Introducing a New Clinical Coding System: ICD-10-CM and ICD-10-PCS

Nelly Leon-Chisen, RHIA
Director of Coding and Classification
American Hospital Association
Objectives

Learn

- The important uses of the ICD-9-CM classification system and why a new version is needed
- The basic structure and format of ICD-10-CM and ICD-10-PCS
- The expected implementation date for ICD-10-CM and ICD-10-PCS
- The impact on recordkeeping systems in hospitals, physician offices, insurance companies, and payment systems
- To develop internal plans for ensuring your organization can meet the challenge
Uses of Clinical Coded Data

- Benchmarking and quality management--to improve the quality and effectiveness of patient care
- Decision-making (clinical, financial, funding, expansion, education)
- Healthcare policy and public health tracking
- Reimbursement
- Research
Regulatory Environment

- Update to the HIPAA Electronic Transaction Standards and Code Sets
- Final Rule published January 2009
  - Calls for update to 5010 claims transaction
  - **January 1, 2012 compliance**
- Final Rule published January 16, 2009
  - Calls for adoption of ICD-10-CM to replace ICD-9-CM diagnosis codes and ICD-10-PCS to replace ICD-9-CM Volume 3 (procedure codes)
  - **October 1, 2013 compliance**
Clinical Coding Diagnosis vs. Procedure

- ICD-9-CM – Volumes 1 and 2, HIPAA standard diagnosis coding for all clinical care settings (e.g. hospitals, physicians, home health, skilled nursing, insurance, etc.)
  - Upgrade to ICD-10-CM

- ICD-9-CM – Volume 3, HIPAA standard coding for hospitals to report inpatient services
  - Upgrade to ICD-10-PCS

- CPT/HCPCS – HIPAA standard for reporting outpatient services by hospitals and both inpatient and outpatient services by non-hospital providers (physicians, therapists, clinics, insurance, etc.)
  - No change
Context for Change

• ICD-9-CM is almost 30 years old
  – No room to add new codes to keep pace with current classification of medical conditions or technological advances
  – Not always precise or unambiguous
• Many countries have already adopted ICD-10
• U.S. mortality data (vital health statistics) already being reported using ICD-10—difficulty comparing mortality vs. morbidity data
• HIPAA Electronic Transactions and Code Sets notice of proposed rule 1998: “it is inevitable that there will be changes to coding and classification standards after the year 2000. For example ICD-10-CM may replace ICD-9-CM.”
Context for Change (cont.)

• Greater interest in more specific coding system
  – Increasing interest in using administrative data for quality reporting, value-based purchasing, biosurveillance
  – Reimbursement: would enhance accurate payment for services rendered
  – Quality: would facilitate evaluation of medical processes and outcomes
  – Provide better data to support performance measurement, outcome analysis, cost analysis and monitoring of resource utilization
RAND Cost Benefit Study - Costs

- Hardware and software changes, lost productivity, and training
- Transition estimated at $425 million to $1.15 billion for the first year, and $5 to $40 million dollars a year thereafter
- Assume simultaneous switch. If separate add up to another $20 to $170 million dollars
RAND Cost Benefit Study - Benefits

- Harder to quantify, but appear to outweigh the costs
- Estimated between $700 million dollars and $7.7 billion dollars over 10 years
- Benefits Include:
  - improvements to the quality of care and patient safety,
  - fewer rejected or questionable reimbursement claims,
RAND Cost Benefit Study – Benefits (cont.)

- improved information for disease management,
- more accurate reimbursement rates for emerging technologies
- better understanding of the value of new procedures
ICD-10-CM Development

- ICD-10 developed by World Health Organization (WHO)
- WHO authorized development of adaptation of ICD-10 for use in the U.S. for governmental purposes
- All modifications to ICD-10 must conform to WHO conventions for the ICD.
ICD-10-CM Major Changes

• Alphanumeric codes
• Restructured classification
• Expanded code length
• New features
Comparison of ICD-9-CM vs. ICD-10-CM (Diagnosis)

**ICD-9-CM**
- Approximately 13,000 codes
- Limited space for adding new codes
- Lacks detail
- Lacks laterality
- Difficult to analyze data due to nonspecific codes

**ICD-10-CM**
- Approximately 68,000 available codes
- Flexible for adding new codes
- Very specific
- Allows laterality and bilaterality
- Specificity improves coding accuracy and richness of data for analysis
<table>
<thead>
<tr>
<th><strong>ICD-9-CM</strong></th>
<th><strong>ICD-10-CM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 3-5 characters in length</td>
<td>- 3-7 characters in length</td>
</tr>
<tr>
<td>- First digit is numeric or alpha (V or E)</td>
<td>- First digit is alpha</td>
</tr>
<tr>
<td>- Digits 2-5 are numeric</td>
<td>- All letters except “U”</td>
</tr>
<tr>
<td>- Always at least 3 characters</td>
<td>- Digits 2 and 3 are numeric, digits 4-7 are alpha or numeric</td>
</tr>
<tr>
<td>- Decimal point: yes, after third digit</td>
<td>- Always at least 3 characters</td>
</tr>
<tr>
<td>- Dummy placeholder? no</td>
<td>- Decimal point: yes, after third character</td>
</tr>
<tr>
<td></td>
<td>- Dummy placeholder: “x”</td>
</tr>
<tr>
<td></td>
<td>- Alpha characters not case-sensitive</td>
</tr>
</tbody>
</table>
## Comparison of ICD-9-CM vs. ICD-10-CM (Diagnosis)

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Does not adequately define diagnoses needed for medical research</td>
<td>• Detail improves the accuracy of data used for medical research</td>
</tr>
<tr>
<td>• Does not support interoperability because it is not used by other</td>
<td>• Supports interoperability and the exchange of health data between the</td>
</tr>
<tr>
<td>countries</td>
<td>U.S. and other countries</td>
</tr>
</tbody>
</table>
### ICD-9-CM vs. ICD-10-CM Sample Codes

#### ICD-9-CM
- **438.11** Late effect of cerebrovascular disease, speech and language deficits, aphasia
  - **NOTE:** Category 438 is to be used to indicate conditions in 430-437 (subarachnoid hemorrhage, intracerebral hemorrhage, infarction cerebral arteries, infarction precerebral arteries), as the cause of late effects

#### ICD-10-CM
- **I69.020** Aphasia following nontraumatic subarachnoid hemorrhage
- **I69.120** Aphasia following nontraumatic intracerebral hemorrhage
- **I69.220** Aphasia following other nontraumatic intracranial hemorrhage
- **I69.320** Aphasia following cerebral infarction
- **I69.920** Aphasia following unspecified cerebrovascular disease
ICD-9-CM vs. ICD-10-CM Sample Codes (cont.)

ICD-9-CM

- **996.09** Other mechanical complication of cardiac device, implant, and graft
- **909.3** Late effect of complications of surgical and medical care

ICD-10-CM

- **T82.223A** Leakage of biological heart valve graft, initial encounter

  OR

- **T82.223D** Leakage of biological heart valve graft, subsequent encounter
- **T82.223S** Leakage of biological heart valve graft, sequela
ICD-10-PCS Development

- ICD-10 Procedure Coding System (ICD-10-PCS)
- HCFA (now CMS) contract to develop a new procedure coding system to replace ICD-9-CM inpatient procedure coding awarded to 3M HIS
ICD-10-PCS Code Structure

• Based on 7-character, alpha-numeric code
  – Digits 0-9
  – Letters A-H, J-N, P-Z
• Multiaxial structure with each code character having the same meaning within the specific procedure section and across procedure sections
## Summary Comparison of ICD-9-CM vs. ICD-10-PCS (Procedures)

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approximately 3,000 codes</td>
<td>• Approximately 87,000 available codes</td>
</tr>
<tr>
<td>• Based on outdated technology</td>
<td>• Reflects current usage of medical terminology and devices</td>
</tr>
<tr>
<td>• Limited space for adding new codes</td>
<td>• Flexible for adding new codes</td>
</tr>
<tr>
<td>• Lacks detail</td>
<td>• Very specific</td>
</tr>
<tr>
<td>• Lacks laterality</td>
<td>• Has laterality</td>
</tr>
<tr>
<td>• Generic terms for body parts</td>
<td>• Detailed descriptions for body parts</td>
</tr>
</tbody>
</table>

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# Summary Comparison of ICD-9-CM vs. ICD-10-PCS (Procedures)

<table>
<thead>
<tr>
<th></th>
<th>ICD-9-CM</th>
<th>ICD-10-PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lacks description of methodology and approach for procedures</td>
<td>Provides detailed descriptions of methodology and approach for procedures</td>
</tr>
<tr>
<td></td>
<td>Limits DRG assignment</td>
<td>Allows DRG definitions to better recognize new technologies and devices</td>
</tr>
<tr>
<td></td>
<td>Lacks precision to adequately define procedures</td>
<td>Precisely defines procedures with detail regarding body part, approach, any device used and qualifying information</td>
</tr>
</tbody>
</table>

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ICD-9-CM vs. ICD-10-PCS Structure

**ICD-9-CM**
- 3-4 digits
- All characters are numeric
- Decimal point: yes, after the second digit
- All codes have at least 3 characters

**ICD-10-PCS**
- Each code must have 7 characters
- Decimal point: No
- Each character can be either alpha or numeric
  - Numbers 0-9
  - Letters A-H, J-N, P-Z
  - Alpha characters are not case-sensitive
Medical & Surgical Procedures Character Assignment

1 - Section
2 - Body System
3 - Root Operation
4 - Body part/region
5 - Approach
6 - Device
7 - Qualifier
<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Esophagus</td>
<td>0 Open</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>1 Esophagus, Upper</td>
<td>1 Open Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Esophagus, Middle</td>
<td>2 Open Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Esophagus, Lower</td>
<td>3 Percutaneous Endoscopic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Esophageal Junction</td>
<td>4 Percutaneous Endoscopic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Stomach</td>
<td>5 Percutaneous Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Stomach, Pylorus</td>
<td>6 Percutaneous Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Small Intestine</td>
<td>7 Transorifice Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Duodenum</td>
<td>8 Transorifice Intraluminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Jejunum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Ileum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Ileocecal Valve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Large Intestine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Large Intestine, Right</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Large Intestine, Left</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Cecum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J Appendix</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K Ascending Colon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L Transverse Colon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M Descending Colon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Sigmoid Colon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Rectum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q Anus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Anal Sphincter</td>
<td>0 Open</td>
<td>Z None</td>
<td>Z None</td>
</tr>
<tr>
<td>S Greater Omentum</td>
<td>3 Percutaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T Lesser Omentum</td>
<td>4 Percutaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V Mesentery</td>
<td>Endoscopic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W Peritoneum</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ICD-9-CM</td>
<td>ICD-10-PCS</td>
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<td>-----------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• 42.41, Partial</td>
<td>• 0DT10ZZ, Open resection of upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>esophagectomy</td>
<td>esophagus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note: code does not reflect what part of esophagus was resected)
Coding Example

Open resection of upper esophagus 0DT10ZZ
0 - Medical and Surgical Section
D - Gastrointestinal system
T - Resection (root operation)
1 – Esophagus, Upper (body part)
0 - Open (approach)
Z - Without device
Z - Without qualifier
Who is Impacted?

- **Payers**
  - Reimbursement systems
  - Contracts
  - Claim systems
- **Providers**
  - Hospitals Physicians
  - Home health agencies
  - Skilled nursing facilities
- **Vendors**
- **Clearinghouses**
- **Employers**
- **Other business partners**
Provider Costs

• Personnel costs -- lost productivity, training
• Hardware and software changes
• Data conversion
Personnel Costs

- Training of coding personnel
- Training seminars on new coding guidelines, rules and definitions.
- Work with medical staff to ensure that the appropriate documentation is available to reap the benefits of greater specificity
- Lost productivity costs—
  - Time away from coding
  - Time to develop proficiency
Personnel training

• Get a headstart
  – Expand coders’ knowledge of medical terminology, anatomy and physiology, and disease process.
  – AHA and AHIMA educational sessions and educational articles
    • For example AHA’s Faye Brown Coding Handbook has bonus chapters on ICD-10
  – Notify management for budgeting purposes - training budget
Cross-Functional Team Membership

• Collaboration among departments will be necessary to identify information systems affected
• Members across clinical, financial and information systems area
• Get support from administration
• Be sure to involve both HIM department leaders as well as coders
Cross-Functional Team Activities

• Conduct systems inventory to determine:
  – where databases exist,
  – what software is available,
  – commercial vendor or a homegrown or proprietary program unique to the provider facility

• Plan future expansions
## Systems Likely To Be Affected

- Accounting systems
- Advanced Beneficiary Software
- Birth defect registries
- Billing
- Case management system
- Claims submission
- Clinical data reporting
- Clinical department systems
- Clinical protocols
- Clinical reminder systems
- Compliance checking systems
- Databases
- Decision support systems
- Disease management
- DRG grouper
- Electronic processing systems
- Encoder software
- E-prescribing
- Financial systems
- Hospital information system
- Interface engines
- Inpatient rehab facility patient assessment instrument data collection
Systems Likely To Be Affected (cont.)

- Managed care (HEDIS) reporting system
- Medical abstracting system
- Medical necessity
- Minimum data set collection system
- OASIS system
- Outpatient Code Editor
- Pharmacy systems
- POA systems
- Provider profiling

- Quality management
- Reports
- Registration and scheduling
- Research databases
- State birth registration systems
- State reporting systems
- Test ordering systems
- Utilization management
Commercial vs. Homegrown Software

• Work with major commercial vendors to ensure they are aware
  – Technical issues
  – Contractual issues
  – Costs
• Homegrown Systems
  – Technical issues
  – Costs
Hardware Issues

- Support both ICD-9-CM and ICD-10-CM and ICD-10-PCS coding systems
- Potential need for additional data storage space
Data Conversion

- Decisions, decisions, decisions
  - Cost/benefit analysis regarding database uses
  - Convert?
  - Cross-walk?
  - Dual systems?
Timing

- Start preparations before implementation date is set
- Notify administration
- Get estimated time frames for making changes for software change
- Short-list cross-functional teams
- Prudent purchase of educational materials