The International Classification of Diseases Version 10 (ICD-10)

What you need to know before the end of February, 2014

Gary W. Williams, MD, PhD, FACR
1.8.2014
Objectives:

1. Review the history of the International List of Causes of Death and its relation to the International Classification of Disease
2. Recognize ICD-9 as inadequate to classify diseases
3. Identify how ICD-10 assists coding
4. Examine why ICD-11 is needed (and on its way)
5. Recognize the role of:
   1. Code Sets,
   2. Reference Terminologies, and
   3. Interface Terminologies in Electronic Health Records;
6. Describe Allscripts’ MAPPING of ICD-9 codes to ICD-10
7. Demonstrate Allscripts functionality in CONVERTING ICD-9 codes to ICD-10
Death Registration

• The beginnings of death registration can be found in mid-15th century Italy
• A death certificate was required before a burial certificate could be issued
• By the 16th Century, Boards of Health were established in France, Switzerland and the Netherlands
• Used to monitor epidemics in various cities
Bills of Mortality

• 1532
  – England began a systematic collection of data on causes of death, the *Bills of Mortality*.

• 1837
  – The Registration Act was passed in England with provisions for inquiry into causes of death in the population.

• 1842
  – The first State Registration law in the US was enacted by Massachusetts in 1842.
American Medical Association

• 1855
  – The American Medical Association (AMA) adopted a resolution urging its members to take “immediate and concerted action in petitioning legislative bodies to establish offices for the registration of vital events”.

• 1900
  – Ten states and the District of Columbia had met the requirements of the U.S. Bureau of the Census for admission to the U.S. Death Registration.
  – The compilation of annual mortality statistics for the United States began with these states in 1900.
  – Nationwide coverage was achieved in 1933.
### Bertillon’s main headings

1. General diseases  
2. Diseases of nervous system and sense organs  
3. Diseases of circulatory system  
4. Diseases of respiratory system  
5. Diseases of digestive system  
6. Diseases of genitourinary system  
7. Puerperal diseases  
8. Diseases of skin and annexes  
9. Diseases of locomotor organs  
10. Malformations  
11. Diseases of early infancy  
12. Diseases of old age  
14. Ill-defined diseases  
15. Residual categories, “other

### ICD-10

1. Certain infectious and parasitic diseases  
2. Neoplasms  
3. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism  
4. Endocrine, nutritional and metabolic diseases  
5. Mental and behavioural disorders  
6. Diseases of the nervous system  
7. Diseases of the eye and adnexa  
8. Diseases of the ear and mastoid process  
9. Diseases of the circulatory system  
10. Diseases of the respiratory system  
11. Diseases of the digestive system  
12. Diseases of the skin and subcutaneous tissue  
13. Diseases of the musculoskeletal system and connective tissue  
14. Diseases of the genitourinary system  
15. Pregnancy, childbirth and the puerperium  
16. Certain conditions originating in the perinatal period  
17. Congenital malformations, deformations and chromosomal abn.  
18. Symptoms, signs and abnormal clinical and laboratory findings, NEC  
19. Injury, poisoning and certain other consequences of external causes  
20. External causes of morbidity and mortality  
21. Factors influencing health status and contact with health services  
22. Codes for special purposes
ICD-First Revision
1900 (in use 1900–1909)

• In 1899, ISI had approved the proposal made for the decennial revision of the list.
• August 18, 1900
  – The first International Conference for the Revision of the International List of Causes of Death convened in Paris
  – Producing the first International List of Causes of Death, a revision cycle was established to keep the list abreast of medical progress.
1948 - Sixth Revision of the International Lists of Diseases and Causes of Death

- April 26-30, 1948
  - The International Conference for the Sixth Revision of the International Lists of Diseases and Causes of Death was convened in Paris by the Government of France.

  - The committee created the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* from the data; in two volumes.

- By the time of the 7th revision, in 1955, the name International Classification of Diseases had been adopted.
1955 - Seventh Revision the International Classification of Diseases

• February 1955
  – The International Conference for the Seventh Revision of the International Classification of Diseases was held in Paris under the auspices of WHO
1965 - Eighth Revision Conference

• July 6-12, 1965
  – The Eighth Revision Conference convened by WHO met in Geneva
  – Left unchanged the basic structure of the Classification
  – Also reinforced the general philosophy of classifying diseases, whenever possible, according to their etiology rather than a particular manifestation.
1977 - Ninth Revision of the International Classification of Diseases

- September 30-October 6
  - The 9th version of ICD came about in 1977. Convened by WHO, the Conference met in Geneva
  - To date, it's the last version that every country adopted at the same time. Incorporated into it were many of the category extensions of diseases and maladies that several represented countries wanted for better clarity of what was occurring in their areas.

- Since 1900, the ICD has been modified about once every 10 years, except for the 20-year interval between the last two revisions, ICD-9 and ICD-10.
ICD-10 Delays

• The ICD-10 update was supposed to begin in 1985, following what had become a 10-year process for working on ICD code revisions.
• ICD-10 was endorsed in May 1990 by the Forty-third World Health Assembly.
• Continuing delays kept it from coming out until 1995 (~18 years ago).
• It is cited in more than 20,000 scientific articles and used by more than 100 countries around the world.
Why ICD-9 Remained in the US

• The U.S. remained on ICD-9 primarily because of billing and payment issues.
• In 1983, ICD-9 was introduced as a critical part of medical billing by physicians and hospitals, and was further embedded by the passage of the Medicare Catastrophic Coverage Act.
• That act was later repealed however, the payment process was already set, as other insurance companies followed Medicare.
• The U.S. will (finally) change over to the ICD-10 system on October 1, 2014.
ICD-10 Used for Mortality Reporting in U.S. Since 1999

• Effective with deaths occurring in 1999, the United States replaced ICD-9, in use for the reporting of deaths from 1979 to 1998, with ICD-10.

• Publications showing mortality data coded under ICD-10 differ substantially from those reported under ICD-9 because of
  – Changes in coding rules
  – Changes in category names and ICD numbers
  – Changes in the tabulation lists used to group mortality data.
The classification of diseases and related health problems in 22 chapters:

1. Certain infectious and parasitic diseases
2. Neoplasms
3. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
4. Endocrine, nutritional and metabolic diseases
5. Mental and behavioural disorders
6. Diseases of the nervous system
7. Diseases of the eye and adnexa
8. Diseases of the ear and mastoid process
9. Diseases of the circulatory system
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15. Pregnancy, childbirth and the puerperium
16. Certain conditions originating in the perinatal period
17. Congenital malformations, deformations and chromosomal abnormalities
18. Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
19. Injury, poisoning and certain other consequences of external causes
20. External causes of morbidity and mortality
21. Factors influencing health status and contact with health services
22. Codes for special purposes

• Volume 2: Instruction Manual
• Volume 3: Alphabetical Index
Organization of ICD-10

- ICD-9 is divided into categories based on a five digit code (which limits the size of the vocabulary), where round numbers represent the more general concepts.
- ICD-10 has some 8,000 categories (ICD-9 had only 4,000) and 12,500 codes.
- ICD in form is a strict hierarchy; code determines position in hierarchy.
- Deaths are ranked on a list of 113 causes (except infant deaths, which are ranked separately on a list of 130 causes.
- A selected list of 39 causes of death is used to show mortality data for geographic areas
ICD-9 has several limitations that prevent complete and precise coding and billing including:

• The 35-year old code set contains outdated terminology
• The code length and alphanumeric structure limit the number of new codes that can be created, and
• Many ICD-9 categories are already full.
• The codes themselves lack specificity and detail to support the following:
  – Accurate anatomical descriptions
  – Differentiation of risk and severity
  – Key parameters to differentiate disease manifestations
  – Optimal claim reimbursement
  – Value-based purchasing methodologies
NCHS and ICD-10-CM

- The National Center for Health Statistics (NCHS), the federal agency is responsible for the United States’ use of ICD-10
- NCHS developed ICD-10-CM, a clinical modification of the classification for morbidity reporting purposes, to replace our ICD-9-CM Codes, Volumes 1 and 2.
- ICD10-CM included a thorough evaluation by a technical advisory panel and extensive consultation with physician groups, clinical coders, and others to ensure clinical accuracy and usefulness.
Benefits of ICD-10

• ICD-10 provides more specific data than ICD-9 and better reflects current medical practice.
• The added detail embedded within ICD-10 codes informs health care providers and health plans of patient incidence and history, which improves the effectiveness of case-management and care-coordination functions.
• Accurate coding also reduces the volume of claims rejected due to ambiguity.
## ICD-9 and ICD-10 Diagnosis Code Comparison

<table>
<thead>
<tr>
<th></th>
<th>CD-9-CM</th>
<th>ICD-9-CM (VOLS. 1 &amp; 2)</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field Length</strong></td>
<td>3-5 Characters</td>
<td>3-7 Characters</td>
<td></td>
</tr>
</tbody>
</table>
| **Code Composition** | Digit 1 = alpha or numeric  
                      | Digits 2-5 = numeric    | Digit 1 = alpha  
                      |                        | Digit 2 = numeric  
                      |                        | Digits 3-7 = alpha or numeric |
| **Available Space for New Codes** | Limited | Flexible               |           |
## ICD-9 and ICD-10 Diagnosis Code Comparison

<table>
<thead>
<tr>
<th>CD-9-CM</th>
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<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Detail Embedded Within Codes</td>
<td>Limited detail in many conditions</td>
<td>Allows descriptions of comorbidities, manifestations, etiology/causation, complications, detailed anatomical location, sequelae (after effects of a disease, condition, or injury such as scar formation after a burn), degree of functional impairment, biologic and chemical agents, phase/stage, lymph node involvement, lateralization and localization, procedure or implant related, age related, or joint involvement</td>
</tr>
</tbody>
</table>
ICD-9 and ICD-10 Diagnosis Code Comparison

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<thead>
<tr>
<th>CD-9-CM</th>
<th>ICD-9-CM (VOLS. 1 &amp; 2)</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laterality</td>
<td>Does not identify right versus left</td>
<td>Often identifies right versus left</td>
</tr>
<tr>
<td>Sample Code</td>
<td>81315 Open fracture of head of radius</td>
<td>S52122C Displaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC</td>
</tr>
</tbody>
</table>
Benefits of ICD-10?

• The benefits of transition from ICD-9 to ICD-10 include the increased specificity offered by the ICD-10 code format

• This specificity will benefit:
  – Patients, doctors, and researchers (by giving more detailed diagnosis and treatment information)
  – Payers (by more accurately defining services) and
  – International organizations that monitor worldwide disease.
Current ICD-9-CM (Clinical Modification) Codes

• **ICD-9-CM** codes are three to five digits
  – The first digit is either numeric or alpha (the letters E or V only)
  – all other digits are numeric.
ICD-10-CM (Clinical Modification) Codes

- **ICD-10-CM** Allows dramatically more specificity however, all of this comes at a price—the codes are becoming more complex.
- In ICD-10-CM, codes can be up to seven digits
  - The first digit is always alpha
    - (it can be any letter except U)
  - the second digit is always numeric
  - the remaining five digits can be any combination.
Increased Specificity in the ICD-10 Code

• The following example shows an ICD-10-CM code for chronic gout due to renal impairment, left shoulder, without tophus.

• The corresponding ICD-9-CM code would have been 274.02 (gouty arthropathy)

• As you can see, the ICD-10-CM code contains much more information
1:1 Mapping (ICD-9 to ICD-10)

- Some ICD-9-CM codes map easily to ICD-10 in a simple one-to-one conversion.
- For example, the ICD-9-CM code 733.6 (Tietze's Syndrome) maps directly to the ICD-10-CM code M94.0. (An exact map does not always mean the codes match in detail.)

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1:3 Mapping (ICD-9 to ICD-10)

- Other codes require additional information to map for possible solutions.
- The ICD-9-CM code 649.51 (spotting complicating pregnancy) requires information about weeks in pregnancy to map.
- There are three (four including unspecified) options:
  - O26.851 (spotting complicating pregnancy, first trimester),
  - O26.852 (spotting complicating pregnancy, second trimester), and
  - O26.853 (spotting complicating pregnancy, third trimester)
## MEDCIN TO IMO

### Medcin

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>ICD-9 Term</th>
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<tbody>
<tr>
<td>649.50</td>
<td>Maternal Spotting Complicating Pregnancy / Childbirth / Puerperium</td>
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</table>

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<tr>
<td>ICD-9 Code</td>
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<td>649.50</td>
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GEMS

• General Equivalence Mappings (GEMS) tool is provided by CMS

• Created with Medicare Data therefore not comprehensive for all diagnoses and Situations
<table>
<thead>
<tr>
<th>Number of Problems to map</th>
<th>Total</th>
<th>Defined Map</th>
<th>No Defined Map</th>
<th>Flagged for Add'l Review</th>
<th>Approved</th>
</tr>
</thead>
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<tr>
<td>Total Number of Problems (Patient Problems &amp; Build Data)</td>
<td>72,169</td>
<td>13,145 (18%)</td>
<td>59,024 (82%)</td>
<td>3 (0%)</td>
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<td>Patient Problem List (Instance Data)</td>
<td>20,002</td>
<td>5,787 (25%)</td>
<td>14,215 (75%)</td>
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<td>Problems Linked to CareGuides</td>
<td>7</td>
<td>7 (100%)</td>
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<td>Problems Linked to FlowSheets</td>
<td>531</td>
<td>197 (37%)</td>
<td>334 (63%)</td>
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<td>Problems Linked to NoteFams</td>
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<td>116 (47%)</td>
<td>129 (53%)</td>
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<td>Problems Linked to Specialty (Market) Favorites</td>
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<td>2,432 (38%)</td>
<td>2,389 (62%)</td>
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<td>Problems Linked to User (Personal) Favorites</td>
<td>44,542</td>
<td>5,296 (12%)</td>
<td>39,246 (88%)</td>
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# Problem Mapping Tool

## Allscripts EHR Problem Mapping Tool

### Problem Details

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<thead>
<tr>
<th>Existing Problem Description</th>
<th>New ICD-9</th>
<th>New ICD-10</th>
<th>New Problem Description</th>
<th>Client Defined</th>
<th>Flag for Addt'Review</th>
<th>Problem Search</th>
<th>Map Status</th>
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<tbody>
<tr>
<td>Mammogram Screening</td>
<td>V76.12</td>
<td>Z12.31</td>
<td>Visit for screening mammogram</td>
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<td>Visit for Screening Exam</td>
<td>V62.21</td>
<td>Z13.02</td>
<td>Encounter for screening mammogram</td>
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<td>Routine Gynecological Exam</td>
<td>V72.31</td>
<td>V76.2</td>
<td>Periodic health assessment, Pap and pelvic</td>
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<td>Existing Diagnosis</td>
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<td>Diabetes Type 1 Controlled</td>
<td>Diabetes mellitus type 1, controlled</td>
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<td>530.01</td>
<td>H21.0</td>
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</tbody>
</table>
Specificity in Injury Reports

Burn due to water skis on fire, initial encounter
Granularity in Injury Reports

Fall in or into bucket of water causing drowning or submersion, initial encounter
San Francisco

Animal-rider injured in collision with streetcar
World Wide
Current Allscripts
Allscripts Problem List Changes
ICD-9 and ICD-10 Codes

ICD-9 Codes remain
### Managed By Field

<table>
<thead>
<tr>
<th>Active Problems</th>
<th>My Priority</th>
<th>IC9-9</th>
<th>IC10-9</th>
<th>Managed By</th>
<th>Last Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Priority</td>
<td></td>
<td></td>
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<tr>
<td>Vasculitis, ANCA positive</td>
<td></td>
<td>447.8</td>
<td>177.6</td>
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<tr>
<td>Health Maintenance</td>
<td></td>
<td>V20.2</td>
<td>200.129</td>
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<td>07Oct2013 AHSAdmin, AHS</td>
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<td>Other Problems</td>
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<tr>
<td>Asthma, extrinsic</td>
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<td>493.00</td>
<td>J45.909</td>
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<tr>
<td>Complete tear of lat rotator cuff</td>
<td></td>
<td>727.61</td>
<td>M75.122</td>
<td></td>
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<tr>
<td>Encounter for aftercare...</td>
<td></td>
<td>V58.44</td>
<td>Z48.23</td>
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</tr>
</tbody>
</table>

**Managed By Field**

- Radial head fracture
- Radial head fracture, closed
- Radial head fracture, open
- Fracture of radial head, closed
- Fracture of radial head, open
- Fracture of radial head, left, closed
- Fracture of radial head, left, open
- Fracture of radial head, right, closed
- Fracture of radial head, right, open
- Left radial head fracture
- Right radial head fracture
- Closed fracture of radial head
<table>
<thead>
<tr>
<th>Name</th>
<th>ICD-9</th>
<th>ICD-10</th>
<th>Managed By</th>
<th>Last Assessed</th>
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<tr>
<td>Vascularitis, ANCA positive</td>
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<tr>
<td>Asthma, extrinsic</td>
<td>490.00</td>
<td>J45.909</td>
<td>WILLIAMS MD,...</td>
<td>12Nov2013 WILLIAMS MD,...</td>
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<td>Z48.23</td>
<td>WILLIAMS MD,...</td>
<td>17Dec2013 WILLIAMS MD,...</td>
</tr>
</tbody>
</table>

**Problem Last Assessed By:**

- WILLIAMS MD, GARY W.
- AHSAdmin, AHS
My Priority

Allows Any Diagnosis to be Automatically Promoted to “My Priority”. All Subsequent Problem Lists Will Promote That Problem, Irrespective of Who Entered it.
PROMPT FOR DUPLICATES
EXPANDED OPTIONS FOR FRACTURES
## Expanded Specificity for Fractures

<table>
<thead>
<tr>
<th>Fracture Description</th>
<th>ICD-9</th>
<th>ICD-10</th>
</tr>
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<tbody>
<tr>
<td>Radial head fracture</td>
<td>813.05</td>
<td>S52.122A</td>
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<tr>
<td>Radial head fracture, closed</td>
<td>813.05</td>
<td>S52.122A</td>
</tr>
<tr>
<td>Radial head fracture, open</td>
<td>813.15</td>
<td>S52.122B</td>
</tr>
<tr>
<td>Fracture of radial head, closed</td>
<td>813.15</td>
<td>S52.123A</td>
</tr>
<tr>
<td>Fracture of radial head, open</td>
<td>813.15</td>
<td>S52.123A</td>
</tr>
<tr>
<td>Fracture of radial head, left, closed</td>
<td>813.15</td>
<td>S52.122A</td>
</tr>
<tr>
<td>Fracture of radial head, left, open</td>
<td>813.15</td>
<td>S52.122B</td>
</tr>
<tr>
<td>Fracture of radial head, right, closed</td>
<td>813.05</td>
<td>S52.121A</td>
</tr>
<tr>
<td>Fracture of radial head, right, open</td>
<td>813.15</td>
<td>S52.121B</td>
</tr>
<tr>
<td>Left radial head fracture</td>
<td>813.15</td>
<td>S52.122A</td>
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<tr>
<td>Right radial head fracture</td>
<td>813.05</td>
<td>S52.121A</td>
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<tr>
<td>Closed fracture of radial head</td>
<td>813.05</td>
<td>S52.122A</td>
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</table>
EXPANDED OPTIONS FOR FRACTURES
### Sample Documentation Requirements for Fractures of the Radius

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DOCUMENTATION REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fracture Type</td>
<td>Open, Closed, Pathologic, Physeal (Growth Plate) Fractures, Neoplastic Disease, Torus (Buckle) Fractures, Green Stick Fractures, Stress Fractures, Orthopedic Implant (fractures associated with), Bent Bone</td>
</tr>
</tbody>
</table>
Sample Documentation Requirements for Fractures of the Radius

<table>
<thead>
<tr>
<th>Healing</th>
<th>Routine</th>
<th>Delayed</th>
<th>Nonunion</th>
<th>Malunion</th>
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</thead>
<tbody>
<tr>
<td>Localization</td>
<td>Shaft</td>
<td>Lower End</td>
<td>Upper End</td>
<td>Head</td>
</tr>
<tr>
<td>Encounter</td>
<td>Initial</td>
<td>Subsequent</td>
<td>Sequelae</td>
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</tr>
<tr>
<td>Displacement</td>
<td>Displaced</td>
<td>Nondisplaced</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample Documentation Requirements for Fractures of the Radius

<table>
<thead>
<tr>
<th>Classification</th>
<th>Salter Harris I</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Salter Harris II</td>
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<tr>
<td></td>
<td>Salter Harris III</td>
</tr>
<tr>
<td></td>
<td>Salter Harris IV</td>
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<tr>
<td>Glystilo Type I or II</td>
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<tr>
<td></td>
<td>Glystilo Type IIIA, IIIB, or IIIC</td>
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<tr>
<td>Laterality</td>
<td>Right</td>
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<tr>
<td></td>
<td>Left</td>
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<td></td>
<td>Unspecified Side</td>
</tr>
<tr>
<td></td>
<td>Unilateral</td>
</tr>
<tr>
<td></td>
<td>Bilateral</td>
</tr>
<tr>
<td>Joint Involvement</td>
<td>Intra-articular</td>
</tr>
<tr>
<td></td>
<td>Extra-articular</td>
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</tbody>
</table>
## Thinking (Dictating) in ICD-10

<table>
<thead>
<tr>
<th>ICD-9 Descriptor and Code</th>
<th>ICD-10 Descriptor and Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>81315 Open fracture of head of radius</td>
<td>S52.122C Displaced fracture of head of left radius, initial encounter for open fracture type IIIA, IIIB, or IIIC</td>
</tr>
</tbody>
</table>

**Initial Sentence of Dictation**

- The patient is seen for evaluation of an open radial head fracture
- “The patient is seen for
  1) initial evaluation of a
  2) left
  2) open
  3) displaced
  2) type IIIA
  5) radial head fracture”
Some ICD-10 Specificity is Unlikely to be Used

- **M05.20 Rheumatoid vasculitis with rheumatoid arthritis of unspecified site**
  - M05.211 Rheumatoid vasculitis with rheumatoid arthritis of right shoulder
  - M05.212 Rheumatoid vasculitis with rheumatoid arthritis of left shoulder
  - M05.219 Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder
  - M05.221 Rheumatoid vasculitis with rheumatoid arthritis of right elbow
  - M05.222 Rheumatoid vasculitis with rheumatoid arthritis of left elbow
  - M05.229 Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow
  - M05.231 Rheumatoid vasculitis with rheumatoid arthritis of right wrist
  - M05.232 Rheumatoid vasculitis with rheumatoid arthritis of left wrist
  - M05.239 Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist
  - M05.241 Rheumatoid vasculitis with rheumatoid arthritis of right hand
  - M05.242 Rheumatoid vasculitis with rheumatoid arthritis of left hand
  - M05.249 Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand
  - M05.251 Rheumatoid vasculitis with rheumatoid arthritis of right hip
  - M05.252 Rheumatoid vasculitis with rheumatoid arthritis of left hip
  - M05.259 Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip
  - M05.261 Rheumatoid vasculitis with rheumatoid arthritis of right knee
  - M05.262 Rheumatoid vasculitis with rheumatoid arthritis of left knee
  - M05.269 Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee
  - M05.271 Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot
  - M05.272 Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot
  - M05.279 Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot
- **M05.29 Rheumatoid vasculitis with rheumatoid arthritis of multiple sites**
### My Priority

- **Vasculitis, ANCA positive**
  - ICDA9: 447.8
  - ICDA10: 177.5
  - Managed By: WILLIAMS MD, GARY W...
  - Last Assessed: 10 Dec 2013

### Health Maintenance/Risks

- **Health Maintenance**
  - V20.2
  - Z00.129
  - Last Assessed: 07 Oct 2013

### Other Problems

- **Asthma, extrinsic**
  - J45.909
  - Last Assessed: 12 Nov 2013

- **Complete tear of left rotator cuff**
  - M75.122
  - Last Assessed: 10 Dec 2013

- **Encounter for orthopedics**
  - V58.44
  - Z48.23
  - Last Assessed: 17 Dec 2013
**Refine Problem**
**Change Type To**
**Change Type To**

<table>
<thead>
<tr>
<th>Problem Type</th>
<th>ID-9</th>
<th>ID-10</th>
<th>Managed By</th>
<th>Last Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasculitis, ANCA positive</td>
<td>447.8</td>
<td>I77.6</td>
<td>WILLIAMS MD, GARY W...</td>
<td>10Dec2013 WILLIAMS MD,...</td>
</tr>
<tr>
<td>Health Maintenance/Risks</td>
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<tr>
<td>Health Maintenance</td>
<td>V29.2</td>
<td>200.129</td>
<td></td>
<td>07Oct2013 AHSAdmin, AHS</td>
</tr>
</tbody>
</table>

**Other Problems**

| New | Asthma | 492.06 | JS5.008 | 12Nov2013 WILLIAMS MD,... |
| New | Complex Entry | 727.61 | M5.122 | 10Dec2013 WILLIAMS MD,... |
| New | Chronic | V59.44 | Z48.23 | 17Dec2013 WILLIAMS MD,... |
Problem Conversion (up to 7 days)

Time to complete the CONVERSION of all MAPPED problems in
~400,000 charts)

- Actual Conversion of ICD-9 codes (already Mapped with the mapping tool) to ICD-10 will start at Go Live Weekend

- PRIORITY
  - First Week of Scheduled Encounters Convert All* Patients’ Problems
  - Patients with Most Frequent Encounters (frequent visitors)
  - Most Frequently Used Diagnoses (will map diagnosis in every chart)

- *Rare problems (only one instance in the data base) are not mapped
Problem Conversion (up to 7 days)
Time to complete the CONVERSION of all MAPPED problems in ~400,000 charts)

• IMPACT
  – Urgent Care (and any other add-on/unscheduled appointment)
  – Patient May Present with an “Unconverted” Problem

• OPTIONS
  – Right Click Add New (Rib Fracture) will display ICD-9 and ICD-10 Codes
  – Select an Unconverted Problem on the Patient’s Current Problem List
  – We will need to convert the problem (if we are billing for it)

  *Rare problems (only one instance in the database) are not mapped
Select Problem Without an ICD-10 Code
“Closed Rib Fracture”
CONVERT SELECTED PROBLEM

Right Click and Select “Convert Selected”
CONVERT PROBLEM OPTIONS

Screen opens with Suggested Options Including Closed Rib Fracture S22.39
If you do not like the options, you can search for additional problems.
Select Choice for Problem Conversion

You Select “Fracture of the Rib on the Right Side”
Select Choice for Problem Conversion

Press Convert
Problem Converted to Selected ICD-10

The Problem is Converted to Fracture of Rib of Right side with ICD-10 Code S22.31XA
Causes of Death, U.S. - 2005
Top Twelve Accounting for 60%

- Heart Disease, 26.6%
- Cancer, 22.8%
- Lung Diseases, 9.9%
- Accidents, 4.2%
- Diabetes, 3.1%
- Alzheimer's, 2.9%
- Pneumonia, 2.6%
- Kidney Disease, 1.8%
- Blood Poisoning, 1.4%
- Suicide, 1.3%
- Liver Disease, 1.1%
- Other, 14.2%

Top Ten Causes of Death in the US
- Heart Disease
- Cancer
- Stroke
- Chronic Obstructive Pulmonary Disease
- Unintentional Injuries
- Alzheimer's
- Diabetes
- Influenza/Pneumonia
- Kidney Disease
- Septicemia

Causes of death, children under 5, developing world

- Diarrhoea 23%
- Tuberculosis 2%
- Neonatal tetanus 5%
- Diarrhoea/measles 2%
- Measles 2%
- ARI/measles 5%
- ARI 25%
- Malaria 6%
- Malaria/ARI 2%
- Other 25%
- Whooping cough 3%

What People Die Of

Infectious and parasitic diseases

- Maternal + perinatal conditions
- Respiratory infections
- Malignant and other neoplasms
- Nutritional deficiencies
- Respiratory diseases
- Non-communicable diseases
- Ill. Injuries
- Other
Leading causes of *accidental* death in the United States

- Motor vehicle
- Unspecified nontransport accidents
- Falls
- Poisoning and noxious substances
- Drowning
- Exposure to smoke, fire, flames
- Other land transport accidents
- Complications of medical/surgical care
- Accidental discharge of firearms
TOBACCO USE IS A RISK FACTOR FOR SIX OF THE EIGHT LEADING CAUSES OF DEATH IN THE WORLD

- Millions of deaths (2005)
- Total deaths: 5,395

<table>
<thead>
<tr>
<th>Cause</th>
<th>Millions of Deaths</th>
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</thead>
<tbody>
<tr>
<td>Ischaemic heart disease</td>
<td>6,704</td>
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<tr>
<td>Cerebrovascular disease</td>
<td>4,66</td>
</tr>
<tr>
<td>Lower respiratory infections</td>
<td>3,552</td>
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<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>2,138</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>1,682</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1,270</td>
</tr>
<tr>
<td>Trachea, bronchus, lung cancers</td>
<td>962</td>
</tr>
<tr>
<td>Tobacco use</td>
<td>544</td>
</tr>
</tbody>
</table>

Out of the top 15 causes of death, if you could control your mortality, which cause would you choose for your own death? (From 2009 National Vital Statistics Report)

- Cancer: 15.7%
- Heart disease: 13.3%
- Stroke: 11.7%
- COPD: 10.4%
- Suicide: 3.0%
- Diabetes: 2.4%
- Chronic obstructive pulmonary disease: 2.2%
- Accidents: 2.2%
- Influenza: 1.2%
- Tuberculosis: 1.2%
- Other: 0.8%


- Unintentional injury: 45
- Cancer: 40
- Heart disease: 30
- Stroke: 20
- Suicide: 15
- HIV infection: 10
- Homicide: 5
- Chronic liver disease: 1

Causes of Death, Maine - 2005

- Top Thirteen, Accounting for 80%

- Heart Disease: 22.9%
- Other: 11.9%
- Cancer: 25.0%
- Other: 11.9%
- Cancer: 25.0%

Note: For comparison with data for 1999-2000, data for 1987-1996 were modified to account for ICD-10 rules instead of ICD-9 rules.
ICD-11 Development Underway

• The 11th version, ICD-11, is being prepared. The development phase will continue for three years and ICD-11 will be finalized in 2015 (Release in 2020?).

• For the first time, through advances in information technology, public health users, stakeholders and others interested can provide input to the beta version of ICD-11 using an online revision process.

• Peer-reviewed comments and input will be added through the revision period.

• When finalized, ICD-11 will be ready to use with electronic health records and information systems.

• WHO encourages broad participation in the 11th revision so that the final classification meets the needs of health information users and is more comprehensive.
THANK YOU

Questions?