

# ICD-10-CM/PCS Implementation and General Equivalence Mappings (Crosswalks) Overview



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# ICD-10 Final Rule

## CMS-0013-F

- Published January 16, 2009
- October 1, 2013 – Compliance date for implementation of ICD-10-Clinical Modification (CM) and ICD-10-Procedure Coding System (PCS)
- No impact on Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes

<http://edocket.access.gpo.gov/2009/pdf/E9-743.pdf>

# ICD-10 Final Rule Issues

- Single implementation date for all users
  - Date of service for ambulatory and physician reporting
  - Date of discharge for inpatient settings
- ICD-9-CM codes will not be accepted for services provided on or after October 1, 2013
- ICD-9-CM claims for services prior to implementation date will continue to flow through systems for a period of time

# ICD-10 Final Rule Issues

- Outreach and education
  - CMS has collaboratively developed materials and conducted outreach conference calls with American Hospital Association (AHA), American Health Information Management Association (AHIMA), and Centers for Disease Control and Prevention (CDC) (Cooperating Parties)

[http://www.cms.hhs.gov/ICD10/05\\_Educational\\_Resources.asp](http://www.cms.hhs.gov/ICD10/05_Educational_Resources.asp)

[http://www.cms.hhs.gov/ICD10/07\\_Sponsored\\_Calls.asp](http://www.cms.hhs.gov/ICD10/07_Sponsored_Calls.asp)

# ICD-10 Final Rule Issues

- Additional outreach and educational efforts in collaboration with Cooperating Parties are planned
- AHA, AHIMA, and others will also provide more detailed outreach and educational resources

# ICD-10 Final Rule Issues

- ICD-9-CM Coordination and Maintenance (C & M) Committee discusses
    - Updates to ICD-9-CM, ICD-10-CM, and ICD-10-PCS
    - Number of total codes changes with updates
- [http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03\\_meetings.asp](http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp)

# ICD-10 Final Rule Issues

- Agenda item for September 16 – 17, 2009  
ICD-9-CM C & M Committee Meeting
  - Should ICD-10 and/or ICD-9-CM be frozen prior to implementation?
  - When should the freeze begin?
- Register for meeting beginning August 14, 2009

[https://www.cms.hhs.gov/apps/events/upcoming\\_events.asp?strOrderBy=1&type=3](https://www.cms.hhs.gov/apps/events/upcoming_events.asp?strOrderBy=1&type=3)

# ICD-10 Final Rule Issues

- Resources available on CMS and CDC websites
  - Complete ICD-10-CM and PCS systems including guidelines
  - General Equivalence Mappings (GEM) between ICD-9-CM and ICD-10 (both ways)
  - User's Guide for GEMs
  - Abbreviated Reimbursement Mappings
  - Development of ICD-10 version of Medicare Severity Diagnosis Related Groups (MS-DRG)

# Complete Versions of ICD-10

- ICD-10-CM (Diagnoses)

[http://www.cms.hhs.gov/ICD10/02m\\_2009\\_ICD\\_10\\_CM.asp](http://www.cms.hhs.gov/ICD10/02m_2009_ICD_10_CM.asp)

- ICD-10-PCS (Procedures)

[http://www.cms.hhs.gov/ICD10/01m\\_2009\\_ICD10PCS.asp](http://www.cms.hhs.gov/ICD10/01m_2009_ICD10PCS.asp)

# ICD-9-CM Users

- ICD-10-CM will replace ICD-9-CM Diagnoses, which is used by all types of providers
- ICD-10-PCS will replace ICD-9-CM Procedures, which is used only by inpatient hospitals
- CPT and HCPCS, which are used for all ambulatory and physician procedure reporting, are not being replaced by ICD-10

# ICD-9-CM is Outdated

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

# Countries Using ICD-10 for Reimbursement or Case Mix

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

# Structural Differences – 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
  - 496 - Chronic airway obstruction not elsewhere classified (NEC)
  - 511.9 - Unspecified pleural effusion
  - V02.61 - Hepatitis B carrier

# Structural Differences – Diagnoses

- ICD-10-CM has 3 – 7 digits
- Digit 1 is alpha (A – Z, not case sensitive)
- Digit 2 is numeric
- Digits 3 – 7 are alpha (not case sensitive) or numeric
  - A78 – Q fever
  - 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

# Structural Differences – 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

# Structural Differences – 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
  - 0FB03ZX - Excision of liver, percutaneous approach, diagnostic
  - 0DQ10ZZ - Repair, upper esophagus, open approach

# Number of Codes – 2009

- Diagnoses
  - ICD-9-CM 14,025
  - ICD-10-CM 68,069
- Procedures
  - ICD-9-CM 3,824
  - ICD-10-PCS 72,589

# ICD-9/ICD-10 Code Mappings

- ICD-9 and ICD-10 codes are quite different
- Tools are needed to convert data
- GEMs
  - Designed to aid in converting applications and systems from ICD-9 to ICD-10
  - Bi-directional mappings
  - “Find and replace” codes or lists of codes

# Bi-Directional Mappings

Source →	Target	A.K.A.
From ICD-9-CM	To ICD-10-CM	“Forward mapping”
From ICD-10-CM	To ICD-9-CM	“Backward mapping”

# Use of GEMs to Convert Payment System

- CMS illustrated use of GEMs by developing ICD-10 version of MS-DRGs
  - Began with digestive MS-DRGs, Major Diagnostic Category (MDC 6)
  - Presented results at September 24, 2008 ICD-9-CM C & M Committee Meeting
  - Will complete all MS-DRGs by October 1, 2009
- [http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03\\_meetings.asp](http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp)

# MS-DRG Conversion Goals

- Coded in ICD-9 or ICD-10, the same patient is assigned to the same MS-DRG
- Clinically equivalent
- Definitions manual has familiar look and feel

## MDC 6, DISEASES & DISORDERS OF THE DIGESTIVE SYSTEM

<b>A00*</b>	Cholera (3 codes)
<b>A020</b>	Salmonella enteritis
<b>A03*</b>	Shigellosis (6 codes)
<b>A04*</b>	Other bacterial intestinal infections (10 codes)
<b>A050</b>	Foodborne staphylococcal intoxication
<b>A052</b>	Foodborne Clostridium perfringens [Clostridium welchii] intoxication
<b>A053</b>	Foodborne Vibrio parahaemolyticus intoxication
<b>A054</b>	Foodborne Bacillus cereus intoxication
<b>A055</b>	Foodborne Vibrio vulnificus intoxication
<b>A058</b>	Other specified bacterial foodborne intoxications
<b>A059</b>	Bacterial foodborne intoxication, unspecified

# Find and Replace Diagnosis Codes

## 4 ICD-9-CM Codes Replaced by 28 ICD-10-CM Codes

**DRG385** Inflammatory bowel disease w MCC

**DRG386** Inflammatory bowel disease w CC

**DRG38** Inflammatory bowel disease w/o CC/MCC

### PRINCIPAL DIAGNOSIS

**5550** Reg enteritis, sm intest

**5551** Reg enteritis, lg intest

**5552** Reg enterit sm/lg intest

**5559** Regional enteritis NOS

**DRG 385** Inflammatory bowel disease w MCC

**DRG 386** Inflammatory bowel disease w CC

**DRG 387** Inflammatory bowel disease w/o CC/MCC

### PRINCIPAL DIAGNOSIS

**K5000** Crohn's disease of small intestine without complications

**K50011** Crohn's disease of small intestine with rectal bleeding

**K50012** Crohn's disease of small intestine with intestinal obstruction

**K50013** Crohn's disease of small intestine with fistula

**K50014** Crohn's disease of small intestine with abscess

**K50018** Crohn's disease of small intestine with other complication

**K50019** Crohn's disease of small intestine with unspecified complications

**K5010** Crohn's disease of large intestine without complications

**K50111** Crohn's disease of large intestine with rectal bleeding

**K50112** Crohn's disease of large intestine with intestinal obstruction

**K50113** Crohn's disease of large intestine with fistula

**K50114** Crohn's disease of large intestine with abscess

**K50118** Crohn's disease of large intestine with other complication

**K50119** Crohn's disease of large intestine with unspecified complications

**K5080** Crohn's disease of both small and large intestine without complications

**K50811** Crohn's disease of both small and large intestine with rectal bleeding

**K50812** Crohn's disease of both small and large intestine with intestinal obstruction

**K50813** Crohn's disease of both small and large intestine with fistula

**K50814** Crohn's disease of both small and large intestine with abscess

**K50818** Crohn's disease of both small and large intestine with other complication

# Find and Replace Procedure Codes

2 ICD-9-CM Codes Replaced  
by 112 ICD-10-PCS Codes

**DRG335** Peritoneal  
Adhesiolysis w  
MCC

**DRG336** Peritoneal  
Adhesiolysis w CC

**DRG337** Peritoneal  
Adhesiolysis w/o  
CC/MCC

**OPERATING ROOM  
PROCEDURES**

5451 Lap periton adhesiolysis

5459 Oth periton adhesiolysis

**DRG 335** Peritoneal adhesiolysis w MCC

**DRG 336** Peritoneal adhesiolysis w CC

**DRG 337** Peritoneal adhesiolysis w/o CC/MCC

**OPERATING ROOM PROCEDURES: LYSIS**

**0DN80ZZ** Release Small Intestine, Open Approach

**0DN82ZZ** Release Small Intestine, Open Endoscopic Approach

**0DN83ZZ** Release Small Intestine, Percutaneous Approach

**0DN84ZZ** Release Small Intestine, Percutaneous Endoscopic Approach

**0DN90ZZ** Release Duodenum, Open Approach

**0DN92ZZ** Release Duodenum, Open Endoscopic Approach

**0DN93ZZ** Release Duodenum, Percutaneous Approach

**0DN94ZZ** Release Duodenum, Percutaneous Endoscopic Approach

**0DNA0ZZ** Release Jejunum, Open Approach

**0DNA2ZZ** Release Jejunum, Open Endoscopic Approach

**0DNA3ZZ** Release Jejunum, Percutaneous Approach

**0DNA4ZZ** Release Jejunum, Percutaneous Endoscopic Approach

**0DNB0ZZ** Release Ileum, Open Approach

**0DNB2ZZ** Release Ileum, Open Endoscopic Approach

**0DNB3ZZ** Release Ileum, Percutaneous Approach

**0DNB4ZZ** Release Ileum, Percutaneous Endoscopic Approach

**0DNE0ZZ** Release Large Intestine, Open Approach

**0DNE2ZZ** Release Large Intestine, Open Endoscopic Approach

# MS-DRGs Conversion Summary

	Diagnosis Codes	Procedure Codes	Total
<b>Number Of Unique Lists in MS-DRGs</b>	~200	~300	~500
<b>Codes in MDC 6 Lists Auto-Replaced by Gems</b>	99%	91%	95%
<b>Codes In MDC 6 Lists Auto-Replaced by Gems and Modified by Clinical Review</b>	1%	9%	5%

- The GEMs produce 95% of the MDC 6 mapping without any need for review
- The remaining 5% is based on MDC 6
  - Need for review of the remaining MDCs is expected to steadily decrease
  - As the rules derived for MDC 6 are applied to the remaining MDCs, fewer codes will need clinical review

# Overly Broad ICD-9 Procedure Codes

- Approximately 200 overly broad ICD-9 Procedure Codes identified
- Should an ICD-9 Procedure Code be replaced with *all* associated PCS codes *everywhere* an ICD-9 code is listed?
- Because PCS codes always specify body part, approach and device, 92.27 is associated with 261 PCS codes

## Examples of Overly Broad ICD-9 Codes

<b>ICD-9</b>	<b>Description</b>
92.27	Radioactive elem implant
86.09	Skin & subq incision NEC
83.82	Muscle or fascia graft
81.96	Other repair of joint
80.19	Other arthrotomy NEC
77.19	Bone incis w/o div NEC
39.50	Angio oth non-coronary
39.31	Suture of artery
39.29	Vasc shunt & bypass NEC
38.21	Blood vessel biopsy
01.24	Other craniotomy
04.04	Peripheral nerve incis NEC

# Solution for ICD-9 Overly Broad Procedure Codes

- Limit the assignment of PCS codes associated with overly broad ICD-9 codes to anatomic sites corresponding to each MDC
- MDC 6 Example
  - DRGs 356, 357, 358 Other Digestive System O.R. Procedures  
*92.27 Implantation or Insertion of Radioactive Elements*
- For Procedure 92.27, only 10 of the 261 PCS codes are assigned to MDC 6

## **Likely** in MDC 6

0DH571Z Insertion of Radioactive Element into Esophagus, Via Natural or Artificial Opening

0DHP81Z Insertion of Radioactive Element into Rectum, Via Natural or Artificial Opening Endoscopic

## **Extremely Unlikely** in MDC 6

08H0X1Z Insertion of Radioactive Element into Right Eye, External Approach

0BHL01Z Insertion of Radioactive Element into Left Lung, Open Approach

0HHU31Z Insertion of Radioactive Element into Left Breast, Percutaneous Approach

# ICD-9 Code Conflicts

- An ICD-10 Code is assigned to more than one ICD-9 code *and* the ICD-9 codes are assigned to different MS-DRGs
- To resolve the conflict for ICD-10 code I09.89, the ICD-10 code is assigned to the ICD-9 code 397.1, which results in the most appropriate MS-DRG assignment

*109.89 Other specified rheumatic heart diseases*  
Rheumatic disease of pulmonary valve

I09.89 combines the descriptions of two ICD-9 codes. All other rheumatic diseases of the heart currently classified have unique codes in ICD-10-CM, and according to frequency data ICD-9 code 398.99 is rarely used.

*398.99 Other rheumatic heart diseases*  
In MDC 5 DRG 314, 315, 316  
Other circulatory system diagnoses

*397.1 Rheumatic diseases of pulmonary valve*  
In MDC 5 DRG 306, 307  
Cardiac congenital and valvular disorders

# Use of GEMs to Convert Payment System

- Will discuss progress at future C & M meetings
  - Next meeting September 16 –17, 2009 in CMS auditorium, Baltimore, MD
  - Work completed to date has been posted
  - Will complete ICD-10 Grouper by October 2009
  - Will post complete Grouper by end of 2009
  - Final Grouper logic subject to rulemaking
- [http://www.cms.hhs.gov/ICD10/01m\\_2009\\_ICD10PCS.asp](http://www.cms.hhs.gov/ICD10/01m_2009_ICD10PCS.asp)

# Why Do We Need the GEMs?

## *ICD-10 is Much More Specific*

- Diagnoses
  - ICD-9-CM 14,025 codes
  - ICD-10-CM 68,069 codes
- Procedures
  - ICD-9-CM 3,824 codes
  - ICD-10-PCS 72,589 codes

# Why Do We Need the GEMs?

## *ICD-10 is Much More Specific*

- One ICD-9 Diagnosis Code represented by multiple ICD-10 codes

**82002** Fracture of midcervical section of femur, closed

*From* S72031A Displaced midcervical fracture of right femur, initial encounter for closed fracture

*From* S72031G Displaced midcervical fracture of right femur, subsequent encounter for closed fracture with delayed healing

*From* S72032A Displaced midcervical fracture of left femur, initial encounter for closed fracture

*From* S72032G Displaced midcervical fracture of left femur, subsequent encounter for closed fracture with delayed healing

*From* S72033A Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture

*From* S72033G Displaced midcervical fracture of unspecified femur, subsequent encounter for closed fracture with delayed healing

*From* S72034A Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture

*From* S72034G Nondisplaced midcervical fracture of right femur, subsequent encounter for closed fracture with delayed healing

*From* S72035A Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture

*From* S72035G Nondisplaced midcervical fracture of left femur, subsequent encounter for closed fracture with delayed healing

*From* S72036A Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture

*From* S72036G Nondisplaced midcervical fracture of unspecified femur, subsequent encounter for closed fracture with delayed healing

# Why Do We Need the GEMs?

- One ICD-10 Diagnosis Code represented by multiple ICD-9 codes

E11341 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema

To ICD-9 cluster

25050 Diabetes with ophthalmic manifestations, type II or specified type, not stated as uncontrolled

36206 Severe nonproliferative diabetic retinopathy

36207 Diabetic macular edema

# Why Do We Need the GEMs?

## *There are New ICD-10 Concepts*

- A few ICD-10 codes have no predecessor ICD-9 codes

T500x6A Underdosing of mineralocorticoids and their antagonists, initial encounter

T501x6A Underdosing of loop [high-ceiling] diuretics, initial encounter

T502x6A Underdosing of carbonic-anhydrase inhibitors, benzothiadiazides and other diuretics, initial encounter

T503x6A Underdosing of electrolytic, caloric and water-balance agents, initial encounter

T504x6A Underdosing of drugs affecting uric acid metabolism, initial encounter

T505x6A Underdosing of appetite depressants, initial encounter

T506x6A Underdosing of antidotes and chelating agents, initial encounter

T507x6A Underdosing of analeptics and opioid receptor antagonists, initial encounter

T508x6A Underdosing of diagnostic agents, initial encounter

T50906A Underdosing of unspecified drugs, medicaments and biological substances, initial encounter

T50996A Underdosing of other drugs, medicaments and biological substances, initial encounter

T50A16A Underdosing of pertussis vaccine, including combinations with a pertussis component, initial encounter

T50A26A Underdosing of mixed bacterial vaccines without a pertussis component, initial encounter

T50A96A Underdosing of other bacterial vaccines, initial encounter

T50B16A Underdosing of smallpox vaccines, initial encounter

T50B96A Underdosing of other viral vaccines, initial encounter

T50Z16A Underdosing of immunoglobulin, initial encounter

T50Z96A Underdosing of other vaccines and biological substances, initial encounter

# Why Do We Need the GEMs?

- *One ICD-10 Procedure Code captured by multiple ICD-9 codes*

**0270346** Dilation of Coronary Artery, One Site, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach

*To ICD-9 cluster*

0066 Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy

0040 Procedure on single vessel

0045 Insertion of one vascular stent

3607 Insertion Of Drug-Eluting Coronary Artery Stents(S)

0044 Procedure on vessel bifurcation

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

*To ICD-9 cluster*

0066 Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy

0040 Procedure on single vessel

0045 Insertion of one vascular stent

3607 Insertion Of Drug-Eluting Coronary Artery Stents(S)

# Why Do We Need the GEMs ?

- One ICD-9 Procedure Code captured by multiple ICD-10 codes
  - Notice the increased detail on the site and type of approach

## **8659** Suture Of Skin And Subcutaneous Tissue Of Other Sites

To 0JQ10ZZ Repair Face Subcutaneous Tissue and Fascia, Open Approach

To 0JQ13ZZ Repair Face Subcutaneous Tissue and Fascia, Percutaneous Approach

To 0JQ40ZZ Repair Anterior Neck Subcutaneous Tissue and Fascia, Open Approach

To 0JQ43ZZ Repair Anterior Neck Subcutaneous Tissue and Fascia, Percutaneous Approach

To 0JQ50ZZ Repair Posterior Neck Subcutaneous Tissue and Fascia, Open Approach

To 0JQ53ZZ Repair Posterior Neck Subcutaneous Tissue and Fascia, Percutaneous Approach

To 0JQ60ZZ Repair Chest Subcutaneous Tissue and Fascia, Open Approach

To 0JQ63ZZ Repair Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

To 0JQ70ZZ Repair Back Subcutaneous Tissue and Fascia, Open Approach

To 0JQ73ZZ Repair Back Subcutaneous Tissue and Fascia, Percutaneous Approach

To 0JQ80ZZ Repair Abdomen Subcutaneous Tissue and Fascia, Open Approach

To 0JQ83ZZ Repair Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

# Where Can I Find the Diagnosis and Procedure GEMs?

- The CMS website has the GEMs and User's Guides

[http://www.cms.hhs.gov/ICD10/01m\\_2009\\_ICD\\_10PCS.asp](http://www.cms.hhs.gov/ICD10/01m_2009_ICD_10PCS.asp)

[http://www.cms.hhs.gov/ICD10/02m\\_2009\\_ICD\\_10\\_CM.asp](http://www.cms.hhs.gov/ICD10/02m_2009_ICD_10_CM.asp)

# How Do I Read the GEMs?

## *GEM File Format*

Example from ICD-10

Diagnosis mapping

- ICD-10 Source system code on the left side
- ICD-9 Target system code in the middle
- Flags on the right

T500x1A	9620	10111
T500x1A	E8580	10112
T500x1D	9620	10111
T500x1D	E8580	10112
T500x1S	9090	10111
T500x1S	E9292	10112
T500x2A	9620	10111
T500x2A	E9504	10112
T500x2D	9620	10111
T500x2D	E9504	10112
T500x2S	9090	10111
T500x2S	E959	10112

# How Do I Read the GEMs?

- T1500xA 9300 10111
- T1500xA E914 10112
- T1500xD 9300 10111
- T1500xD E914 10112
- T1500xS 9085 10000

**T1500xA** Foreign body in cornea, unspecified eye, initial encounter

*To ICD-9 cluster*

9300 Corneal foreign body

E914 Foreign body accidentally entering eye and adnexa

**T1500xD** Foreign body in cornea, unspecified eye, subsequent encounter

*To ICD-9 cluster*

9300 Corneal foreign body

E914 Foreign body accidentally entering eye and adnexa

**T1500xS** Foreign body in cornea, unspecified eye, sequela

*To 9085* Late effect of foreign body in orifice

# How Do I Read the GEMs?

## *Flags*

- ICD-10 Procedure GEM
- Read as
  - 1 = On
  - 0 = Off
- Three different flags
  - “Approximate” - Flag 1
  - “No Map” - Flag 2
  - “Combination” - Flag 3  
(more detail in Flags  
4 – 5)

<u>PCS</u> →	<u>ICD-9</u>	+ <u>Flags</u>
0270346	0040	10112
0270346	0044	10115
0270346	0045	10113
0270346	0066	10111
0270346	3607	10114

# How Do I Read the GEMs?

## *The “Approximate” Flag*

- Column 1 of the flags
- 1 means the translation is an Approximate match
  - The majority of alternatives are considered an Approximate match
- 0 means the translation is an Identical match
  - Rare in the Procedure GEMs
  - More common in the Diagnosis GEMs
- Example of Approximate match, not Identical match
  - T1500xA 9300 10111
  - T1500xA E914 10112

# How Do I Read the GEMs?

## *The “Approximate” Flag*

- Column 1 of the flags
  - 0 means the translation is an Identical match
- Example of Identical match, ICD-9 code  
414.11 – Aneurysm of coronary vessels
  - 41411 I2542 00000

# How Do I Read the GEMs?

## *The “No Map” Flag*

- Column 2 of the flags
- 1 means there is *no* plausible translation for the source system code
- 0 means there is at least one plausible translation for the source system code
- Notice the NODX “No Description Found” entry instead of a code number in middle column
  - T500x6A NODX 1000
  - T500x6D NODX 1000
  - T500x6S NODX 1000

**T500x6A** Underdosing of mineralocorticoids and their antagonists, initial encounter

To NODX No description found

**T500x6D** Underdosing of mineralocorticoids and their antagonists, subsequent encounter

To NODX No description found

**T500x6S** Underdosing of mineralocorticoids and their antagonists, sequela

To NODX No description found

# How Do I Read the GEMs?

## *Scenario and Choice List*

- Flag 3
  - 1 means code maps to more than one code
  - 0 means the code maps to a single code
- Flags 4 and 5 further clarify combination entries

T1500xA	9300	10111
T1500xA	E914	10112
T1500xD	9300	10111
T1500xD	E914	10112
T1500xS	9085	10000

**T1500xA** Foreign body in cornea, unspecified eye, initial encounter

*To ICD-9 cluster*

9300 Corneal foreign body

E914 Foreign body accidentally entering eye and adnexa

**T1500xD** Foreign body in cornea, unspecified eye, subsequent encounter

*To ICD-9 cluster*

9300 Corneal foreign body

E914 Foreign body accidentally entering eye and adnexa

**T1500xS** Foreign body in cornea, unspecified eye, sequela

*To* 9085 Late effect of foreign body in orifice

# Reimbursement Mappings

- Some payers found GEM detail daunting
  - Developed streamlined Reimbursement Mapping
  - One-to-one best map or occasional cluster of codes when required
- Reimbursement Mappings provide simpler conversion of codes for reimbursement purposes or for use in legacy systems

# Development of Reimbursement Mapping

- Start with the ICD-10 to ICD-9 GEM
- Where an ICD-10 code is translated to one ICD-9 code, no additional review is necessary
  - 95% of the ICD-10 codes are translated to a single ICD-9 code
  - Many ICD-10 codes are translated to the same ICD-9 code

# Development of Reimbursement Mapping

- Where an ICD-10 code is translated to more than one ICD-9 code, historical ICD-9 code frequency data are used to determine the most commonly used ICD-9 code
  - Used Medicare Provider Analysis and Review (MedPAR) and California (for newborn and obstetrical codes) data
  - In vast majority of cases, there is a clear dominant code in terms of frequency
  - In rare cases, clinical review is needed to make the final choice

# How Do I Use the Reimbursement Mappings?

## *Reading the File*

- ICD-10 code on the left side
- Digit in the middle indicates the number of ICD-9 codes required for a complete translation
- ICD-9 code or codes on the right side
- Reimbursement Mapping examples
  - ICD-10-CM                      Single ICD-9 code  
    S72032G            1            82002
  - ICD-10-PCS                    ICD-9 code cluster  
    02733D6            5            0066 0043 0048 3606 0044

# Use of Mappings

- GEMs and Reimbursement Mappings designed to be used by all providers, payers, and data users
- Tools that assist in converting data
- Publicly available on the CMS and CDC websites
- We will continue to update and maintain the mappings

# CMS Use of Mappings

- Convert payment systems and edits
- Convert national and local coverage decisions
- Convert quality measures
- Convert risk adjustments
- Analyze trend data pre-and post-ICD-10 implementation

# ICD-10 Updates

- Posted on CMS ICD-10 website
  - 2009 Diagnosis GEMs and User's Guide
  - 2009 Procedure GEMs and User's Guide
  - 2009 Reimbursement Mappings
  - ICD-10 Digestive System MS-DRGs
  - 2009 version of ICD-10-CM and PCS codes and official coding guidelines

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

# ICD-10 Web Resources

## CMS

- ICD-10 General Information  
<http://www.cms.hhs.gov/ICD10>
- ICD-10 Educational Resources  
[http://www.cms.hhs.gov/ICD10/05\\_Educational\\_Resources.asp](http://www.cms.hhs.gov/ICD10/05_Educational_Resources.asp)
- ICD-10 CMS Sponsored Calls  
[http://www.cms.hhs.gov/ICD10/07\\_Sponsored\\_Calls.asp](http://www.cms.hhs.gov/ICD10/07_Sponsored_Calls.asp)
- ICD-10 Final Rule  
<http://edocket.access.gpo.gov/2009/pdf/E9-743.pdf>

# ICD-10 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>

# ICD-10 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>

Questions or Comments?

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### ICD-9 Notice

The International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification (ICD-9-CM) is published by the United States Government. A CD-ROM, which may be purchased through the Government Printing Office, is the only official Federal government version of the ICD-9-CM. ICD-9-CM is an official Health Insurance Portability and Accountability Act standard.