Head Start to Implementation:
Preparing Now for ICD-10
(Focus on PCS)

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3M Health Information Systems

Head Start to Implementation: Preparing Now for ICD-10

- Reasons for change
- Basic structure of ICD-10-CM and ICD-10-PCS
- Differences between ICD-9 and ICD-10
- Preparing for implementation and change
Reasonn to Switch to ICD-10

ICD-9-CM ...
- has been used in the U.S. since 1979
- cannot keep up with medical technology
- does not allow new codes to be added as needed
ICD code set: 1001 uses

- Set healthcare policy
- Determine reimbursement
- Conduct research and clinical trials
- Measure quality of health care
- Evaluate health care providers
- Provide treatment options
- Track and manage health risk and disease process
ICD-10-CM Development

- With consideration of other code sets:
  - DSM-IV
  - NANDA (nursing classification)
  - ICD-O-2
ICD-10-CM: Major Changes

- Alphanumeric codes
- Addition of a 6th digit classification with a seventh digit extension
- Combination diagnosis/symptom codes
- Expanded injury codes, grouped according to site rather than type of injury
- Laterality
- V and E codes incorporated into the main classification
ICD-10-CM: Major Changes

- Obstetric codes identify trimester
- Separate categories for Type I and Type II diabetes
- Addition of ambulatory and managed care encounter information
- Postoperative complications codes expanded and located within the individual chapters
ICD Structure: Overview

- **ICD-9-CM**
  - Numeric
  - 17 chapters
  - \(V\) codes and \(E\) codes additional

- **ICD-10-CM**
  - Alphanumeric and includes all letters except “U”
  - 21 chapters
  - \(V\)-codes and \(E\)-codes in main classification

\[
E \Rightarrow V, W, X, Y \\
V \Rightarrow Z
\]
ICD Structure: Overview

- Retained some ICD-9 modifications
  - Combination codes
    - A02.21 Salmonella meningitis
    - A02.22 Salmonella pneumonia
- Removed some ICD-9 modifications
  - No 5th digit for episode of care
    - I21 Acute myocardial infarction
    - I22 Subsequent acute myocardial infarction
ICD-10-CM Structure: Codes

Valid codes can be 3, 4, 5, 6 or 7 characters

- **K23** Disorders of esophagus in diseases classified elsewhere
- **K44.1** Diaphragmatic hernia with gangrene
- **K29.01** Acute gastritis with bleeding
- **K50.114** Crohn’s disease of Ig. intestine with abscess
- **S20.112a** Abrasion of breast, left breast, initial encounter

Source: 3M Health Information Systems
ICD-10-CM Structure : Codes

A00-B99 Infectious/Parasitic Disease
C00-D48 Neoplasms
G00-G99 Nervous System
H00-H95 Sense Organs
I00-I99 Circulatory System
O00-O99 Pregnancy/Childbirth

• First character always a letter
• Second and third characters always numbers
• Fourth and fifth characters either numbers or letters
• In some cases, fifth character uses lowercase "x" as place holder: T38.1x5

Source: 3M Health Information Systems
ICD-10-CM Example: Injury
Seventh Character Extensions

- Expansion of injury codes
  - S00.411 Abrasion of ear, right ear

  5th digit defines type of injury
  6th digit defines laterality
ICD-10-CM Example: Combination codes

- Combination codes for diagnosis and symptom
  - I25.12 Atherosclerotic heart disease with unstable angina
  - N41.01 Acute prostatitis with hematuria
  - K71.51 Toxic liver disease with chronic active hepatitis with ascites
ICD-10-CM Example: Obstetrics

ICD-10-CM

O15.03 Eclampsia in pregnancy, third trimester:

O15 = Eclampsia

.0 = in pregnancy

3 = third trimester

ICD-10 (WHO version)

O15.0 Eclampsia in pregnancy
ICD-10-CM Example:
Diabetes

E11.621 Type 2 diabetes mellitus with foot ulcer

E11 = Type 2 diabetes mellitus
.6 = with other specified complications
 2 = skin complications
 1 = foot ulcer
ICD-10-CM: Field Testing Project

National Committee on Vital and Health Statistics (NCVHS) called for ICD-10-CM coding study by Health and Human Services (HHS)

- Conducted June-August 2003
- 6,177 medical records coded
- ICD-10-CM seen as improvement
- Sixteen hours or less of training needed
- No time difference in coding
Development of ICD-10-PCS
PCS – Procedure Coding System

- Replacement for ICD-9-CM, procedures
- 1998 – first version released by CMS
- Annual updates since that time
- Not in use at this time
I-10 PCS: 
Essential Characteristics

Seven Character Alphanumeric Code

- Digits 0 - 9
- Letters A-H, J-N, P-Z

Source: 3M Health Information Systems
I-10 PCS: 
Essential Characteristics

- **Completeness:** unique code for every distinct procedure
- **Expandability:** easily adapts to changes in technology and clinical practice
- **Standardized terminology:** terms have a single precise meaning
- **Multiaxial:** fixed order, each character functions independently
PCS Character Assignment: Medical and Surgical Procedures

1st Section
2nd Body System
3rd Root Operation
4th Body Part
5th Approach
6th Qualifier
7th Device

Source: 3M Health Information Systems
PCS Codes: Each Code Tells a Story

Med/Surg  Drainage  Brain  Open  None  Drainage Device

PCS Code: 0090000Z

Source: 3M Health Information Systems
Section (1st character)

1st  2nd  3rd  4th  5th  6th  7th

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

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Body System (2nd character)

- Identifies general area of procedure

**Examples:**

1. Peripheral Nervous System
2. Heart and Great Vessels
3. Respiratory System
4. Mouth and Throat
5. Gastrointestinal System
Root Operation (3rd character)

- Identifies essential surgical action performed
- Examples in Medical/Surgical:
  - 0 Alteration
  - 1 Bypass
  - 2 Change
  - 3 Control
  - 4 Creation
  - 5 Destruction
  - 6 Detachment
  - 7 Dilation
Body Part (4th character)

- Describes specific body part on which the procedure was performed
  - Body parts include lesions, polyps, etc. found in/on the body part
- Example: body system D, Gastrointestinal
  - 0 Esophagus
  - 1 Esophagus, Upper
  - 5 Upper Intestine

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**Approach (5<sup>th</sup> character)**

<table>
<thead>
<tr>
<th>1&lt;sup&gt;st&lt;/sup&gt;</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt;</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt;</th>
<th>4&lt;sup&gt;th&lt;/sup&gt;</th>
<th>5&lt;sup&gt;th&lt;/sup&gt;</th>
<th>6&lt;sup&gt;th&lt;/sup&gt;</th>
<th>7&lt;sup&gt;th&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicates the method used to reach the body part</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13 different approaches made up of three basic types, plus the external approach:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Open</strong> =&gt; <strong>Open intraluminal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percutaneous</strong> =&gt; <strong>Percutaneous intraluminal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transorifice</strong> =&gt; <strong>Transorifice intraluminal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Device (6th character)

1st  2nd  3rd  4th  5th  6th  7th

- Describes a device placed during the procedure
- Applies only to devices that remain after the procedure is completed
  - Grafts and prostheses (skin graft, joint prosthesis)
  - Implants (IUD, brachytherapy seeds)
  - Simple/Mechanical Appliances (tracheostomy tube, VAD)
  - Electronic Appliances (pacemakers, infusion pumps)
### Qualifier (7th character)

<table>
<thead>
<tr>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
</tr>
</thead>
</table>

- **Unique meaning for different root operations**

#### Examples:

- *Genetic compatibility of transplant*
- *Biopsy (diagnostic excision)*
- *Destination site for a bypass*
- *Original procedure being revised*
Number of PCS codes by section = 86,617

- Medical and Surgical: 77,242
- Obstetrics: 331
- Placement: 864
- Administration: 1,401
- Measurement and Monitoring: 290
- Extracorporeal Assistance and Performance: 26
- Extracorporeal Therapies: 34
- Osteopathic: 100
- Other Procedures: 21
- Chiropractic: 90
- Imaging: 2,466
- Nuclear Medicine: 458
- Radiation Oncology: 1,823
- Rehabilitation and Diagnostic Audiology: 1,382
- Mental Health: 30
- Substance Abuse Treatment: 59
I-10-PCS Book Format

- **Matrix and index**
- **Index provides first three or four characters**
- **Matrix must be used to build valid code**
- **No eponyms are included**
### 0: Medical and Surgical Section

**D Gastrointestinal System**

**B: EXCISION: Cutting out or off, without replacement, a portion of a body part.**

<table>
<thead>
<tr>
<th>1 Esophagus, upper</th>
<th>0 Open</th>
<th>Z None</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Esophagus, middle</td>
<td>1 Open Intraluminal</td>
<td>X Diagnostic</td>
</tr>
<tr>
<td>3 Esophagus, lower</td>
<td>2 Open Intraluminal Endoscopic</td>
<td>Z None</td>
</tr>
<tr>
<td>4 Esophagogastric junction</td>
<td>3 Percutaneous</td>
<td>X Diagnostic</td>
</tr>
<tr>
<td>6 Stomach</td>
<td>4 Percutaneous Endoscopic</td>
<td>Z None</td>
</tr>
<tr>
<td>7 Stomach, pylorus</td>
<td>5 Percutaneous Intraluminal</td>
<td>Z None</td>
</tr>
<tr>
<td>9 Duodenum</td>
<td>6 Percutaneous Intraluminal Endoscopic</td>
<td>Z None</td>
</tr>
<tr>
<td>A Jejunum</td>
<td>7 Transorifice Intraluminal</td>
<td>Z None</td>
</tr>
<tr>
<td>B Ileum</td>
<td>8 Transorifice Intraluminal Endoscopic</td>
<td>Z None</td>
</tr>
<tr>
<td>C Ileocecal valve</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>H Cecum</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>J Appendix</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>K Ascending Colon</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>L Transverse Colon</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>M Descending Colon</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>N Sigmoid Colon</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>P Rectum</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>Q Anus</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>R Anal Sphincter</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>S Greater Omentum</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>T Lesser Omentum</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
<tr>
<td>V Mesentery</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>W Peritoneum</td>
<td>X Diagnostic</td>
<td>Z None</td>
</tr>
</tbody>
</table>
PCS Code Example:

“EGD with biopsy of stomach”
PCS Code Example:
“Drainage of liver, open”
## I-9-CM to I-10-PCS:
### “Excisional debridement of skin”

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-PCS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>86.22</td>
<td>0HBJZZZ</td>
<td>Excision, skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>right upper leg</td>
</tr>
<tr>
<td>86.22</td>
<td>0HBLZZZ</td>
<td>Excision, skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>right lower leg</td>
</tr>
<tr>
<td>86.22</td>
<td>0HB9ZZZ</td>
<td>Excision, skin buttock</td>
</tr>
<tr>
<td>86.2</td>
<td>0HBPZZZ</td>
<td>Excision, skin left foot</td>
</tr>
</tbody>
</table>

Source: 3M Health Information Systems

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ICD-10: Implementation Issues

- Codes are the language of healthcare
- When the code set changes it will affect all healthcare providers and payers

Areas of impact:

- Health Information Management (HIM)
- Patient Financial Services (PFS)
- Information Services (IS)
HIM: Implementation Issues

- Evaluate education needs:
  - **Expertise in medical terminology**
  - **Detailed knowledge of anatomy**
  - **Better comprehension of operative reports**
  - **Increased collaboration with medical staff**
  - **Comprehension, interpretation and application of ICD-10-PCS definitions**

Source: 3M Health Information Systems
HIM: Implementation Issues

- Consider alternative ways to increase the capabilities of coding staff
  
  - Begin a mentor program ("train the trainer")
  
  - Cross train (assign leadership)
  
  - Monthly education sessions (tracking, Q&A)
HIM: Implementation Issues

- Clinical Impact
  - Physician Documentation
    - Is the key to appropriate coding
    - Has been a problem since 1900s
    - Will need to meet expanded requirements
HIM: Implementation Issues

- Single most important step to take in determining weakness:
  - Gap analysis of current documentation and coding practices

- Audit for weaknesses in:
  - Coder knowledge of anatomy and surgical procedures
  - Physician documentation

Source: 3M Health Information Systems
Pay For Service: Implementation Issues

**Budgetary Impact**

- *Hospital Finance*
  - Inventory all reports containing procedure DRG information
  - Determine source of reports

**Clinical Impact**

- Reports should be inventoried
  
  By department, By user, By content

Source: 3M Health Information Systems
Retention of both ICD-9-CM and ICD-10 codes are based on the facility’s needs for:

- Research data
- Trending of clinical data and comprehensive clinical studies
- Case-mix analysis
- Financial information connected with DRGs

Source: 3M Health Information Systems
ICD-10 Preparation

- Educate affected personnel
  - HIM, Clinicians, Management, other departments
- Vendor preparation
- Contract renewals
- Communicate with regulatory agencies and payers
- Plan for transition
  - Teams, staffing, training, going live

Source: 3M Health Information Systems
ICD-10 Preparation

- Task Force members should include, but not be limited to:
  - Health Information Management
  - Patient Financial Services
  - Information Services
  - Medical Staff Affairs
  - Physician liaisons
  - Quality Management
  - Hospital Finance
ICD-10-CM resources

- Access ICD-10-CM on the NCHS website:
  http://www.cdc.gov/nchs/icd/icd10cm.htm#09update

- ICD-9-CM Coordination and Maintenance Meeting
  http://cms.hhs.gov/paymentsystems/icd9/
ICD-10-PCS resources

- Access ICD-10-PCS on the CMS website:
  

- 3M http://www.3m.com/us/healthcare/his/ICD-10.jhtml
Thank you!
ICD-10CM Resources

Questions/Comments?

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