left shoulder was propped posteriorly with a rolled towel. His head was secured to the Mayfield headrest. The left shoulder and upper extremity were then prepped and draped in the usual manner.

A posterior lateral port was made for the arthroscopic cannula. The scope was introduced into the glenohumeral joint. There was noted to be a complete tear of the anterior glenoid labrum off from superiorly at about 11:30 extending down inferiorly to about 6 o'clock. The labrum was adherent to the underlying capsule. The margin of the glenoid was frayed in this area. The biceps tendon was noted to be intact. The articular surface of the glenoid was fairly well preserved. The articular surface on the humeral head was intact; however, there was a large Hill-Sachs lesion on the posterolateral aspect of the humeral head. The rotator cuff was visualized and noted to be intact. The axillary pouch was visualized and it was free of injury. There were some cartilaginous fragments within the axillary pouch.
Case Study #5: Shoulder Arthroplasty

Attention was first directed after making an anterior portal to fixation of the anterior glenoid labrum. Utilizing the [brand] system through the anterior cannula, the labrum was secured with the pin and drill component and was then tacked back to the superior glenoid rim at about the 11 o’clock position. A second tack was then placed at about the 8 o’clock position. The labrum was then probed and was noted to be stable. With some general ranging of the shoulder, the tissue was pulled out from the tacks. An attempt was made at placement of two other tacks; however, the tissue was not of good quality to be held in position. Therefore, all tacks were either buried down to a flat surface or were removed from the anterior glenoid area.

At this point, it was deemed that an open Bankart arthroplasty was necessary. The arthroscopic instruments were removed.

Case Study #5: Shoulder Arthroplasty

An anterior incision was made extending from just lateral of the coracoid down toward the axillary fold. The skin incision was taken down through the skin. Subcutaneous tissues were then separated using coagulation to provide hemostasis. The deltopectoral fascia was identified. It was split at the deltopectoral interval and the deltoid was reflected laterally. The subdeltoid bursa was then removed with rongeurs.

The conjoint tendon was identified. The deltoid and conjoint tendons were then retracted with a self-retaining retractor. The subscapularis tendon was identified. It was separated about a centimeter from its insertion, leaving the tissue to do sew later. The subscapularis was reflected off superiorly and inferiorly and the muscle retracted medially. This allowed for visualization of the capsule.
Case Study #5: Shoulder Arthroplasty

The capsule was split near the humeral head insertion leaving a tag for repair. It was then split longitudinally towards the glenoid at approximately 9 o’clock position. This provided visualization of the glenohumeral joint. The friable labral and capsular tissue was identified. The glenoid neck was already prepared for suturing, therefore, three [brand] suture anchors were then positioned to place at approximately 7 o’clock, 9 o’clock, and 10 o’clock. The sutures were passed through the labral capsular tissue and tied securely. At this point, the anterior glenoid rim had been recreated.

The joint was then copiously irrigated with gentamicin solution and suctioned dry. The capsule was then repaired with interrupted #1 suture and repaired back to its insertion site with #1 suture. This later was then copiously irrigated with gentamicin solution and suctioned dry. Subscapularis was reapproximated on to the lesser tuberosity of the humerus utilizing interrupted #1 suture.

This later was then copiously irrigated as well and suctioned dry. The deltoid fascia was approximated with running #2-0 suture. Subcutaneous tissues were approximated with interrupted #2-0 suture and the skin was approximated with a running #4-0 subcuticular suture followed by placement of adhesive bandages. 0.25% [local anesthetic] was placed in the subcutaneous area for postoperative analgesia. The patient was then placed in a shoulder immobilizer after a bulky dressing had been applied. The patient was then transferred to the recovery room in apparent satisfactory condition.

He will be admitted overnight due to the fact that he has sleep apnea for pulmonary observation. Anesthesia service will provide pain control. The patient will be rounded on in the morning and will be discharged home if all is uneventful in terms of his pulmonary function.
Case Study #5: Shoulder Arthroplasty

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>CPT PROCEDURE CODES</th>
<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open capsulorrhaphy, anterior; with labral repair</td>
<td>23455</td>
<td>81.82</td>
<td>718.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>718.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V64.43</td>
</tr>
<tr>
<td>Arthroscopy, shoulder</td>
<td>29807</td>
<td>80.21</td>
<td></td>
</tr>
</tbody>
</table>

**CASE NOTES:** Review documentation to ensure clear statement of “reason for admission” – if for surgery, sleep apnea is not a CC; if admission is stated to be for the sleep apnea, then this changes MS-DRG to “procedure not matching principal diagnosis” category.

Arthroscopy is converted to open procedure. CCI Notes state that if an arthroscopic procedure is converted to an open procedure, only the open procedure may be reported. Although there may be occasions where a distinct arthroscopic service could be reported, the descriptor for 23455 includes labral repair (Bankart procedure), so this is a conversion.

Case #6 -- Arthroscopy Knee

**PREOPERATIVE DIAGNOSIS:** Degenerative changes left patellofemoral joint with recurrent lateral swelling and probable loose body lateral retinaculum.

**POSTOPERATIVE DIAGNOSIS:** Grade 4 change of the lateral trochlea with chondral fragmentation laterally and plica with a large loose body in the superolateral pouch attached to the wall.

**PROCEDURE:** Diagnostic and surgical arthroscopy with chondroplasty lateral facet and microfracture of the trochlea as well as arthrotomy and removal of large 1.5 x 1 cm osteochondral fragment.

**ANESTHESIA:** General.
Case #6 -- Arthroscopy Knee

INDICATIONS: Patient is a 53-year-old female who has had persistent pain and swelling and a mass effect over the lateral aspect despite a previous lateral release a number of years ago. She has had chondral changes, failed conservative management. She is brought to the operating room for diagnostic and surgical arthroscopy of the same.

PROCEDURE: After adequate anesthesia and placement of the tourniquet on the thigh, the left lower extremity was preppe and draped in the usual manner, exsanguinated with an Esmarch, and the tourniquet inflated. Inferolateral portal was placed for a scope. Diagnostic arthroscopy demonstrated the medial and lateral compartments to be intact as was the ACL. The medial facet of the patella was reasonably well. There was complete denuding of the lateral trochlea with a large fragmentation laterally as well which corresponded to the patient's symptoms and ganglion.

A separate superolateral portal was then made and shaving was done with multiple shavers to stable chondral surfaces both on the inferolateral trochlea and lateral aspect of it. Then osteochondral punches were used to do microfracture technique to the entire lateral facet. This was done manually and finally irrigation was done with that. Then a large sessile osteochondral fragment was attempted initially to be removed, but was sessile and so was grabbed and released with an 11 blade from the synovium and capsule as well and removed and retrieved in two large pieces. Finally, the knee was irrigated, closed with 3-0 Monocryl, Steri-Strips, and a bulky Jones dressing.

The patient tolerated this procedure well. Was stable to the recovery room.
**Case #6 -- Arthroscopy Knee**

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>CPT PROCEDURE CODES</th>
<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthroscopy, knee; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture</td>
<td>29879-59</td>
<td>80.86</td>
<td>717.9</td>
</tr>
<tr>
<td>Arthrotomy, knee; including joint exploration, biopsy, or removal of loose or foreign bodies</td>
<td>27331</td>
<td>80.16</td>
<td>717.6 V64.43</td>
</tr>
<tr>
<td>Diagnostic arthroscopy, knee</td>
<td>(29870) Bundled</td>
<td>80.26</td>
<td>719.46 719.16</td>
</tr>
</tbody>
</table>

**CASE NOTES:** Any surgical arthroscopy always includes diagnostic arthroscopy, so 29870 is not reported; arthroscopy technique is reported additionally in ICD-9 procedure coding. An arthroscopy is also converted to open procedure. CCI Notes state that if an arthroscopic procedure is converted to an open procedure, only the open procedure may be reported. However, in this instance, a significant surgical arthroscopic procedure is fully completed, and it is the attempted second procedure which is converted – 29874 is not reported, but only 27331. The completed abrasion arthroplasty and microfracture is reported with modifier -59; documentation may be requested.

**Case #7 -- I&D Knee**

**PREOPERATIVE DIAGNOSIS:** Infected knee, right, status post explants total knee arthroplasty with implantation of antibiotic cement spacer. V54.8 V88.22

The patient was previously seen in outpatient clinic after failing IV antibiotic and ID treatment after explantation of a total knee arthroplasty, which was treated with a staged explant. He continued to worsen clinically as well as via laboratory work after cessation of his antibiotic treatment per Infectious Disease.

The patient was treated with adequate anesthesia. Antibiotics were held prior to surgical incision. Knee was elevated. Tourniquet was elevated to 300 mmHg. A midline incision was established through skin and subcutaneous tissue down to the fascial layer. As soon as the fascia was entered, copious amounts of purulent material expressed from the knee. This was cultured with a swab tissue.
Case #7 -- I&D Knee

Cultures were also sent for superficial and deep tissues. Copious amounts of irrigation and multiple antibiotic solutions were used in irrigation after culture specimens were passed off the table.

Abundant necrotic tissue, purulent material, and biofilm was removed during the I&D, total synovectomy and irrigation and incision and debridement. The wound was copiously irrigated with multiple liters of antibiotic solution and multiple other antibiotics utilized on the operating room table. The wound was then closed in layers after instillation of the antibiotic cement spacer with antibiotic cement being placed. The temporary spacer was allowed to cure into place and the wound was closed in layers with multiple irrigations at every layer closure. Sterile dressing was applied and the patient was taken to PACU in stable condition.

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>CPT PROCEDURE CODES</th>
<th>ICD-9 PROCEDURE CODES</th>
<th>DIAGNOSIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synovectomy, anterior AND posterior including popliteal area</td>
<td>(27335)</td>
<td>80.76</td>
<td>996.66/554.8/588.22</td>
</tr>
<tr>
<td>Arthrotomy, knee, with exploration, drainage, or removal of foreign body (eg, infection)</td>
<td>27310</td>
<td>86.28</td>
<td></td>
</tr>
<tr>
<td>Removal with replacement of cement spacer</td>
<td>11983</td>
<td>84.56</td>
<td></td>
</tr>
</tbody>
</table>

**CASE NOTES:** There is a CCI bundling edit of 27335 (Synovectomy, anterior AND posterior including popliteal area) into 27310 - not reported.

An antibiotic impregnated cement joint spacer is reported in CPT as a non-biodegradable drug delivery system – a spacer without drug delivery is not coded.

Also, for debridement of wound infection, although it appears excisional, the term is not used – clarify that this is excisional (86.22) vs. nonexcisional (86.28) debridement.
A question to consider is whether this patient would most appropriately be reported as an inpatient or outpatient.

When reviewing claims for procedures with DRGs, the CMS online Manual, Pub 100-08, Chapter 6, Section, 6.5.2 states the following:

“Review of the medical record must indicate that inpatient hospital care was medically necessary, reasonable, and appropriate for the diagnosis and condition of the beneficiary at any time during the stay. The beneficiary must demonstrate signs and/or symptoms severe enough to warrant the need for medical care and must receive services of such intensity that they can be furnished safely and effectively only on an inpatient basis.”

To meet Medicare’s reasonable and necessary (R&N) threshold for coverage of a procedure, the physician’s documentation for the case should clearly support both the diagnostic criteria for the indication and the medical need:

• the procedure does not exceed the medical need and is at least as beneficial as existing alternatives
• the procedure is furnished within accepted standards of medical practice
• the procedure is furnished in a setting appropriate for the patient’s medical needs and condition

Lacking compelling arguments for an exception in the supporting documentation, the services can be denied.

The clinical judgment of the treating physician is always a consideration if clearly addressed in the record and consistent with the episode of care.
Data Collection Challenges

- Quality data extracted from current coding is clinically less specific
- Retrospective chart review, while clinically more specific, is burdensome
- The current clinical classification system (ICD-9-CM) is not designed for quality or safety reporting or risk stratification
ICD-10-CM

- ICD-10 is the international standard to report and monitor diseases and mortality, with U.S. implementation scheduled for October 2013.
- ICD-10-CM reflects advances in medicine and medical terminology.
- ICD-10-CM provides codes to allow comparison of mortality and morbidity data.
- ICD-10 provides better data for:
  - Measuring care furnished to patients;
  - Designing payment systems;
  - Processing claims;
  - Making clinical decisions;
  - Tracking public health;
  - Identifying fraud and abuse; and
  - Conducting research.

On January 16, 2009, the Department of Health and Human Services (HHS) published a Final Rule for the adoption of ICD-10-CM and ICD-10-PCS, with a compliance date of October 1, 2013 (now 2014).

Under the electronic health transaction standards final rule, also issued on January 16, 2009, covered entities must comply with Version 5010 (for some health care transactions) and Version D.0 (pharmacy transactions) on January 1, 2012 (extended to July 1).


However, the codes in ICD-10 are not currently valid for any purpose or use in the United States.
ICD-9-CM vs. ICD-10-CM

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
<th>Implementation Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5 digit codes</td>
<td>3-6 digit codes (possibly 7)</td>
<td>All computer fields must be able to accommodate additional characters</td>
</tr>
<tr>
<td>0 as spacer</td>
<td>X as spacer</td>
<td>Ensure fields can accept alphabetic characters in any digit position. Ensure distinction between numbers and letters (although 0 and I not used, to minimize confusion).</td>
</tr>
<tr>
<td>Numeric values except V and E codes</td>
<td>All alphanumeric, including 1st and sometimes subsequent digits</td>
<td>Ensure fields can accept up to 4 digits after decimal.</td>
</tr>
<tr>
<td>1-2 digits after decimal</td>
<td>1-4 digits after decimal</td>
<td>Ensure system can accept up to 4 digits after decimal.</td>
</tr>
<tr>
<td>Partial descriptors for 4th &amp; 5th digits</td>
<td>Full descriptors for every code</td>
<td>Ensure format reflects full descriptors, not “cumulative” data.</td>
</tr>
<tr>
<td>Hierarchical structure</td>
<td>Hierarchical structure</td>
<td>Programming expanded to recognize at least one more level to hierarchy</td>
</tr>
<tr>
<td>Approximately 17,000 diagnosis codes and 5,000 procedure codes</td>
<td>Potentially 70,000 diagnosis codes and almost 120,000 procedure codes</td>
<td>Additional training and education, documentation improvements, revised reference guides, computerized coding support</td>
</tr>
</tbody>
</table>

ICD-9-CM vs. ICD-10-CM

- Some codes do have direct translations from ICD-9-CM to ICD-10-CM.
- Some ICD-10 diagnosis codes combine multiple presentations or facets of a condition into a single code – such as incorporating underlying cause, concurrent condition, or complication as a subclassification -- which in ICD-9-CM requires 2 or more codes.
- For some categories, terms may be defined in different ways, or whole chapters are organized along a different axis of classification, such that the mapping is only a series of approximations or possible compromises.
- There are cases where ICD-9 contains more detail than ICD-10, where a clinical concept or axis of classification is no longer deemed essential information.
- ICD-9 may also contain more detail than ICD-10 when ICD-9-CM captured information on issues relating to procedures, which ICD-10 does not consider an appropriate element of the diagnosis code.
Sample Code Comparisons

And many of the ICD-10 categories offer a much greater degree of specificity / granularity than is possible with ICD-9, such as more precise anatomic site, laterality, and/or episode of care.

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>715.xx</td>
<td>Osteoarthritis</td>
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</table>

ICD-10-PCS is designed to permit assignment of a unique code to each substantially different procedure, with the flexible open structure easily allowing the incorporation of future new procedures. There is no numeric listing of codes; rather, there are 16 sections with sub-tables to determine code selection.

0 Medical and Surgical
1 Obstetrics
2 Placement
3 Administration
4 Measurement and Monitoring
5 Extracorporeal Assistance and Performance
6 Extracorporeal Therapies
7 Osteopathic
8 Other Procedures
9 Chiropractic
B Imaging
C Nuclear Medicine
D Radiation Oncology
F Physical Rehabilitation and Diagnostic Audiology
G Mental Health
H Substance Abuse Treatment
ICD-10-PCS

The first character identifies the type of service/procedure provided (the section), and each subsequent place in the code also has a specific function, the meaning of which may differ from one section to another. For example:

Medical and Surgical Codes (Section 0):
1 2 3 4 5 6 7
Section Body System Root Operation Body Part Approach Device Qualifier

Imaging Codes (Section B):
1 2 3 4 5 6 7
Section Body System Type Body Part Contrast Qualifier Qualifier

Extracorporeal Assistance and Performance Codes (Section 5):
1 2 3 4 5 6 7
Section Physiological Systems Root Operation Body System Duration Function Qualifier

ICD-10-PCS

- All terminology is standardized, and defined within the reference tables
- Diagnosis information is not part of the procedure code descriptor
- There are no eponyms (procedures identified by a person’s name, rather than clinical description)
- If multiple procedures as defined by distinct objectives are performed, then multiple codes should be assigned
ICD-10-PCS

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Lumbar Vertebral Joint</td>
<td>0 Open</td>
<td>A Autologous Tissue Substitute</td>
<td>0 Anterior Approach, Anterior Column</td>
</tr>
<tr>
<td>1 Lumbar Vertebral Joints, 2 or more</td>
<td>3 Percutaneous</td>
<td>B Interbody Fusion Device</td>
<td>1 Posterior Approach, Posterior Column</td>
</tr>
<tr>
<td>3 Lumbosacral Joint</td>
<td>4 Percutaneous</td>
<td>C Synthetic Substitute</td>
<td>2 Posterior Approach, Anterior Column</td>
</tr>
<tr>
<td>5 Sacroiliac Joint</td>
<td>0 Open</td>
<td>D Autologous Tissue Substitute</td>
<td>3 No Qualifier</td>
</tr>
<tr>
<td>6 Coccygeal Joint</td>
<td>3 Percutaneous</td>
<td>E Synthetic Substitute</td>
<td>4 No Qualifier</td>
</tr>
<tr>
<td>7 Sacroiliac Joint, Right</td>
<td>4 Percutaneous</td>
<td>F Nonautologous Tissue Substitute</td>
<td>5 No Qualifier</td>
</tr>
<tr>
<td>8 Sacroiliac Joint, Left</td>
<td>7 No Device</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Hip Joint, Right</td>
<td>4 Internal Fixation Device</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Hip Joint, Left</td>
<td>5 External Fixation Device</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Knee Joint, Right</td>
<td>6 Synthetic Substitute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Knee Joint, Left</td>
<td>7 Nonautologous Tissue Substitute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Ankle Joint, Right</td>
<td>8 No Device</td>
<td></td>
<td></td>
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<tr>
<td>G Ankle Joint, Left</td>
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<tr>
<td>H Tarsal Joint, Right</td>
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<td>J Tarsal Joint, Left</td>
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<tr>
<td>K Metatarsal-Tarsal Joint, Right</td>
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<tr>
<td>L Metatarsal-Tarsal Joint, Left</td>
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<tr>
<td>M Metatarsal-Phalangeal Joint, Right</td>
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<tr>
<td>N Metatarsal-Phalangeal Joint, Left</td>
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<td></td>
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<tr>
<td>P Toe Phalangeal Joint, Right</td>
<td></td>
<td></td>
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<tr>
<td>Q Toe Phalangeal Joint, Left</td>
<td></td>
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</tr>
</tbody>
</table>

What Can I Do?

- Step 1 – Examine Affect on Facility Departments
- Step 2 – Confirm Compliance with Contractors
- Step 3 – Train for ICD-10-CM
- Step 4 – Perform Internal Tests
- Step 5 – Implement ICD-10-CM
Coding and Documentation Improvement

- With complete information in the record, coders can effectively analyze, code, and report necessary information for claims and for quality measures
  - Physician review / sign all facility documentation
  - Make sure key elements are captured – query when needed
  - Ensure specificity of diagnosis documentation, including documentation for POA indicators
- Without such documentation, the application of all coding guidelines is a difficult, if not impossible, task – and accuracy of reimbursement is affected

Coding and Documentation Improvement

- Health care is increasingly data driven
- Cross functional skill sets support evolving activities
- Enhanced roles of HIM and Coding Department staff in ensuring quality of information
- Education and open communication are key
- Work Smart
Questions?

THANK YOU ALL FOR PARTICIPATING!

Presented by:
Sheila Sylvan
IMPACT!

Hosted by:
DePuy Synthes

Spring 2013