History of ICD-9-CM

- Pat Brooks, RHIA
- Senior Technical Advisor
- Centers for Medicare & Medicaid Services (CMS), Hospital and Ambulatory Policy Group

E-mail – patricia.brooks2@cms.hhs.gov
History of ICD-9-CM

- World Health Organization (WHO) developed ICD-9 for use worldwide
- U.S. developed clinical modification (ICD-9-CM)
  - Implemented in 1979 in U.S.
  - Expanded number of diagnosis codes
  - Developed procedure coding system

Pat Brooks, CMS
ICD-9-CM Users

• ICD-9-CM Diagnoses – used by all types of providers
• ICD-9-CM Procedures – used only by inpatient hospitals
• Current Procedural Terminology (CPT) – used for all ambulatory and physician procedure reporting

Pat Brooks, CMS
What is ICD-9-CM Used For?

- Calculate payment – Medicare Severity-Diagnosis Related Groups (MS-DRGs)
- Adjudicate coverage – diagnosis codes for all settings
- Compile statistics
- Assess quality

Pat Brooks, CMS
ICD-9-CM is Outdated

- 30 years old – technology has changed
- Many categories full
- Not descriptive enough

Pat Brooks, CMS
Why Do We Need a New Coding System?

- **Reimbursement** – would enhance accurate payment for services rendered
- **Quality** – would facilitate evaluation of medical processes and outcomes

Pat Brooks, CMS
What Characteristics Are Needed in a Coding System?

- **Flexible** enough to quickly incorporate emerging diagnoses and procedures
- **Exact** enough to identify diagnoses and procedures precisely

ICD-9-CM is *neither* of these

Pat Brooks, CMS
Reimbursement and Quality Problems With ICD-9-CM

• Example – fracture of wrist
  – Patient fractures left wrist
    • A month later, fractures right wrist
    • ICD-9-CM does not identify left versus right – requires additional documentation
  – ICD-10-CM describes
    • Left versus right
    • Initial encounter, subsequent encounter
    • Routine healing, delayed healing, nonunion, or malunion

Pat Brooks, CMS
Reimbursement and Quality Problems With ICD-9-CM

• Example – combination defibrillator pacemaker device
  – Codes for this device are not in the cardiovascular chapter of ICD-9-CM with other defibrillator and pacemaker devices
  – Coders and researchers have trouble finding these codes with this type of erratic code assignment
  – ICD-10-PCS provides distinct codes for all these types of devices, in an orderly manner that is easy to find

Pat Brooks, CMS
Benefits of Adopting the New Coding System

• Incorporates much greater specificity and clinical information, which results in
  – Improved ability to measure health care services
  – Increased sensitivity when refining grouping and reimbursement methodologies
  – Enhanced ability to conduct public health surveillance
  – Decreased need to include supporting documentation with claims

Pat Brooks, CMS
Cooperating Parties

- Each will discuss their organization’s perspective on ICD-10 and any implementation issues
  - Pat Brooks – ICD-10-PCS, Procedures
  - Donna Pickett – ICD-10-CM, Diagnoses
  - Nelly Leon-Chisen – American Hospital Association’s (AHA) role and views of implementation
  - Sue Bowman – American Health Information Management Association’s (AHIMA) role and views on implementation
  - Physician views on implementation

Pat Brooks, CMS
ICD-10-CM

- Donna Pickett, RHIA
- Medical Systems Administrator
- Centers for Disease Control and Prevention (CDC), National Center for Health Statistics
- Classifications and Public Health Data Standards

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Donna Pickett, CDC
ICD-10

• 1990 – Endorsed by World Health Assembly (diagnosis only)
• 1994 – Release of full ICD-10 by WHO
• 2002 (October) – ICD-10 published in 42 languages (including 6 official WHO languages)
• Implementation
  – 138 countries for mortality
  – 99 countries for morbidity
• January 1, 1999 – U.S. implemented for mortality (death certificates)
Countries Using ICD-10 For Reimbursement or Case Mix

- United Kingdom (1995)
- Nordic countries (Denmark, Finland, Iceland, Norway, Sweden) (1994 – 1997)
- France (1997)
- Australia (1998)
- Belgium (1999)
- Germany (2000)
- Canada (2001)
ICD-10-CM Development

• CM – Clinical Modification of ICD-10
• Consultation with
  – Physician groups
  – Clinical coders
  – Other users of ICD-9-CM
• Review of previous Coordination and Maintenance Committee recommendations that could not be incorporated into ICD-9-CM due to space limitations
• Not in use at this time

Donna Pickett, CDC
ICD-10-CM
Partial List of Reviewers

• American Academy of Dermatology
• American Academy of Neurology
• American Academy of Oral and Maxillofacial Surgeons
• American Academy of Orthopedic Surgeons
• American Academy of Pediatrics
• American College of Obstetricians and Gynecologists

Donna Pickett, CDC
ICD-10-CM
Partial List of Reviewers

- American Burn Association
- American Diabetes Association
- American Nursing Association
- American Psychiatric Association
- American Urological Association
- ANSI Z16.2 Workgroup (Worker’s Comp)
- National Association of Children’s Hospitals and Related Institutions

Donna Pickett, CDC
ICD-10-CM
Major Modifications

• Added trimesters to obstetrical codes (5th digits from ICD-9-CM will not be used)
• Revised diabetes mellitus codes (5th digits from ICD-9-CM will not be used)
• Expanded codes (e.g., injury, diabetes)
• Added code extensions for injuries and external causes of injuries

Donna Pickett, CDC
Laterality – Left Versus Right

C50.1  Malignant neoplasm, of central portion of breast

C50.111  Malignant neoplasm of central portion of right female breast

C50.112  Malignant neoplasm of central portion of left female breast

Donna Pickett, CDC
ICD-10-CM
Benefits of Enhancements

• Works well with and is consistent with the following:
  – Diagnostic and Statistical Manual of Mental Disorders (DSM IV)
  – Chapter 2 (Neoplasms) and morphology codes correspond to ICD-O-2, which have been used by cancer registry programs since 1995
  – Nursing classification (90 – 95%)

Donna Pickett, CDC
Structural Differences – ICD-9-CM Diagnoses

• ICD-9-CM has 3 – 5 digits
• Chapters 1 – 17: all characters are numeric
• Supplemental chapters: first digit is alpha (E or V), remainder are numeric
• Examples:
  – 496 Chronic airway obstruction not elsewhere classified (NEC)
  – 511.9 Unspecified pleural effusion
  – V02.61 Hepatitis B carrier

Donna Pickett, CDC
Structural Differences
ICD-10-CM Diagnoses

- ICD-10-CM has 3 – 7 digits
- Digit 1 is alpha (A – Z, not case sensitive)
- Digit 2 is numeric
- Digit 3 is alpha (not case sensitive) or numeric
- Digits 4 – 7 are alpha (not case sensitive) or numeric
  - A66  Yaws
  - A69.20  Lyme disease, unspecified
  - O9A.311  Physical abuse complicating pregnancy, first trimester
  - S42.001A  Fracture of unspecified part of right clavicle, initial encounter for closed fracture

Donna Pickett, CDC
Full Code Titles

ICD-9-CM
143  Malignant neoplasm of gum
   143.0  Upper gum
   143.1  Lower gum

ICD-10-CM
C03  Malignant neoplasm of gum
   C03.0  Malignant neoplasm of upper gum
   C03.1  Malignant neoplasm of lower gum

Donna Pickett, CDC
CDC Web Page

• General ICD-10 information
  http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm

• ICD-10-CM files, information and general equivalence mappings between ICD-10-CM and ICD-9-CM
  http://www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm

Donna Pickett, CDC
ICD-10-PCS, Procedures

- Pat Brooks, RHIA
- Senior Technical Advisor
- CMS, Hospital and Ambulatory Policy Group

E-mail – patricia.brooks2@cms.hhs.gov

Pat Brooks, CMS
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

Pat Brooks, CMS
Structural Differences
ICD-9-CM Procedures

• ICD-9-CM has 3 – 4 digits
• All 4 digits are numeric
  – 43.5 Partial gastrectomy with anastomosis to esophagus
  – 44.42 Suture of duodenal ulcer site

Pat Brooks, CMS
Structural Differences
ICD-10-PCS Procedures

• ICD-10-PCS has 7 digits
• Each can be either alpha (not case sensitive) or numeric
  – Numbers 0 – 9 are used
  – Letters O and I are not used to avoid confusion with numbers 0 and 1
• Examples
  – 0680ZZ Division, inferior vena cava, open
  – 0DQ107Z Repair, esophagus, upper, open with autograft

Pat Brooks, CMS
ICD-9-CM Angioplasty
Code 39.50

1,170 ICD-10-PCS angioplasty codes specifying body part, approach, and device, including
- 047K04Z Dilation of right femoral artery with drug-eluting intraluminal device, open approach
- 047K0DZ Dilation of right femoral artery with intraluminal device, open approach
- 047K0ZZ Dilation of right femoral artery, open approach
- 047K24Z Dilation of right femoral artery with drug-eluting intraluminal device, open endoscopic approach
- 047K2DZ Dilation of right femoral artery with intraluminal device, open endoscopic approach

Pat Brooks, CMS
Advantages of ICD-10-PCS

• Provides detailed information on procedures
• Ample space for capturing new technology and devices
• Logical structure with clear, consistent definitions

Pat Brooks, CMS
Electronic Version Available On ICD-10 Web Page

• Complete version of ICD-10-PCS – updated annually
• User guide manual
• Mapping between ICD-10-PCS and ICD-9-CM
• PowerPoint speaker slides
• Technical paper explaining system

http://www.cms.hhs.gov/ICD10

Pat Brooks, CMS
Impact on MS-DRGs

- MS-DRGs are being converted to ICD-10-CM and ICD-10-PCS
  - Beginning with digestive system
  - Presented at September 24 – 25, 2008 ICD-9-CM Coordination and Maintenance Committee Meeting
  - Will convert rest of MS-DRGs by October 1, 2009 (final version will be subject to rulemaking)

- Over time DRGs could be refined to take advantage of additional specificity

Pat Brooks, CMS
Role of AHA

• Nelly Leon-Chisen, RHIA
• Director, Central Office on ICD-9-CM
• AHA

E-mail – nleon@aha.org
Role of AHA

• Cooperating Party member
• Central Office on ICD-9-CM
• Publisher of *AHA Coding Clinic for ICD-9-CM*
• Publisher of Faye Brown’s *ICD-9-CM Coding Handbook*
• Provide coding education
  – Audioseminar series
  – Speaker’s bureau

Nelly Leon-Chisen, AHA
AHA Central Office on ICD-9-CM

• Established in 1962 by Memorandum of Understanding
• Housed within the AHA
• Clearinghouse for issues related to the use of ICD-9-CM
• Maintains integrity of classification system

Nelly Leon-Chisen, AHA
AHA Central Office on ICD-9-CM

• Recommends revisions and modifications to current and future revisions of ICD
• Develops educational material and programs on ICD-9-CM
• Publishes *AHA Coding Clinic for ICD-9-CM*

Nelly Leon-Chisen, AHA
AHA Coding Clinic for ICD-9-CM

• Published since 1984
• Quarterly newsletter
  – Ask the Editor Section – FAQs
  – Educational articles
  – Fourth Quarter Issue – yearly code updates
  – Present on Admission Section
• Supported by Cooperating Parties and Editorial Advisory Board

Nelly Leon-Chisen, AHA
AHA Coding Clinic for ICD-9-CM Major Functions

• Provide official ICD-9-CM coding advice and official guidelines
• Answer questions on code assignment and sequencing of codes
• Serve as a current reference on regulatory and other requirements for reporting diagnostic and procedural information from medical records

Nelly Leon-Chisen, AHA
AHA Coding Clinic for ICD-9-CM Major Functions

• Present topics and articles that provide practical information
• Improve technical coding skills
• Address issues facing ICD-9-CM users on data reporting requirements, data edits, record documentation, and other ICD-9-CM related matters

Nelly Leon-Chisen, AHA
AHA - Faye Brown’s
*ICD-9-CM Coding Handbook*

- First coding training book published in the U.S.
- First edition developed by the founder of AHA Central Office
- Textbook in coding and Health Information Management (HIM) programs
- Revised annually by AHA Central Office on ICD-9-CM

Nelly Leon-Chisen, AHA
AHA’s Role in ICD-10  
Past and Current

• Participated in testing and development of ICD-10
• AHA/AHIMA ICD-10-CM field testing
• Planning for ICD-10 implementation for years
• ICD-10 articles, slide presentations, speaker at conferences

Nelly Leon-Chisen, AHA
AHA’s Role in ICD-10 Past and Current

  – Preview chapters on ICD-10-CM and ICD-10-PCS
  – Preparing for ICD-10 implementation (HIM/coding staff and institutions)
  – Implementation issues to consider

Nelly Leon-Chisen, AHA
AHA’s Future Plans for ICD-10

• Central Office on ICD-10
• Coding Clinic for ICD-10
• Train the Trainer
• Education and outreach for hospitals

Nelly Leon-Chisen, AHA
AHA Central Office on ICD-10

- Continue support of coding questions clearinghouse function
- Direct responses to individual coding questions
- Cooperating Parties

Nelly Leon-Chisen, AHA
AHA Coding Clinic for ICD-10

• Continue major functions – similar to AHA Coding Clinic for ICD-9-CM

• Continue same format
  – Subscription
  – Electronic
  – Via encoder products

Nelly Leon-Chisen, AHA
AHA ICD-10 Education Plans

• Train the Trainer
• Collaboration with State hospital associations
• Training and education
  – Overview versus in-depth training, depending on individual role and timing
    • Prudent purchase of educational resources
    • Trusted source
    • In-depth training of coders 3 – 6 months prior to implementation

Nelly Leon-Chisen, AHA
AHA Hospital
Implementation Issues

• Budgeting
• Personnel training
• Working with medical staff to ensure appropriate documentation available to reap the benefits of greater specificity
• Hardware and software changes
• Data conversion

Nelly Leon-Chisen, AHA
AHA Team Approach to Implementation

• Cross-functional team membership
  – Collaboration among departments necessary to identify information systems affected
  – Members across clinical, financial, and information systems areas
  – Get support from administration
  – Involve HIM department leaders as well as coders

Nelly Leon-Chisen, AHA
AHA 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 provider facility

• Plan future expansions

Nelly Leon-Chisen, AHA
AHA Timing

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

Nelly Leon-Chisen, AHA
AHA Resources

• Central Office on ICD-9-CM
  http://www.ahacentraloffice.org

• AHA Central Office ICD-10 Resource Center
  http://www.ahacentraloffice.org/ICD-10

Nelly Leon-Chisen, AHA
AHIMA Role

• Sue Bowman, RHIA, CCS
• Director, Coding Policy and Compliance
• AHIMA

E-mail – Sue.Bowman@ahima.org

Sue Bowman, AHIMA
AHIMA Academic Preparation

• HIM curriculum at all academic levels currently have ICD-10 as a required knowledge cluster
• As implementation plan is realized, will expand content of educational preparation for the learning domain: Clinical Classification Systems
  – Expand training requirement that already exists in all model curricula

Sue Bowman, AHIMA
AHIMA Academic Preparation

• AHIMA Education Strategy Committee will develop transition and implementation strategy to pull ICD-10 coding, reimbursement, and change management knowledge clusters into associate and baccalaureate model curriculums
• Master’s level programs will also be updated to reflect changes in managerial and organizational skills

Sue Bowman, AHIMA
AHIMA Academic Preparation

• The Approval Committee for Certificate Programs will develop an impact plan for approved coding programs including comprehensive training on ICD-10 in the Coding Model Curriculum
• AHIMA Virtual Lab will have ICD-10 available through our coding vendor
  – HIM students conduct skill labs using the encoder
  – Software and lesson plans will be available for skills training

Sue Bowman, AHIMA
AHIMA Academic Preparation

• Will call upon educational relationships through AHIMA International Education Workgroup of educators, who have converted to ICD-10 and are experienced with conversion strategies, to help us
• Newly launched (July 2008) AHIMA CourseShare, national clearinghouse for HIM educators to share learning packets
  – Web destination can be a conduit to quickly distribute ICD-10 public information to all HIM educational programs

Sue Bowman, AHIMA
AHIMA Educational Plan

• Targeted educational model for defined ICD-10 audience segments
  – HIM and executive level leadership
  – Educators and current students
  – Experienced coders
  – Managers of data
  – Care providers, etc.

• Tailored to address varying needs over time leading up to implementation date
  – General, Expert, and Maintenance level training needs

Sue Bowman, AHIMA
AHIMA ICD-10 Resources

- ICD-10 Online Courses
  - ICD-10-CM Overview: Deciphering the Code
  - ICD-10-PCS Overview: Deciphering the Code
- ICD-10 Preview Book
- ICD-10-CM Proficiency Assessment
- Coming soon: ICD-10-PCS Proficiency Assessment
- Implementation Preparation Checklist
- Audio seminars
- Conferences
  - Coding Regional Meetings
  - National Convention
- Journal articles

http://www.ahima.org/icd10

Sue Bowman, AHIMA
AHIMA Transition Resources

• Implementation guidance
  – Health care facilities – moving to ICD-10
  – Certified coders – maintaining credentials
  – Educational institutions – shifting curriculum

• Practical change management tools
  – Toolkits and checklists
  – Talking points
  – Lessons learned

Sue Bowman, AHIMA
AHIMA Summary – ICD-10-CM and PCS Testing

• AHA, AHIMA, and CMS contractors participated in testing
• Training should occur 3 – 6 months prior to implementation
• 2 – 3 days of training adequate for ICD-10-CM
• After initial learning curve, participants use ICD-10-PCS easily

Sue Bowman, AHIMA
AHIMA Implementation Planning Recommendations

- Situational analysis
  - Identify stakeholders
  - Assess impact
  - Formulate strategies and identify goals
  - Develop education/training plans for employees at all levels
  - Develop information systems/technology systems change implementation plan that includes testing and "go live" dates
  - Plan for documentation changes

Sue Bowman, AHIMA
AHIMA Implementation Planning Recommendations

• Strategic Implementation/Organizing
  – Acquire resources to implement the plan
    • Evaluate financial impact on organization
  – Planning for Strategic Control
    • Develop objectives
    • Plan measurement tools
    • Plan evaluation strategies
    • Plan action steps for implementation

Sue Bowman, AHIMA
Possible Systems and Applications Affected (AHIMA Suggestions)

Encoding software
Case mix systems
Medical record abstracting
Billing systems
Registration and scheduling systems
Accounting systems
Decision support systems
Clinical systems
Utilization management
Quality management

Case management
Clinical protocols
Test ordering systems
Clinical reminder systems
Performance measurement systems
Medical necessity software
Disease management systems
Provider profiling systems
Aggregate data reporting

Sue Bowman, AHIMA
PLEASE RETURN THIS FORM TO RECEPTIONIST

Pt Name:__________Date:_______
Bill #:________ [ ] Care [ ] Priv.
[ ] MC [ ] Medicaid [ ] Cash

Time In:______ Time Out:______

SYMPTOMS/ DIAGNOSIS
R10.9  Abdom. Pain
R63.4  Abn. Weight Loss
T78.4  Allergic Reaction
G30.9  Alzheimers
D64.9  Anemia
D51.0  Anemia, Pernicious
I20.9  Angina
F41.9  Anxiety
R06.81 Apnea
I49.9  Arrhythmia, Cardiac
I70.0  Atherosclerosis - Aorta
J45.909 Asthma
I48.0  Atrial Fib.
I48.1  Atrial Flutter
I47.1  Atrial Tach.
E53.8  B-12 Defic.
M54.9  Back Pain
K92.1  Blood - Stool
N40.0_ BPH
R00.1  Bradycardia
I49.5  Brady/Sick Sinus
J42  Bronchitis, Chronic
J20._  Bronchitis, Acute

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Sue Bowman, AHIMA
Web Resources

CMS

- General ICD-10 Information (including regulations)
  http://www.cms.hhs.gov/ICD10
- ICD-10-PCS Coding System and Training Manual
  http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/08_ICD10.asp
- ICD-10-PCS Files
  http://www.cms.hhs.gov/ICD10/02_ICD-10-PCS.asp#
- ICD-10-CM Coding System
  http://www.cms.hhs.gov/ICD10/03_ICD_10_CM.asp#
Web Resources

CDC

• General ICD-10 information
  http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm

• ICD-10-CM files, information and general equivalence mappings between ICD-10-CM and ICD-9-CM
  http://www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm
Web Resources

AHA

• Central Office on ICD-9-CM
  http://www.ahacentraloffice.org

• AHA Central Office ICD-10 Resource Center
  http://www.ahacentraloffice.org/ICD-10

AHIMA

• ICD-10 General Information
  http://www.ahima.org/icd10
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