ICD-10 “New Normal” Overview

The Changing Behavior of ICD-10 Coded Information

August 2015
ICD-10 Transition Impacts
ICD-10 will create a “New Normal”

New Terminology and Concepts, some examples:
• STEMI and Non-STEMI instead of “Heart Attack” or “AMI”
• Underdosing and more Borderline conditions can be coded
• New scales for Asthma (4 levels), Diabetes (5 levels), Coma, and other conditions
• Episode of care indicators
• Pregnancy coded in trimesters
• Only 1 code to use for vaccinations
• Routine exams split into “with” and “without findings” categories

Data will behave differently, some examples:
• Fewer heart attacks (coded for 4 weeks following infarct instead of 8 in ICD-9)
• More cancer cases (anemia coded 2\textsuperscript{nd} in ICD-10 after cancer, ICD-9 rule was opposite) when looking at primary Dx
• No V codes for rehab visits, instead this is part of the episode of care digit
• Pregnancies include new code for weeks gestation
• More combination codes will cause some conditions harder to locate in queries (e.g. kidney failure due to diabetes)
• Abnormal test findings will appear in more records
• Smokers and patients exposed to tobacco smoke will appear more often
ICD-10 New Normal Overview
Relationship between Coding and Clinical Documentation

ICD, like any medical code set, reflects the information present in the medical record. Think of ICD-10 as a mature, or enhanced, version of ICD-9, that enables the significant detail already being captured in medical records to be captured equally well in coding.

**Most clinical detail captured today is lost when translated to ICD-9**

Consider this quote from Dan Riskin*, MD, CEO of Health Fidelity:

“ICD-10 is not about going from a small number of codes to a moderate number of codes. The patient doesn’t actually care about that.

And Meaningful Use 2 is not about reporting smokers. The country doesn’t actually care about that.

These things are about getting sufficiently detailed information and sufficiently broad information that actually gets used in analytics to improve care, and yet we’re not really thinking about that all that much.”

*About Dr. Riskin: Dan has developed and commercialized products in the fields of healthcare analytics, healthcare services, and medical devices. He was named one of the top 35 innovators under 35 by Technology Review and won the AMA Leadership Award in 2005. He subsequently served on the Obama Campaign Healthcare Advisory Committee in 2008. He has been an invited speaker on medical technology creation and venture development at the NIH, NSF, NASA, DARPA, IBM, HP, Harvard, Stanford, and MIT. Dan’s medical credentials include a MD from Boston University, residency in surgery at UCLA, and fellowship in critical care and acute care surgery at Stanford University. He is dual boarded in surgery and critical care and is on consulting faculty at Stanford University. His business training includes a MBA with a focus in biomedical engineering from MIT Sloan School of Management and the Stanford Biodesign Fellowship.
What is the Same, New, and Different?

DIAGNOSES
ICD-10 New Normal Overview
New & Different - Diagnosis

Data and transactions for these conditions and reasons for visit will behave differently

- Abnormal Test Findings & Borderline Diagnoses
- Acute Myocardial Infarction
- Adverse Effects, Dosing, & Poisoning
- Atherosclerosis, Angina & Hypertension
- Coma
- Diabetes Mellitus
- Kidney Disease & Urosepsis
- OB, Pregnancy, & Newborns
- Oncology & Neoplasms
- Orthopedics, Musculoskeletal, Injuries & Fractures
- Routine Exams / Physicals
- Vaccines / Immunizations
ICD-10 New Normal Overview
Abnormal Test Findings & Borderline Dx are Different

Abnormal Test Findings

- In ICD-10-CM, Many new codes exist for abnormal findings if a related diagnosis is not coded, if a confirmed diagnosis is coded, the abnormal test result is not coded
- In ICD-9-CM Only confirmed diagnoses are coded, and abnormal tests were often not captured in coding

**Borderline Diagnoses** – “borderline” is new term in ICD-10

- Terms described by the provider as “borderline” are coded as a confirmed, not a suspected, condition unless the Index has specific entry for a borderline condition
- Other abnormal glucose
  - Borderline diabetes mellitus, R73.09
- Elevated blood pressure reading
  - Borderline hypertension, R03.0
- Low bone mineral density (BMD), borderline osteoporosis
  - Borderline osteopenia, M85.8

*Data Behavior Implication – More abnormal test findings in data, more borderline diagnoses in data*
ICD-10 New Normal Overview
Adverse Effects, Dosing, Poisoning are New & Different

- **Drug Effects**

<table>
<thead>
<tr>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grouped by drug, with codes for poisonings, adverse effects, and underdosing</td>
<td>Grouped by effect, with no codes for underdosing.</td>
</tr>
</tbody>
</table>

- **Adverse effect codes** – same as ICD-9 – identifies drugs producing side effects when taken correctly
  - First code is the nature of the adverse effect
  - Second code identifies the drug or chemical
  - More effects and types of drugs/chemicals available

- **Underdosing** – new concept for ICD-10-CM, means taking less of a substance than is prescribed by a provider or according to manufacturer’s instruction
  - First code the relapse or exacerbation of the medical condition for which the drug is prescribed
  - Second code the drug that was not taken properly
  - Noncompliance codes used to identify intent if known (e.g. financially motivated, or elderly did not remember)

- **Poisoning codes** – same as ICD-9 – means not ingesting the drug correctly (took too much, or mixed with alcohol or other substance/drugs)
  - Combination codes in ICD-10 explaining two facts – identify event + drug involved
  - Indicate if Accidental, Self Harm, Assault & Undetermined
  - External Cause code not needed – this concept is built in to poisoning code meanings
  - Additional codes used for manifestations

*Data Behavior Implication – Underdosing now appears in data, better detail why poisoning occurred and drugs/chemicals involved*
ICD-10 New Normal Overview
Asthma is Different

Asthma
• ICD-10 requires the following scales into documentation:
  – Mild intermittent
  – Mild persistent
  – Moderate persistent
  – Severe persistent
• More instructions to code tobacco

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>493.22</td>
<td>J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation</td>
</tr>
<tr>
<td>493.22</td>
<td>J45.42 Moderate persistent asthma with status asthmaticus</td>
</tr>
<tr>
<td></td>
<td>Z72.0 Tobacco use</td>
</tr>
</tbody>
</table>

Data Behavior Implication – The varying degrees of asthma severity will be easier to identify and separate in health care data sets, more identification of patients who smoke/exposed to tobacco smoke
ICD-10 New Normal Overview
Acute Myocardial Infarction is Different

Acute Myocardial Infarction (Heart Attack)

- Duration changed from 8 weeks in ICD-9 to 4 weeks in ICD-10
  - Why? – Physicians are no longer treating the heart attack after the first 4 weeks, other ongoing conditions take precedence
- The terms “Acute MI” or “AMI” is no longer used. Codes reflect newer terminology and distinguishes between ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarctions
  - STEMI of anterior wall, inferior wall, other sites, or unspecified site
  - NSTEMI (subendocardial, nontransmural)
- Category I21 used for initial treatment of STEMI and NSTEMI and all continued treatment during next 4 weeks, but use Category I22 for subsequent episode:

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
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</tr>
</thead>
<tbody>
<tr>
<td>410.71 Subendocardial infarction, initial episode of care</td>
<td>I21.4 Non-ST-elevation (NSTEMI) myocardial infarction I48.91 Fibrillation, atrial or auricular</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial STEMI or NSTEMI</th>
<th>Subsequent STEMI or NSTEMI during next 4 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I21 code used during 4 weeks after first episode occurred</td>
<td>Category I22 code used for episode that occurs within 4 weeks of a previous STEMI or NSTEMI, regardless of site</td>
</tr>
<tr>
<td>No concept of “initial” or “subsequent” myocardial Infarction in ICD-10</td>
<td>Code both the I21 and I22 category codes (Patient recovering from a heart attack had a new heart attack)</td>
</tr>
</tbody>
</table>

Data Behavior Implication – Fewer records with heart attack diagnoses in the same patient population
ICD-10 New Normal Overview
Atherosclerosis, Angina & Hypertension are Different

Atherosclerosis, Angina & Hypertension

Angina often occurs in combination codes for atherosclerotic heart disease

- Coronary artery disease of native vessel and bypass grafts with angina pectoris, unstable angina, documented spasm or unspecified type
  - Eliminates the use of a second code for the angina
  - Angina is coded separately only when the cause is unrelated to heart disease

Only one code for essential (primary) hypertension

- I10 (Letter I, digits 10)
- In ICD-10-CM, hypertension not classified by type

- Hypertension causing chronic kidney disease, heart disease or disease have separate category codes, similar to ICD-9

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
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<tbody>
<tr>
<td>414.00</td>
<td>I25.119</td>
</tr>
<tr>
<td>413.9</td>
<td>Atherosclerosis heart disease of native coronary artery with unspecified angina pectoris</td>
</tr>
</tbody>
</table>

Data Behavior Implication – Fewer records with angina diagnoses in the same patient population, risk of excluding hypertension in data if not looking at combination codes with hypertension, more smokers
ICD-10 New Normal Overview
Coma is Different

- **Neurological Coma** scale codes in Section R40.2
- Used with traumatic brain injury, acute cerebrovascular disease or sequela of CVA
- 1 code for total coma scale score – or 3 codes for
  - Eyes open
  - Best verbal response
  - Best motor response
- Code at a minimum one score/set of 3 scores determined at the initial presentation to ER
- ER documentation usually contains a CS score (Glasgow coma score). Look for other scores by trauma physicians and intensivists in progress notes
- GCS not captured in ICD-9

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<thead>
<tr>
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<tbody>
<tr>
<td>780.01 – Coma</td>
<td>R40.2121 – Coma with opening of eyes in response to pain</td>
</tr>
<tr>
<td></td>
<td>R40.2211 – Coma with no verbal response</td>
</tr>
<tr>
<td></td>
<td>R40.2311 Coma with no motor response</td>
</tr>
<tr>
<td>Also coded: Head Injury and external causes of injury</td>
<td>Also coded: Head Injury and external causes of injury</td>
</tr>
</tbody>
</table>

*Data Behavior Implication – More coma Dx codes will be used per encounter due to the need to reflect the 3 scale score*
ICD-10 New Normal Overview
Diabetes Mellitus is Different

• Combination codes for diabetes include the type, body system affected and the complication affected in that body system (disease + complication or manifestation), such as:
  – E10.42 Type 1 Diabetes mellitus with diabetic polyneuropathy
  – E11.21 Type 2 Diabetes mellitus with diabetic nephropathy
  – In ICD-9-CM, disease and manifestation were coded separately

• Multiple diabetes codes can be used when multiple complications

• 5 Categories of Diabetes can be identified (only 1 category in ICD-9-CM)
  – E08 Diabetes mellitus due to underlying condition
    • Such as due to Cushing’s syndrome or Cystic fibrosis
  – E09 Drug or chemical induced diabetes mellitus
    • Use additional code to identify drug causing poisoning or adverse effect
  – E10 Type 1 diabetes mellitus
  – E11 Type 2 diabetes mellitus
    • When provider does not state the type of diabetes, the default category is E11, but documentation should indicate type
  – E13 Other specified diabetes mellitus
    • Examples include postprocedural diabetes; diabetes due to genetic factors

• ICD-10-CM diabetes codes do not include concepts of “uncontrolled” or “not stated as uncontrolled”, Diabetes “out of control” or “poorly controlled” coded as:
  – Diabetes, by type, with hyperglycemia

Data Behavior Implication – Methods used to detect complications and manifestations in health care data will need to be modified to include these combination codes. For instance, if a report was being run to look for cases of kidney disease, it would miss all diabetics with kidney disease because the kidney disease is not coded separately. Type I and II will be defined differently for the same population.
A 50-year-old patient presents to the neurosurgery clinic with type I diabetes mellitus with neuropathy.

**Diabetes Coding Tips**

- There are now combination codes that include the type of diabetes mellitus, the body system affected, and the complications affecting that body system.
- Inadequately, out of control or poorly controlled is coded by type with hyperglycemia.
- If the patient uses insulin for long term treatment assign code Z79.4.
- If the type of diabetes is not documented assign a code from E11.X (Type II diabetes mellitus).

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<thead>
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</thead>
<tbody>
<tr>
<td>250.61 Type I Diabetes Mellitus with neurological manifestations</td>
<td>E10.40 Type I Diabetes Mellitus with neuropathy unspecified</td>
</tr>
<tr>
<td>357.2 Polyneuropathy in diabetes</td>
<td></td>
</tr>
</tbody>
</table>

No longer classified as controlled or uncontrolled
Age no longer determines Type I status
Type 2 is default when type is unspecified, but this is a poor quality documentation practice.
ICD-10 New Normal Overview
Kidney Disease & Urosepsis are Different

Kidney Disease is similar
- The stages of Chronic Kidney Disease (CKD) have not changed
  - N18.1 Chronic kidney disease, stage 1
  - N18.2 Chronic kidney disease, stage 2
  - N18.3 Chronic kidney disease, stage 3
  - N18.4 Chronic kidney disease, stage 4
  - N18.5 Chronic kidney disease, stage 5
  - N18.6 End-Stage Renal Disease
- Different combo codes exist that incorporate stage with

Urosepsis is Different
- The term “urosepsis” is not included in ICD-10
- Does provider mean urinary tract infection?
  - N39.0 Urinary tract infection, site not specified
  - N30.00-N30.01 Acute cystitis
- Does provider mean sepsis?
  - Category A40 Streptococcal sepsis
  - Category A41 Other sepsis

Data Behavior Implication – Fewer services for "kidney disease" or "renal disease" may seem to exist in a population of patients. Data analysts may need to expand their searches to look for combination codes that include kidney disease if the kidney disease is an area of analytical focus.
A 47-year-old male with hypertensive heart disease and end-stage renal disease reports to the dialysis center for treatment.

Kidney Disease Coding Tips

- Code first, any other related conditions. Ex. Hypertension, Diabetes Mellitus, etc. Combination codes may apply
- Determine renal transplant status. If there has been a transplant use code Z94.0 (Kidney transplant status)
- Determine the stage of Chronic Kidney Disease

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
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</thead>
<tbody>
<tr>
<td>404.92</td>
<td>I13.11 Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end-stage renal disease</td>
</tr>
<tr>
<td>585.6</td>
<td>N18.6 End-stage renal disease</td>
</tr>
</tbody>
</table>
ICD-10 New Normal Overview
Orthopedics, Musculoskeletal, Injuries & Fractures are New and Different (part 1)

Orthopedics, Musculoskeletal, Injuries & Fractures – New and Different

- Disease of the musculoskeletal system and connective tissue (M00-M99)
- Conditions that are result of healed injury
- Chronic or recurrent conditions
- Site identified by bone, joint or muscle
- Many codes added to this chapter because of number of sites and the laterality included in most codes: right, left or unspecified

Injuries

- Injury codes organized by body site and then by injury type:
  - superficial, contusion, open wound (laceration, puncture, bite) fracture, subluxation, strain, injury to nerve, spinal cord injury, blood vessel, & internal organs
- Laterality included: right, left, unspecified
- Seventh character of many codes is required to identify the encounter:
  - A = Initial encounter or active treatment
    - Surgical treatment, Emergency department encounter, evaluation and treatment by new physician
  - D = Subsequent encounter
    - Healing or recovery phase, active treatment done, cast change, removal fixation device, medication adjusted
  - S = Sequela
    - Complication or condition that arises as a direct result of the original injury, but after the original injury has healed. “S” added to original injury code that is assigned with another code for the specific current (sequela) condition. Painful scar, L90.5; Palm burn, T23.351S

Some coders may find phase hard to determine in current medical records

Data Behavior Implication – for any particular population of encounters, orthopedic conditions coded under ICD-10 will likely have many more codes per encounter than were possible under ICD-9. Some data analysts may need additional training in body anatomy to interpret codes in this section. Analysis based on principle diagnosis should be extended to include additional diagnoses to get a full picture of a patient's injury.
ICD-10 New Normal Overview
Orthopedics, Musculoskeletal, Injuries & Fractures are New and Different (part 2)

Stress and Pathological Fractures

• Grouped by anatomical site in ICD-10, grouped by injury type in ICD-9
• Identified by bone (or section of bone) and laterality
• ICD-10-CM has more anatomical specificity than ICD-9-CM.
  – Now instead of just cervical, you must specify the cervical region:
    • occipito-atlanto-axial, cervical, or cervicothoracic.
• Open and closed fracture (default is closed) – same as ICD-9
• Displaced and non-displaced (default is displaced) – new terms not used in ICD-9
• Specific seventh characters for most fracture codes
  – A Initial encounter for closed fracture
  – D Subsequent encounter for fracture with routine healing
  – G Subsequent encounter for fracture with delayed healing
  – K Subsequent encounter for fracture with nonunion
  – P Subsequent encounter for fracture with malunion
  – S Sequela
• Differentiated by Type I, Type II, Type IIIA, IIIB or IIIC Fractures

Data Behavior Implication – Savvy data analysts will be able to use ICD-10 to track the progression of an injury, from its initial treatment, though healing, and any complications or new conditions that arise due to the original problem. Analysts should be aware that both the diagnosis and procedure coding on inpatient hospital claims is also very complex and detailed
ICD-10 New Normal Overview
Orthopedics, Musculoskeletal, Injuries & Fractures are New and Different (part 3)

Documentation Needed to properly code Fractures (Fx)

<table>
<thead>
<tr>
<th>Category</th>
<th>Documentation Needed</th>
<th>(continued on next slide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fracture Type</td>
<td>Open</td>
<td>Torus (buckle)</td>
</tr>
<tr>
<td></td>
<td>Closed (default)</td>
<td>Green stick Fx</td>
</tr>
<tr>
<td></td>
<td>Pathological</td>
<td>Stress Fx</td>
</tr>
<tr>
<td></td>
<td>Physeal (growth plate) Fx</td>
<td>Orthopedic implant (Fx associated with)</td>
</tr>
<tr>
<td></td>
<td>Neoplastic disease</td>
<td>Bent bone</td>
</tr>
<tr>
<td>Classification</td>
<td>Salter Harris I</td>
<td>Salter Harris IV</td>
</tr>
<tr>
<td></td>
<td>Salter Harris II</td>
<td>Gustilo type I or II</td>
</tr>
<tr>
<td></td>
<td>Salter Harris III</td>
<td>Gustilo type IIIA, IIIB, or IIIC</td>
</tr>
<tr>
<td>Healing</td>
<td>Routine</td>
<td>Nonunion</td>
</tr>
<tr>
<td></td>
<td>Delayed</td>
<td>Malunion</td>
</tr>
<tr>
<td>Localization</td>
<td>Shaft</td>
<td>Head</td>
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<tr>
<td></td>
<td>Lower End</td>
<td>Neck</td>
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<td></td>
<td>Upper End</td>
<td>Styloid process</td>
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<tr>
<td>Encounter</td>
<td>Initial</td>
<td></td>
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<td></td>
<td>Subsequent</td>
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<tr>
<td></td>
<td>Sequelae</td>
<td></td>
</tr>
<tr>
<td>Displacement</td>
<td>Displaced (default)</td>
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<tr>
<td></td>
<td>Nondisplaced</td>
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ICD-10 New Normal Overview
Orthopedics, Musculoskeletal, Injuries & Fractures are New and Different (part 4)

Documentation Needed to properly code Fractures (Fx)

<table>
<thead>
<tr>
<th>Category</th>
<th>Documentation Needed (continued from previous slide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laterality</td>
<td>Right, Unilateral</td>
</tr>
<tr>
<td></td>
<td>Left, Unilateral</td>
</tr>
<tr>
<td></td>
<td>Bilateral, Unspecified side</td>
</tr>
<tr>
<td>Joint involvement</td>
<td>Intra-articular, Comminuted (many pieces)</td>
</tr>
<tr>
<td></td>
<td>Extra-articular, Segmental</td>
</tr>
<tr>
<td>Fracture pattern</td>
<td>Transverse, Oblique</td>
</tr>
<tr>
<td></td>
<td>Spiral, Comminuted (many pieces)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Named fractures</td>
<td>Colles’, Barton’s</td>
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<td></td>
<td>Galeazzi’s, Smith’s</td>
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</tbody>
</table>

Anatomy Examples

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>721.0 Cervical spondylosis</td>
<td>M47.811 Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region</td>
</tr>
<tr>
<td>without myelopathy (What part of cervical region?)</td>
<td>M47.812 Spondylosis without myelopathy or radiculopathy, cervical region</td>
</tr>
<tr>
<td></td>
<td>M47.813 Spondylosis without myelopathy or radiculopathy, cervicothoracic region</td>
</tr>
</tbody>
</table>
Richard was treated for a compound fracture of the right tibia and fibula when his motorcycle was struck by a train.

**Fracture Coding Tips**

- To assign the correct ICD-10-CM codes, coders must know:
  - Which leg and which specific bone(s) the patient injured (in this example, the right tibia and fibula)
  - Whether the fracture is open or closed
  - Whether the fracture is displaced
  - For open fractures - need to know type of trauma to choose the appropriate character from Gustilo-Anderson classification system
  - Identifies the severity of the soft-tissue damage
  - Whether the encounter sequence is initial, subsequent or sequela

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
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</tr>
</thead>
<tbody>
<tr>
<td>823.92 Fracture of tibia and fibula unspecified part, open</td>
<td>S82.201B Unspecified fracture of shaft of right tibia, init for open fx type I/II</td>
</tr>
<tr>
<td></td>
<td>S82.401B Unspecified fracture of shaft of right fibula, init for open fx type I/II</td>
</tr>
</tbody>
</table>
ICD-10 New Normal Overview
OB, Pregnancy, & Newborns are New and Different (part 1)

OB, Pregnancy, & Newborns – New and Different
Mom and Baby claims must be coded separately, not combined

Maternal Records – Require codes from Chapter 15, never Chapter 16
• Certain conditions require final character for trimesters, which are counted from the first day of the last menstrual period. They are defined as follows:
  – First trimester = less than 14 weeks 0 days
  – Second trimester = 14 weeks 0 day to less than 28 days 0 days
  – Third trimester= 28 weeks 0 days to delivery
  – Trimesters defined for Section Z34* Supervision of normal pregnancy
• Concepts of Delivered vs. not delivered no longer part of diagnosis (this information captured in ICD-10-PCS procedure codes)
• Provider can document number of weeks or trimester number
  – Codes available to indicate week of pregnancy (Z3A00-Z3A49)
• 5th digit for episode of care eliminated
• Some complications require a 7th character to indicate which fetus is affected
• Obstructed labor + reason for obstruction is coded with a single code (these were coded separately in ICD-9-CM)

Data Behavior Implication – In the past using ICD-9, many uncomplicated birth events were coded in a single record (usually the mother’s) that combined "Mom + Baby" services, and that will no longer be possible in ICD-10. This separation between mother and newborn records should be helpful to most people involved in health data analysis as long as they account for it in their queries and algorithms.
ICD-10 New Normal Overview
OB, Pregnancy, & Newborns are New and Different (part 2)

**OB, Pregnancy, & Newborns** – New and Different
Mom and Baby claims must be coded separately, not combined

**Newborn Records** – Require codes from Chapter 16, never Chapter 15
- Chapter 16 can only be used on live born newborn/infant records, never on maternal records
- **Congenital Defects**
  - Certain Conditions Originating in the Perinatal Period (P00-P96) are never for use on the maternal record. These codes may be used throughout the life of the patient if the condition is still present (e.g. congenital disorders)

Data Behavior Implication – congenital defect conditions may appear on more records in a population of patients due to the new guideline to code conditions throughout the life of the patient.
A 27-weeks-pregnant female presents to the OB/Gyn office for treatment of gestational hypertension.

OB Coding Tips

- Documentation of conditions/complications of pregnancy will need to specify the trimester in which that condition occurred. Some codes but not all specify trimester.
- If the patient is hospitalized during one trimester and a condition/complication develops during the same hospitalization but in a subsequent trimester, the code for the trimester in which the complication develops is assigned.
- The provider’s documentation of “weeks” may be used to assign the appropriate ICD-10 code for trimester.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>642.33 Transient hypertension of pregnancy (Gestational hypertension)</td>
<td>O13.2 Gestational (pregnancy-induced) hypertension without significant proteinuria, second trimester Z3A.27 27 weeks gestation of pregnancy</td>
</tr>
</tbody>
</table>

ICD-9 documentation required “episode of care” (delivered, ante-partum, post-partum) instead of trimester, childbirth, puerperium

**Definition of trimesters:**
- First trimester = less than 14 weeks, 0 days
- Second trimester = 14 weeks, 0 days to less than 28 weeks, 0 days
- Third trimester = 28 weeks until delivery

“O” codes in chapter 15 are used for maternal charts
A twenty-day-old infant was admitted with *Staphylococcus aureus* sepsis

**Newborn Coding Tips**
- Newborn, before birth through 1st-28th day following birth
- When both birth weight and gestational age are available, both should be coded with birth weight coded first then gestational age
- P07 Birth Weight
- P08 Gestational Age

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
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<tbody>
<tr>
<td>771.81 Septicemia</td>
<td>P362 Sepsis of newborn due to</td>
</tr>
<tr>
<td>[sepsis] of newborn</td>
<td><em>Staphylococcus aureus</em></td>
</tr>
<tr>
<td>038.11 <em>Staphylococcus</em></td>
<td></td>
</tr>
<tr>
<td><em>aureus</em></td>
<td></td>
</tr>
</tbody>
</table>

The phase “fetus or newborn” used in many ICD-9-CM codes is not in ICD-10-CM. The term “newborn” is consistently used in code title in Chapter 16 to clarify that these codes are for use on newborn records only, NEVER ON MATERNAL RECORDS

“P” codes in chapter 16 are used for newborn charts
### Fetus Affected in Multiple Pregnancies

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>651.83 Other specified multiple gestation, antepartum condition or complication</td>
<td>O30.803 90 Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs</td>
</tr>
<tr>
<td>652.63 Multiple gestation with malpresentation of one fetus or more</td>
<td>O32.9XX5 Maternal care for malpresentation of fetus, unspecified (fetus 5)</td>
</tr>
<tr>
<td>V91.90 Other specified multiple gestation unspecified number of placenta and unspecified number of amniotic sacs</td>
<td>Z3A.36 36 weeks gestation of pregnancy</td>
</tr>
</tbody>
</table>

In this example a female is pregnant with quintuplets at 36 weeks gestation. Fetus # 5 has malpresentation. ICD-10-CM is more specific about fetuses in multiple gestations, the specific trimester of pregnancy, and the specific week of gestation.
ICD-10 New Normal Overview
Oncology & Neoplasms are Different

Similar style of coding but generally more specific sites

- Malignant primary, secondary and in situ
- Specific forms of lymphoma and leukemia
- Benign neoplasm or tumor more specific
- Uncertain behavior
  - Histologically cannot confirm malignant or benign
  - Does not mean that provider/coder is uncertain about behavior
- Unspecified behavior
  - Mass, tumor, growth

**Anemia Due to Malignancy**

- Major change in sequencing rule (cancer first, then anemia)
- When admission or visit is for management of anemia associated with a malignancy, and the treatment is only for anemia, the appropriate code for the malignancy is sequenced first followed by the appropriate code for the anemia, such as, D63.0, Anemia in neoplastic disease.

Data Behavior Implication – *In a given population of patients with anemia, the number of primary diagnoses for anemia will be fewer under ICD-10 than the number in ICD-9. For instance, if analysis of encounter or claims history is primarily based on the primary diagnosis, it will appear the number of cancer patients have increased significantly, when in fact, there is no increase, but cancer is coded as the primary diagnosis on ICD-10 claims*
A 52-year-old man is being treated with chemotherapy for cancer of the small intestine where the duodenum and jejunum join. A portion of the small intestine was removed when the cancer tumor was removed earlier that month.

Neoplasm Coding Tips
- Determine if benign, malignant, in situ, or of uncertain behavior; note metastases if malignant
- Access Index Neoplasm Table EXCEPT if histology mentioned in descriptor, e.g. adenoma or sarcoma

Neoplasm generally coded first:
- Anemia associated with malignancy: malignancy first, anemia second (major departure from ICD-9)
- with exceptions:
  - Chemo, immunotherapy, or radiation encounters principal diagnoses with neoplasm secondary
  - Anemia associated with chemo/immunotherapy: adverse event first, anemia second, then malignancy
  - Anemia associated with radiation: anemia first, malignancy second, abnormal reaction to radiation third

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>V58.11 Encounter for antineoplastic chemotherapy</td>
<td>Z51.11 Encounter for antineoplastic chemotherapy</td>
</tr>
<tr>
<td>152.8 Malignant neoplasm of other unspecified sites of small intestine</td>
<td>C17.8 Malignant neoplasm of overlapping sites of small intestine</td>
</tr>
<tr>
<td>V45.72 Acquired absence of intestine (large) (small)</td>
<td>Z90.49 Acquired absence of other specified parts of digestive tract</td>
</tr>
</tbody>
</table>

Signs, symptoms and abnormal findings don’t replace malignancies as primary, except as noted in the coding guidelines

Malignancies of two or more contiguous sites not coded as one or the other unless directed in guidelines

For disseminated neoplasms with no known primary or secondary sites are coded to C80.0
Edna Jones is receiving a blood transfusion for severe anemia due to her left breast carcinoma.

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>285.22 Anemia in neoplastic disease</td>
<td>C50.912 Malignant neoplasm of unspecified site of left female breast</td>
</tr>
<tr>
<td>174.9 Malignant neoplasm of female breast, unspecified site</td>
<td>D63.0 Anemia in neoplastic disease</td>
</tr>
</tbody>
</table>

In ICD-9-CM the anemia code is listed first then the neoplasm code is listed second. But, in ICD-10-CM the neoplasm code is listed first and the anemia code is listed secondary.
ICD-10 New Normal Overview
Routine and Administrative Exams are Different

New information needed in ICD-10 for Exams by physician which are not well documented in many physician office records today:

• 3 categories of routine exams, divided further by nature of findings
  – Z00.00-Z00.01 General adult medical exam
  – Z00.121-Z00.129 Routine child health exam
  – Z01.411-Z01.419 Routine gynecological exam
    • With abnormal findings
    • Without abnormal findings

• Specific reasons needed for administrative physicals”
  – School exam
  – Admission to residential institution
  – Pre-employment
  – Sports participation
  – And more.....

*Data Behavior Implication – Can better identify abnormal vs normal screening exams in a population of patients*
ICD-10 New Normal Overview
Vaccines are Different

Encounters for vaccination/immunization
• An example of where ICD-10-CM is less specific than ICD-9
  – ICD-10: One code, Z23 used as diagnosis for all types of immunizations
  – ICD-9: Several codes depending on type of immunization
• Procedure code (rather than diagnosis) identifies
  – Administration of the injection
  – Type of immunization given

Data Behavior Implication – Can no longer rely on Dx to identify type of vaccine given, must look to CPT/HCPCS code for most records
### ICD-10 New Normal Overview

**Significant changes to other diseases & conditions**

#### A through B

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion vs. Fetal death</td>
<td>20 weeks</td>
<td>22 weeks</td>
</tr>
<tr>
<td>AIDS/HIV</td>
<td>Encounters for HIV-related conditions should code AIDS first, then the other condition. For non-related conditions, code HIV status as an “other” diagnosis</td>
<td>Less consistency in sequencing</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>Severity of dependence not coded</td>
<td>Severity is coded</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>Differentiation between early and late onset. Manifestation coded second</td>
<td>No differentiation</td>
</tr>
<tr>
<td>Anemia (due to other external agents)</td>
<td>Code first the toxic effects of substances, then the anemia</td>
<td>Anemia diagnosis is listed first if it the principle reason for visit</td>
</tr>
<tr>
<td>Blindness and low vision</td>
<td>Code first the underlying condition of the blindness or low vision</td>
<td>No instructions to code underlying condition</td>
</tr>
<tr>
<td>Bronchitis (acute)</td>
<td>Combination codes include the disease + manifestation</td>
<td>Disease and manifestation coded separately</td>
</tr>
<tr>
<td>Burns</td>
<td>Two types of burns: Burns are from heat (except sunburns), Corrosions are burns due to chemicals</td>
<td>Only one type of burn</td>
</tr>
</tbody>
</table>
## ICD-10 New Normal Overview

**Significant changes to other diseases & conditions**

### C through E

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital defects</td>
<td>Specific instructions explain this code may be coded throughout the life of the patient (not just newborns)</td>
<td>No specific instructions</td>
</tr>
<tr>
<td>Crohn’s Disease</td>
<td>Combination codes include the disease + manifestation</td>
<td>Disease and manifestation coded separately</td>
</tr>
<tr>
<td>Ear &amp; mastoid process conditions</td>
<td>Must define laterality (side of body) Separate chapter</td>
<td>Side of body not defined Part of Nervous System chapter</td>
</tr>
<tr>
<td>Eardrum perforation</td>
<td>Code first any associated otitis media (ear infection)</td>
<td>Do not code otitis media</td>
</tr>
<tr>
<td>Eye &amp; adnexa conditions</td>
<td>Must define laterality (side of body) Separate chapter</td>
<td>Side of body not defined Part of Nervous System chapter</td>
</tr>
<tr>
<td></td>
<td>7th digit represents glaucoma stage</td>
<td>Glaucoma stage a separate code</td>
</tr>
<tr>
<td></td>
<td>Newer terminology – age-related cataract</td>
<td>Outdated terminology – senile cataract</td>
</tr>
<tr>
<td>Disease or Condition</td>
<td>ICD-10-CM</td>
<td>ICD-9-CM</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Gangrene</td>
<td>Part of Diseases of circulatory system chapter</td>
<td>Part of Signs and Symptoms chapter</td>
</tr>
<tr>
<td>Gout</td>
<td>Part of Musculoskeletal system and connective</td>
<td>Part of Endocrine, Nutritional &amp; Metabolic</td>
</tr>
<tr>
<td></td>
<td>tissue chapter</td>
<td>Diseases chapter</td>
</tr>
<tr>
<td>Health Status Factors</td>
<td>Codes available for blood type</td>
<td>No codes for Blood type</td>
</tr>
<tr>
<td></td>
<td>Less specificity for screening encounters.</td>
<td>More specificity for screening encounters.</td>
</tr>
<tr>
<td></td>
<td>Screening for: depression, alcoholism, obesity,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nephropathy, skin conditions, chromosomal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>anomalies all map to Z1389. (also see</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Immunization and Episode of Care, and Pregnancy)</td>
<td></td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Combination codes include the disease +</td>
<td>Disease and manifestation coded separately</td>
</tr>
<tr>
<td></td>
<td>manifestation</td>
<td></td>
</tr>
<tr>
<td>Histoplasmosis</td>
<td>Uses additional code for manifestation</td>
<td>Uses 5th digit for manifestation</td>
</tr>
</tbody>
</table>
# ICD-10 New Normal Overview

## Significant changes to other diseases & conditions

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immune disorders</td>
<td>Reclassified to Chapter 3: Diseases of the Blood and Blood Forming Organs involving the immune mechanism.</td>
<td>Classified in Chapter 4: Endocrine, Nutrition, and Metabolic Diseases, and Immunity Disorders.</td>
</tr>
<tr>
<td>Infectious and Parasitic diseases</td>
<td>Many codes expanded to reflect the manifestations of the disease with the use of fourth or fifth characters allowing the infectious disease and manifestation to be captured in one code instead of two.</td>
<td>Infectious or parasitic agent coded separately from manifestation</td>
</tr>
<tr>
<td>Immunizations</td>
<td>All immunizations code to one code Z23</td>
<td>Some specificity to type of immunization given</td>
</tr>
<tr>
<td>Malocclusion</td>
<td>Reclassified to Chapter 13: Diseases of the Musculoskeletal System and Connective Tissue</td>
<td>Classified in Chapter 9: Diseases of the Digestive System</td>
</tr>
<tr>
<td>Mental &amp; Behavioral Disorders</td>
<td>Chapter 5 – contains significantly more subchapters, categories, and subcategories. Substantial changes made to codes for drug/alcohol abuse and dependence.)</td>
<td>Chapter 5 – less classification between categories</td>
</tr>
</tbody>
</table>
# ICD-10 New Normal Overview

**Significant changes to other diseases & conditions**

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous system and sense organs</td>
<td>3 chapters each for eyes (chapter 7), ears (chapter 8), and nervous system (chapter 6)</td>
<td>1 chapter combines all 3</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>Combined codes for type of osteoporosis and site of current pathological fracture</td>
<td>Type of osteoporosis and nature of fracture are coded separately</td>
</tr>
<tr>
<td>Outpatient testing</td>
<td>Especially important for injuries – Need to document if subsequent care, and what type</td>
<td>Sequence of testing in care plan not captured</td>
</tr>
<tr>
<td>Otitis media (ear infection)</td>
<td>Use additional code to indicate exposure to tobacco smoke and tobacco use/dependence</td>
<td>No instructions to code tobacco exposure and tobacco use/dependence</td>
</tr>
<tr>
<td>Pain</td>
<td>More specific sites and types, such as location of abdominal pain, acute vs. rebound pain</td>
<td>Types/sites of pain less specific</td>
</tr>
<tr>
<td>Phantom limb syndrome</td>
<td>Differentiation between whether pain is present or not</td>
<td>No differentiation</td>
</tr>
<tr>
<td>Postoperative conditions</td>
<td>Distinction is made between intraoperative complications and post-procedural disorders</td>
<td>No distinction</td>
</tr>
<tr>
<td>Respiratory System Diseases</td>
<td>Use additional code to indicate exposure to tobacco smoke and tobacco use/dependence</td>
<td>No instructions to code tobacco exposure and tobacco use/dependence</td>
</tr>
</tbody>
</table>
# ICD-10 New Normal Overview

## Significant changes to other diseases & conditions

### S through Z

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>ICD-10-CM</th>
<th>ICD-9-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>The term sepsis is used consistently</td>
<td>The terms sepsis and septicemia are often used interchangeably by providers, however they are not considered synonymous terms.</td>
</tr>
<tr>
<td></td>
<td>Severe sepsis requires a minimum of 2 codes, first the underlying systemic infection, followed by a code from subcategory R65.2, Severe sepsis. If the casual organism is not documented, assign code A41.9, Sepsis, unspecified organism, for the infection. Additional code(s) for the associated acute organ dysfunction are also required. Due to the complex nature of severe sepsis, some cases may require querying the provider PRIOR to assignment of the codes.</td>
<td></td>
</tr>
<tr>
<td>Sexual dysfunction</td>
<td>Many new codes to identify cause of the dysfunction</td>
<td>Less specificity</td>
</tr>
<tr>
<td>Sinusitis</td>
<td>Codes exist for recurrent infections for each sinus</td>
<td>No code for recurrent sinusitis</td>
</tr>
<tr>
<td>Therapy visits</td>
<td>Code reason for therapy – reason is found in care plan, subsequent visit 7th digit in diagnosis indicates aftercare</td>
<td>Heavy use of V57 for encounter for rehabilitation</td>
</tr>
<tr>
<td>Ulcers (decubitus)</td>
<td>Combination codes to include site and stage.</td>
<td>Stages coded separately</td>
</tr>
<tr>
<td>Ulcers (gastric)</td>
<td>Newer terminology used: “hemorrhage”</td>
<td>Older terminology used: “bleeding”, With or Without obstruction is part of the code</td>
</tr>
</tbody>
</table>

---

36
What is the Same, New, and Different?
PROCEDURES
ICD-10 New Normal Overview

New & Different - Procedures

ICD-10-PCS procedure codes only required for inpatient facility procedures

What’s Different? – EVERYTHING!

– Diagnostic information not contained in procedure description
– Codes are “built” from tables, rather than picking from an Alphabetic Index
– All significant components of a procedure are captured in coding
– Standardized terminologies used, no mnemonics

• Example:

<table>
<thead>
<tr>
<th>ICD-9 Description</th>
<th>ICD-10 Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURP procedure</td>
<td>Excision of Prostate, Via Natural or Artificial Opening</td>
</tr>
</tbody>
</table>

• In ICD-10, coders must learn how to translate mnemonics to the appropriate ICD-10 code

– Unique codes available for variations of procedures that can be performed
– Very few options for “other” and no options for “unspecified” type of procedures
– Bilateral body part values are available for a limited number of body parts
– Same root operation on multiple body parts = multiple procedures
Example of an ICD-10-PCS Table

Procedures to drain fluid or gases from the eye
- Notice laterality of body part
- Approach
- Use of a device
- Qualifier
ICD-10 New Normal Overview

Procedures Built with Tables, not Lists

16 Sections

Over 35 Body Systems

31 Root Operations

Thousands of Body Parts (Examples)

Six Approaches

Hundreds of Devices (Examples)

Intermittent Qualifiers (Examples)

Medical/Surgical Section

- Central nervous system
- Peripheral nervous system
- Heart and Great vessels
- Upper arteries
- Lower arteries
- Upper veins
- Lower veins
- Lymphatic and Hemic system
- Eye
- Ear, Nose, Sinus
- Respiratory System
- Mouth and Throat
- Gastrointestinal system
- Hepatobiliary System & Pancreas
- Endocrine system
- Skin and Breast
- Subcutaneous tissue
- Muscles
- Tendons
- Bursae and Ligaments
- Head and Facial bones
- Upper bones
- Lower bones
- Upper joints
- Lower joints
- Urinary system
- Female reproductive system
- Male reproductive system
- Anatomical regions, General
- Anatomical regions, Upper extremities
- Anatomical regions, Lower extremities
- Pregnancy
- Anatomical Orifices
- Indwelling Device

31 Root Operations

- Excision
- Resection
- Destruction
- Excision
- Extraction
- Drainage
- Extirpation
- Fragmentation
- Division
- Release
- Transplantation
- Reattachment
- Transfer
- Reposition
- Restriction
- Occlusion
- Dilation
- By pass
- Insertion
- Replacement
- Supplement
- Change
- Removal
- Revision
- Inspection
- Map
- Repair
- Control
- Fusion
- Alteration
- Creation

Thousands of Body Parts (Examples)

- Abdominal Sympathetic Nerve
- Anterior Tibial Artery, Left
- Cephalic Vein, Right
- Cerebral Meninges
- Esophagus, Lower
- External Carotid Artery, Right
- Internal Mammary Artery, Left
- Lumbar Plexus
- Phrenic nerve
- Scapula, Left
- Shoulder Bursa
- Spleen
- Subcutaneous tissue and Fascia, Left Lower Arm
- Ventricle, Right
- Upper Leg Muscle, Right
- Luteine Supporting Structure

Six Approaches

- Open
- Percutaneous
- Percutaneous endoscopic
- Via Natural or artificial opening
- Via Natural or artificial opening endoscopic
- Via Natural or artificial opening with percutaneous endoscopic assistance

Hundreds of Devices (Examples)

- Graft (e.g. synthetic, autologous, nonautologous)
- Prosthesis
- Intraluminal
- Leads
- Implants
- Fixation Devices
- Mechanical appliances
- Electronic appliances
- Source of tissue used for bypass or graft

Intermittent Qualifiers

- Diagnostic
- Temporary
- Cemented
- Allogeneic
- Zooplastic
- Type of Substance
- Z = NONE

Values for each position are not interchangeable among sections, body systems, and root operations. Only valid combinations can be coded using carefully organized tables.

These combine to make >87,000 codes
Operation: CABG of LAD using left internal mammary artery, open; off pump

Coded as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Medical and Surgical</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Heart and Great Vessels</td>
<td>2</td>
</tr>
<tr>
<td>Root Operation</td>
<td>Bypass</td>
<td>1</td>
</tr>
<tr>
<td>Body Part</td>
<td>Coronary Artery, One site</td>
<td>0</td>
</tr>
<tr>
<td>Approach</td>
<td>Open</td>
<td>0</td>
</tr>
<tr>
<td>Device</td>
<td>No Device</td>
<td>Z</td>
</tr>
<tr>
<td>Qualifier</td>
<td>Internal Mammary, Left</td>
<td>9</td>
</tr>
</tbody>
</table>

02100Z9
Bypass Coronary Artery, One Site to Left Internal Mammary, Open Approach

- The body part value identifies the number of coronary artery sites bypassed
- The qualifier identifies the vessel bypassed from
- No device because no use of free graft, rather a pedicled graft from mammary artery
Operation: Cesarean section delivery of twins

One procedure, coded as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Obstetrics</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Pregnancy</td>
<td>0</td>
</tr>
<tr>
<td>Root Operation</td>
<td>Extraction</td>
<td>D</td>
</tr>
<tr>
<td>Body Part</td>
<td>Products of Conception</td>
<td>0</td>
</tr>
<tr>
<td>Approach</td>
<td>Open</td>
<td>0</td>
</tr>
<tr>
<td>Device</td>
<td>No Device</td>
<td>Z</td>
</tr>
<tr>
<td>Qualifier</td>
<td>Low Cervical</td>
<td>1</td>
</tr>
</tbody>
</table>

The diagnosis, not procedure, will explain the number of newborns, outcome of delivery, trimester of delivery, number of weeks gestation (if premature), birth weight, any complications in one of the newborns, and which newborn had each complication.

No diagnostic information is included in ICD-10-PCS
ICD-10 New Normal Overview
Cardiology Procedure Coding Example

Operation: PTCA of 2 coronary arteries, RCA w/drug-eluting stent & LAD without stent
Two procedures, coded as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Medical and Surgical</th>
<th></th>
<th></th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Heart and Great Vessels</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root Operation</td>
<td>Dilation</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Part</td>
<td>Coronary Artery, One site</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach</td>
<td>Percutaneous</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device</td>
<td>Intraluminal Device, Drug-eluting</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualifier</td>
<td>No Qualifier</td>
<td>Z</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

027034Z
Dilation of Coronary Artery, One Site with Drug-eluting Intraluminal Device, Percutaneous Approach

<table>
<thead>
<tr>
<th>Section</th>
<th>Medical and Surgical</th>
<th></th>
<th></th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Heart and Great Vessels</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root Operation</td>
<td>Dilation</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Part</td>
<td>Coronary Artery, One site</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach</td>
<td>Percutaneous</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device</td>
<td>No Device</td>
<td>Z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualifier</td>
<td>No Qualifier</td>
<td>Z</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

02703ZZ
Dilation of Coronary Artery, One Site, Percutaneous Approach
What Else Should You Know About ICD-10?
Operational Impacts, DRGs & Crosswalks
ICD-10 New Normal Overview
Impacts to Payments, Benefits, and Workflows

ICD-10 can have subtle or dramatic effects on each of these health plan activities

• The more activities affected, the greater the impact of the change
• An ICD-10 change affecting all 4 activities will be the most intense, exacerbated by volume

Most ICD-10 effects will be subtle

• The challenge is predicting the major effects and preparing to mitigate them before business or patient care/service can be disrupted
• Measuring extent of ICD-10 change impacts will be key
ICD-10 New Normal Overview

Expected impacts to Claims Throughput

The switch to ICD-10 will likely cause a temporary interruption in claim throughput for several reasons:

• Providers are expected to take longer to complete coding in ICD-10 in the weeks following the compliance date, causing an industry-wide delay in claims submission

• Providers will likely experience more claims rejects from clearinghouses as they learn to code in ICD-10 correctly - EDI claims will need to be corrected and re-submitted

• As providers gain competence in coding, the backlog will begin to push through clearinghouses & payers
Crosswalks, such as CMS’ General Equivalence Mappings (GEMs), are imprecise, miss intended meanings, & lose additional codes that can be captured in ICD-10

Providers should avoid using crosswalks to generate ICD-10 codes, especially for certain complex diagnoses and most ICD-10 procedures. They should code “natively” in ICD-10 from the original medical record.

Example: 61 year old male, 3 day LOS

<table>
<thead>
<tr>
<th>ICD-9 Claim</th>
<th>ICD-10 Claim – natively coded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICD type</strong></td>
<td><strong>Original Icd9code</strong></td>
</tr>
<tr>
<td>Admitting Dx</td>
<td>721.1</td>
</tr>
<tr>
<td>Principal Dx</td>
<td>721.1</td>
</tr>
<tr>
<td>Other Dx</td>
<td>285.1</td>
</tr>
<tr>
<td>Other Dx</td>
<td>722.4</td>
</tr>
<tr>
<td>Other Dx</td>
<td>250</td>
</tr>
<tr>
<td>Other Dx</td>
<td>272.4</td>
</tr>
<tr>
<td>Principal Proc</td>
<td>81.03</td>
</tr>
<tr>
<td>Other Proc</td>
<td>81.63</td>
</tr>
</tbody>
</table>

**Legend:**
- Exact Match
- Close Match, different meaning
- No Match, Must refer to patient’s chart to code correctly in ICD-10
- New code captured in ICD-10, would have been missed with crosswalk
A recent study, published by Vanderbilt University examined differences in GEMs-mapped vs. natively coded primary care services. Small study sample (~100 claims, <600 diagnoses)

- **Study Conclusion:**
  - Our analysis demonstrates that, while the GEMs/RMs were consistent with manual encodings > 80% of the time in all directions, there is a significant fraction of manual mappings that were inconsistent with the GEMs and RMs. Of those mismatched mappings consisting of only one ICD-9 and one ICD-10 code, at least 50% did not match the GEMs due to subtle differences within the same hierarchical category. Despite the limitations of this study, it should raise awareness about the importance of testing the GEMs and RMs in each unique practice environment.

Source: http://jamia.oxfordjournals.org/content/early/2015/02/07/jamia.ocu028
ICD-10 New Normal Overview
DRG is Sensitive to ICD changes

Diagnosis Related Groupings (DRGs) – Inpatient Facility pricing method used only for certain states

CMS has attempted to make ICD-10-based DRGs “payment neutral”, but degree of impact is dependent on provider billing style and attention to detail

• Factors affecting DRG determination (process standard for ALL payers):
  – Sequence of Admitting Dx, Principle Dx, and up to 24 secondary Dx, and present on admission indicators
    – There are different levels of severity in the DRGs based on secondary diagnosis codes:
      1) – Major Complication/Comorbidity, which reflect the highest level of severity;
      2) – Complication/Comorbidity, which is the next level of severity; and
      3) – Non-Complication/Comorbidity, which do not significantly affect severity of illness and resource use.
  – Sequence of Principle Procedure, and up to 24 other procedures
  – Patient age and gender
  – Length of stay
  – Discharge status

• Payment = Base rate x (Wage index) x DRG weight + Add-on payments
  – **Base rate** - Often Negotiated - Standard payment amount, may be divided into labor/non-labor/capital components
  – **Wage index** - (if used) Accounts for geographic variation in hospitals’ labor costs
  – **DRG weight** - Often negotiated - Reflects a patient’s relative costliness (how sick the patient is & how many resources consumed)
  – **Add-ons** - can include teaching hospitals/ indirect graduate medical education (IME), hospitals treating a disproportionate share of low-income patients (DSH), costly cases
Different DRGs in Natively Coded ICD-10

<table>
<thead>
<tr>
<th>ICD-9-CM Diagnosis Codes</th>
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<tbody>
<tr>
<td>Natively Coded ICD-9 claim ↓</td>
<td>Natively Coded ICD-10 Claim ↓</td>
</tr>
<tr>
<td>285.22 Anemia in neoplastic disease</td>
<td>C50.912 Malignant neoplasm of unspecified site of left female breast</td>
</tr>
<tr>
<td>174.9 Malignant neoplasm of female breast, unspecified</td>
<td>D63.0 Anemia in neoplastic disease</td>
</tr>
<tr>
<td>Medicare Assigned DRG : 0812, RED BLOOD CELL DISORDERS W/O MCC</td>
<td>Medicare Assigned DRG : 0599, MALIGNANT BREAST DISORDERS W/O CC/MCC</td>
</tr>
<tr>
<td>MDC : 16, DRG Weight = 0.7985, GLOS = 002.6, ALOS = 003.4</td>
<td>MDC : 09, DRG Weight = 0.6547, GLOS = 002.5, ALOS = 003.1</td>
</tr>
<tr>
<td>Estimated Medicare Reimbursement = $4,288.17</td>
<td>Estimated Medicare Reimbursement = $3,515.92</td>
</tr>
<tr>
<td>Grouper Version Used: 30-10/12</td>
<td>Grouper Version Used: 30-10/12</td>
</tr>
</tbody>
</table>

Significant sequencing rule change in ICD-10 if backward mapped without adjusting sequencing to follow ICD-9 sequencing rule will produce a different DRG

Implication: Backward mappings must adjust for sequencing rule changes if an ICD-9 equivalent DRG is desired
# Different DRGs in Natively Coded ICD-10

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<td>Natively Coded ICD-9 claim ↓</td>
<td>Natively Coded ICD-10 Claim ↓</td>
</tr>
<tr>
<td>821.11 Open fracture of shaft of femur</td>
<td>S72.322E Displaced transverse fracture of shaft of left femur, subsequent encounter for open fracture type I or II with routine healing</td>
</tr>
<tr>
<td>E919.2 Accidents caused by lifting machines and appliances</td>
<td>W23.0xxD Caught, crushed, jammed, or pinched between moving objects subsequent encounter</td>
</tr>
<tr>
<td>N/A</td>
<td>V83.7xxD Person on outside of special industrial vehicle injured in nontraffic accident</td>
</tr>
<tr>
<td>Groups to ↓</td>
<td>Groups to ↓</td>
</tr>
<tr>
<td>Medicare Assigned DRG : 0534, FRACTURES OF FEMUR W/O MCC</td>
<td>Medicare Assigned DRG : 0561, AFTERCARE, MUSCULOSKELETAL SYSTEM &amp; CONNECTIVE TISSUE W/O CC/MCC</td>
</tr>
<tr>
<td>MDC : 08, DRG Weight = 00.7364, GLOS = 002.9, ALOS = 003.6</td>
<td>MDC : 08, DRG Weight = 00.6408, GLOS = 002.0, ALOS = 002.5</td>
</tr>
<tr>
<td>Estimated Medicare Reimbursement = $3,954.67</td>
<td>Estimated Medicare Reimbursement = $3,441.28</td>
</tr>
<tr>
<td>Grouper Version Used: 30-10/12</td>
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Subsequent fracture encounter qualifier “E” assigns a different DRG. Encounter sequence during healing for fractures could not be indicated in ICD-9

Implication: New concepts in ICD-10 may not backward map as expected to ICD-9
Study done by North Shore health system in Illinois:

- Many of North Shore's payers reimburse based on DRG for inpatient stays
- Their hospitals include Evanston, Glenbrook, Highland Park, and Skokie
- Of the 7,000+ cases they have dual coded so far, 358 had DRG change. 130 of these cases were for inpatient rehab, which they ignored and studied the remaining 228 DRG shifts (3.3% of the cases)
- Shifts were largely due to new coding guidelines and new codes in ICD-10, particularly procedure codes
- North Shore did not share any specific financial impacts, but they did provide a number of examples where DRG shifts occurred. Their most surprising shifts are listed below:

<table>
<thead>
<tr>
<th>MDC</th>
<th>Category</th>
<th>Number of Charts</th>
<th>Number with DRG shift</th>
<th>Number that shifted due to ICD-10 procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Digestive</td>
<td>739</td>
<td>31 (4%)</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>Hepatobiliary</td>
<td>178</td>
<td>19 (11%)</td>
<td>16</td>
</tr>
<tr>
<td>8</td>
<td>Musculoskeletal</td>
<td>882</td>
<td>49 (5.5%)</td>
<td>48</td>
</tr>
<tr>
<td>11</td>
<td>Kidney &amp; Urinary Tract</td>
<td>354</td>
<td>23 (6.5%)</td>
<td>Note: many lost CC and MCCs (new ICD-10 is no longer a cc/mcc due to new combo codes)</td>
</tr>
</tbody>
</table>