

ICD-10 Transition Overview

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Overview

- ❑ **Why the transition**
- ❑ **Who else is affected**
- ❑ **What CDC is doing**
- ❑ **Differences between ICD-9-CM and ICD-10 code sets**
- ❑ **Implementation Issues**

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Background

- ❑ **International Classification of Diseases (ICD) used to classify clinical diagnoses and in-hospital procedures**
- ❑ **Department of Health & Human Services has mandated a transition to ICD-10-CM/PCS on October 1, 2014**
 - ICD-10-CM – Clinical Modification (medical diagnoses)
 - ICD-10-PCS – Procedure Coding System (hospital inpatient procedures)
- ❑ **Mandate affects all entities covered by Health Insurance Portability and Accountability Act (HIPAA)**
- ❑ **ICD-10 was implemented for mortality reporting in the U.S. in 1999**

ICD Revisions

ICD Revision No.	Year of Conference When Adopted	Year in Use in the U.S.	ICD, Clinical Modification	Year in Use in the U.S.
First	1900	1900-1909		
Second	1909	1910-1920		
Third	1920	1921-1929		
Fourth	1929	1930-1938		
Fifth	1938	1939-1948		
Sixth	1948	1949-1957		
Seventh	1955	1958-1967		
Eighth	1965	1968-1978	ICDA-8 H-ICDA-1 H-ICDA-2	1968-1978 1968-1972 1973-1978
Ninth	1975	1979-1998	ICD-9-CM	1979
Tenth	1989	1999-	ICD-10-CM	Oct. 1, 2014

Implementation of ICD-10 International Perspective

- ❑ **Endorsed by the World Health Assembly in 1990**
- ❑ **World Health Organization publishes ICD-10 in 6 official languages of WHO; also available in 36 other languages**
- ❑ **ICD-10 was implemented for mortality reporting in the U. S. in 1999**

Implementation of ICD-10 for Morbidity Uses

Year of Implementation	Number of Countries
1995	8
1996	10
1997	15
1998	14
1999	11
2000	8
2001	5
2002	8
2003	5
2004	2
2005	4
2006	5
Total	95

Use of ICD in the U.S.

- ❑ ICD-10-CM was developed by CDC/National Center for Health Statistics**
- ❑ ICD-10-PCS was developed by Centers for Medicare and Medicaid Services**
- ❑ These two agencies are responsible for ICD-10 code sets use in U.S.**
- ❑ ICD-10-CM/PCS in public domain, however cannot be altered except through the Coordination and Maintenance Committee Meeting process**

HIPAA Administrative Simplification: Modifications to Medical Data Code Set Standards

- ❑ **Adopts ICD-10-CM as replacement for ICD-9-CM Volumes 1 and 2**
- ❑ **Adopts ICD10-PCS as replacement for ICD-9-CM Volume 3**
- ❑ **October 1, 2014 – Compliance date for implementation of ICD-10-CM/PCS**
- ❑ **Use of CPT codes remains unchanged**

Current Situation is not Sustainable

ICD-9-CM is not sufficiently robust to serve the health care needs of the future

- ❑ Due to the classification's age (30+ years) its content is no longer clinically accurate**
- ❑ Need better data to drive changes needed in health care today**
- ❑ The number of available codes is limited and the structure is restrictive**
- ❑ Unable to compare at international levels or compare ICD-9-CM diagnosis data with ICD-10 mortality data**

Benefits of the New Coding Sets

- ❑ Updated medical terminology and classification of diseases and procedures
- ❑ Allows easier comparison of mortality and morbidity diagnosis data
- ❑ Provides better data for:
 - Measuring care provided to patients
 - Tracking public health
 - Making clinical decisions
 - Identifying fraud and abuse
 - Improved data for epidemiological research
 - Designing payment systems/processing claims

ICD-10 Code Sets Final Rule

- ❑ **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, 2014**
- ❑ **ICD-9-CM claims for services prior to implementation date will continue to flow through systems for a period of time**

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Who Else is Affected? Anyone Who...

- ❑ Utilizes already-coded ICD-9-CM data**
- ❑ Supports systems that consume ICD-9-CM data**
- ❑ Analyzes public-use data files derived from or including ICD-9-CM codes**
- ❑ Assigns codes to verbatim diagnosis/procedure information**
- ❑ Uses ICD-9-CM codes to define health conditions or service coverage**

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ICD-10 Transition Workgroup

- ❑ CDC formed this Workgroup in 2011 under the Information Resources Governance structure to facilitate transition for CDC**
- ❑ Representation from all Centers/Institute/Offices**
- ❑ Two Co-Chairs, 3 support team members**
- ❑ Executive Lead**

Goals of Workgroup

- ❑ Create awareness of transition**
- ❑ Identify impacted programs within CDC**
- ❑ Identify program needs/gaps/issues**
- ❑ Address commonly identified needs where possible**
- ❑ Leverage and repurpose existing resources; share developed resources**

Completed Workgroup Activities

- ❑ **CDC Needs Assessment survey (all CDC programs)**
 - Training Needs supplement survey
- ❑ **CDC Impact Analysis (4 CDC programs)**
- ❑ **Resource Repository**
- ❑ **Internal intranet site ([link](#))**
- ❑ **Posters for NCHS and AMIA conferences (2012)**

Upcoming Workgroup Activities

- ❑ Training (this overview, General Equivalence Mappings, birth defects/disabilities/blood disorders, injuries, general CM, etc.)**
- ❑ Outreach campaign to create awareness**
- ❑ External internet site**
- ❑ Share resources/trainings**
- ❑ Conference presentations**

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 - **Clinical Modification**
 - **Procedure Coding System**
- ❑ **Implementation Issues**

ICD-10-CM Structure

Differences Between ICD-9-CM and ICD-10-CM

ICD-9-CM	ICD-10-CM
14,025 codes	69,823 codes
3 -5 characters	3 -7 characters
First character is numeric or alpha (E or V)	Character 1 is alpha (all letters except U are used)
Characters 2-5 are numeric	Character 2 is numeric
Always at least 3 characters	Characters 3 -7 are alpha or numeric
Use of decimal after 3 characters	Use of decimal after 3 characters
	Use of dummy placeholder "x"
	Alpha characters not case-sensitive

ICD-10-CM

Major Modifications

- ❑ **Addition of sixth character**
- ❑ **Addition of laterality**
- ❑ **Combining dagger/asterisk codes**
- ❑ **Created combination diagnosis/symptoms codes**
- ❑ **Deactivated procedure codes**

ICD-10-CM Major Modifications [continued]

- ❑ Added trimesters to OB codes (fifth-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**

Injury Codes in ICD-9-CM/ICD-10

□ Open wounds

- laceration w/foreign body
- laceration w/o foreign body
- puncture wound w/foreign body
- puncture wound w/o foreign body
- animal bite

□ Superficial wounds

- abrasion
- blister
- contusion
- external constriction
- superficial foreign body
- insect bite

ICD-10-CM

Expanded Injury Codes

- ❑ Detail for open wounds added at 5th digit
- ❑ **S41.01** Laceration of shoulder without foreign body
- ❑ **S41.02** Laceration of shoulder with foreign body
- ❑ **S41.03** Puncture wound of shoulder without foreign body

Place of Occurrence

ICD-10-CM Code	Place
Y92.0xx	Home
Y92.1xx	Residential institution
Y92.2xx	School, other institution and public administrative area
Y92.3xx	Sports and athletic area
Y92.4xx	Street and highway
Y92.5xx	Trade and Service areas
Y92.6x	Industrial and construction area
Y92.7x	Farm
Y92.8xx	Other specified place

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ICD-10-PCS Structure

Differences Between ICD-9-CM Volume 3 and ICD-10-PCS

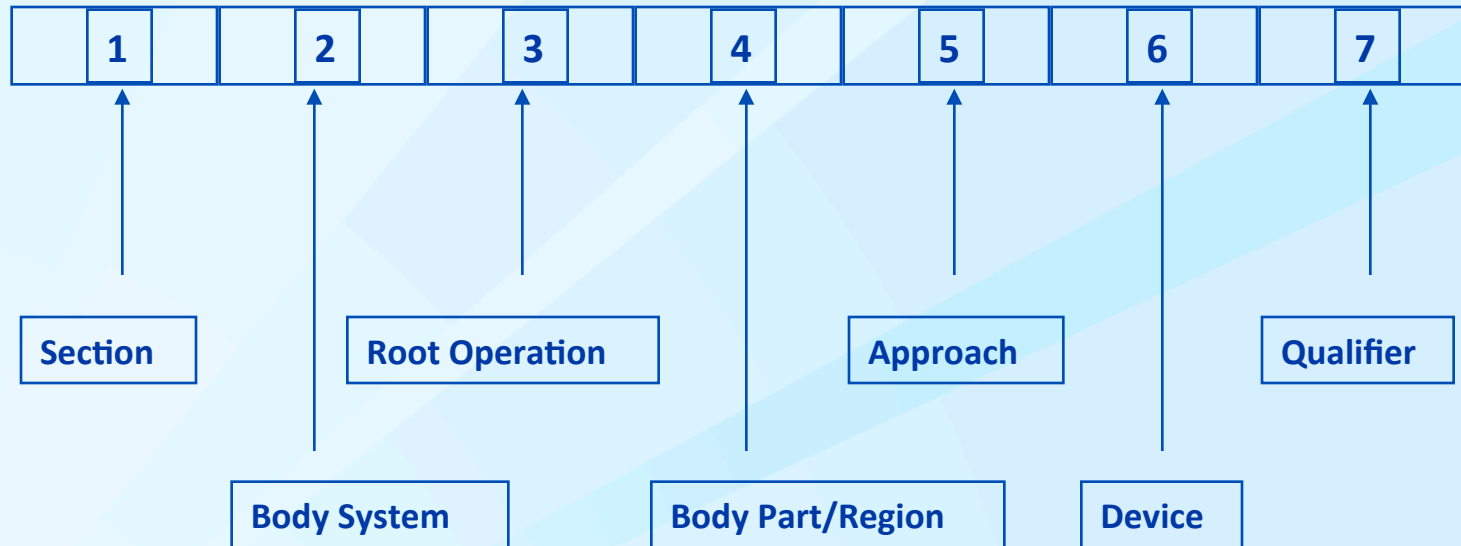
ICD-9-CM	ICD-10-PCS
3,824 codes	71,924 codes
3-4 characters	7 characters
All characters are numeric	Each can be either alpha or numeric
All codes have at least 3 characters	Numbers 0-9; letters A-H, J-N, P-Z
Decimal after 2nd character	Alpha characters not case-sensitive
	Each code <u>must</u> have 7 characters
	No decimal

ICD-10-PCS System Structure

16 Sections

- ❑ Medical and Surgical
- ❑ Obstetrics
- ❑ Placement
- ❑ Administration
- ❑ Measurement and Monitoring
- ❑ Extracorporeal Assistance and Performance
- ❑ Extracorporeal Therapies
- ❑ Osteopathic
- ❑ Other Procedures
- ❑ Chiropractic
- ❑ Imaging
- ❑ Nuclear Medicine
- ❑ Radiation Oncology
- ❑ Physical Rehabilitation and Diagnostic Audiology
- ❑ Mental Health
- ❑ Substance Abuse Treatment

Medical and Surgical Procedures Character Assignments



ICD-10-PCS Structure: Characters and Values

- ❑ **A character is a stable, standardized code component**
 - Holds a fixed place in the code
 - Retains its meaning across a range of codes
- ❑ **A value is an individual unit defined for each character**

<i>Section</i>	1 Obstetrics		
<i>Body System</i>	0 Pregnancy		
<i>Operation</i>	D Extraction: Pulling or stripping out or off all or a portion of a body part		
<i>Body Part</i>	<i>Approach</i>	<i>Device</i>	<i>Qualifier</i>
0 Products of Conception	0 Open	Z No Device	0 Classical 1 Low Cervical 2 Extrapertitoneal
0 Products of Conception	7 Via Natural or Artificial Opening	Z No Device	3 Low Forceps 4 Mid Forceps 5 High Forceps 6 Vacuum 7 Internal Version 8 Other

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- ❑ **Implementation Issues**
 - Implications for systems, processes and people
 - Tools/GEMs

Implications for Systems

Changes may be needed to accommodate the new codes:

- ❑ Extend character length (to 7), code title lengths
- ❑ Increase messaging capacity
- ❑ Increase storage capacity
- ❑ Modify system logic and edits (e.g., age, sex)
- ❑ Update system documentation
- ❑ Modify links with other systems
- ❑ Test/validate system use of new code sets

Implications for Processes - General

Modification may be needed for:

- ❑ Definitions of health conditions based on ICD codes**
- ❑ Data collection**
- ❑ Statistical analysis**
- ❑ Data extraction**
- ❑ Data tables**
- ❑ Publications**
- ❑ Reports**

Implications for Processes - Analysis and Reporting

- ❑ **For 2014**
 - 9 months of ICD-9-CM coded data
 - 3 months of ICD-10-CM coded data
- ❑ **Trend analysis from one code set to another and over time**
- ❑ **Elimination of previously used codes**
- ❑ **Very detailed information**
 - Data aggregation

Implications for People

Training/orientation will be needed for:

- ❑ **Primary users (medical coders who assign codes to diagnosis text)**
- ❑ **Secondary users (epidemiologists, scientists, statisticians, IT personnel, programmers, etc. who use already coded ICD-9-CM data)**
- ❑ **Project managers**
- ❑ **Users of public-use data files**

Implications of Unsuccessful Transition for CDC

- ❑ Users unable to carry out core daily activities (BioSense)**
- ❑ Inaccurate data (Stroke Registry, Cancer Registries, national health care surveys, Birth Defects, etc.)**
- ❑ Claims for services not processed or paid (World Trade Center Health Program)**
- ❑ Public-use data files not available (injuries, national surveys)**

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 - **Tools/GEMs**

Tools

ICD-9-CM and ICD-10-CM/PCS codes are very different and tools are needed to convert data

❑ **General Equivalence Maps (GEMs)**

- Designed to aid in converting applications and systems from ICD-9-CM to ICD-10-CM/PCS codes
- Bi-directional mappings (backward and forward maps)
- “Find and replace” codes or lists of codes

Use of GEMs

- ❑ **Converting ICD-9 based systems or applications to ICD-10 based applications**
- ❑ **Creating one-to-one backwards mappings (also known as a crosswalk) from incoming ICD-10 based records to ICD-9 based legacy systems**
- ❑ **Migrating ICD-9 historical data to a ICD-10 based representation for comparable longitudinal analysis**
- ❑ **Creating ICD-10 based test records from a repository of ICD-9 based test records**
- ❑ **GEMs are not a substitute for learning how to use ICD-10-CM and ICD-10-PCS**

Specific Examples of the Need for GEMs

- ❑ **One ICD-9-CM code represented by multiple ICD-10-CM codes**
- ❑ **One ICD-10-CM/PCS code represented by multiple ICD-9-CM codes**
- ❑ **There are new concepts in ICD-10-CM that have no predecessor in ICD-9-CM (e.g., under dosing, blood type, Glasgow Coma Scale)**
- ❑ **Use of GEMs very important in identifying differences that would have been highlighted if dual-coding could have been undertaken**

Summary

- ❑ **ICD-10 code sets are very different than ICD-9-CM**
 - Number of codes higher
 - Much more detailed information
 - There will be many challenges (condition definitions, trend analyses)

- ❑ **Level/type of impact on programs dependent on level/type of interaction with codes**
 - Systems (structure, capacity)
 - Processes (revised, new)
 - People (training)

Questions?



Email: ICD-10Transition@cdc.gov

For more information please contact Centers for Disease Control and Prevention

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Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



Resources



Adobe Acrobat
Document

❑ Fact sheet:

❑ General Equivalence Maps (GEMs)

- Version 2013 ICD-10-CM , GEMs, Guidelines
 - <http://www.cdc.gov/nchs/icd/icd10cm.htm#10update>
- Version 2013 ICD-10-PCS Files, GEMs, Coding System
 - <https://www.cms.gov/Medicare/Coding/ICD10/2013-ICD-10-PCS-GEMs.html>

❑ Systematized Nomenclature of Medicine—Clinical Terms (SNOMED CT) to ICD-10-CM map

- http://www.nlm.nih.gov/research/umls/mapping_projects/snomedct_to_icd10cm.html

Resources (continued)

- ❑ **Cancer case finding lists for ICD-10**
 - <http://seer.cancer.gov/registrars/>
- ❑ **American Health Information Management Assoc. (AHIMA)**
 - <http://www.ahima.org/icd10/default.aspx>
- ❑ **American Hospital Association (AHA)**
 - <http://www.ahacentraloffice.com/ahacentraloffice/shtml/ICDstep1.shtml>
- ❑ **Health Information and Management Systems Society (HIMSS)**
 - http://www.himss.org/ASP/topics_ICD10Playbook.asp

Helpful Links

- ❑ **Centers for Medicare and Medicaid Services ICD-10 website**
 - <http://www.cms.gov/Medicare/Coding/ICD10/>
- ❑ **National Center for Health Statistics ICD-10 website**
 - <http://www.cdc.gov/nchs/icd/icd10cm.htm>