ICD
International Classification of Diseases

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What is the ICD?

- International standard maintained by WHO
- WHO Nomenclature Regulations require use by WHO Member Countries
- Promote international comparability in collection, classification, processing, and presentation of health statistics
Expansion over time

- Originally, tool to group cause of death for presentation in tables and research
- Use and content expanded over time
- Yet, ICD is not always enough to meet morbidity needs
Closely related but not the same, US example

**ICD:**
- Parent classification
- ICD is used for mortality purposes in the US
- Maintained and coordinated by WHO in conjunction with Collaborating Centres

**ICD-CM:**
- CM is a clinical modification of the classification
- ICD-CM used for morbidity purposes in the US
- Maintained by the US but coordinated with WHO
ICD revised periodically

- To reflect current knowledge and needs
- Need to mention 3 revisions when considering where WHO, US mortality, and US morbidity communities are today:
US morbidity summary

• Continues to use ICD-9-CM but has a freeze on most updates
• ICD-10-CM developed and was at precipice of transitioning in 2013
• Participating in effort to develop ICD-11
Details: What’s happening?

• Working towards implementation
  – Previously would have implemented on a similar timeframe as mortality
  – Enactment of HIPAA in 1996 put morbidity coding standards on a different timeline
  – Developed ICD-10-CM in late 1990’s
  – Were current with ICD-10 updates until code freeze in October 2011
The implementation date

- Implementation is tied to legislation and reimbursement requirements
  - Final rule in Federal Register mandates compliance by October 1, 2013
  - However in April of 2012, there was a notice in the Federal Register proposing delay of the compliance date until October 1, 2014
- So, the implementation date in the US is still unknown
Debates about implementation

Benefits:
- Address problems associated with older revision
- Better data for many purposes
  - Allows more specificity
  - Has more room for expansion
  - Uses more current concepts
  - Captures more clinical information
  - Permits improved coding
- Easier to compare with mortality data
- Many ready for transition
- Facilitate adoption of future revision

Costs:
- Many not ready for transition (seems to include many small providers)
- It takes considerable resources to switch
- Some question cost/benefit balance when another revision is on horizon
Preparing for implementation

• HHS continues to assist those implementing the code sets (e.g., files, guidelines, general equivalence maps, webinars)
• HIM and other training programs conducted
• Organizations assess how impacted, make plans, set goals, and test
  – Systems
  – People
  – End users
• Stakeholders keep moving forward regardless of what’s happening with compliance date
US mortality summary

• Have been using ICD-10 for more than a decade
  – Transition receding into memory
  – ICD-10 updating process continual challenge
• Some involved in developing ICD-11 but most focused on ICD-10 with ICD-11 off on horizon
Memories of ICD-10 implementation

• US mortality implemented in 1999
  – Extensive preparation in advance
    • Convert automated systems
    • Conduct training
    • Convert tables
    • Coordinate with state programs
  – Implementation generally smooth but preliminary data release slower
Since implementation

- ICD-10 included updating feature which US mortality has been doing since 1999 also
  - Innovation & challenge
  - Requires resources
  - Affects statistical trends

comparability of data between years for selected causes of death. The implementation of changes in coding rules in 2008 had an impact on several mortality causes—and the comparison of 2008 and 2007 data for these causes—in the following ways:

- The increase in deaths from Chronic obstructive pulmonary disease with acute lower respiratory infection (ICD–10 code J44.0) is a component condition of the larger category Chronic lower respiratory diseases (ICD–10 codes J40–J47). This component condition (ICD–10 code J44.0) increased as a proportion of all deaths from Chronic lower respiratory diseases between 2007 and 2008. (See 2009 report of Chronic lower respiratory diseases.)

- Otherwise, mortality is in a stable place in continual evolution of ICD
WHO summary

• ICD-10:
  – Interested in implementation
  – Oversees updating process
• ICD-11: Increasingly focus
Time for another ICD revision?

• When ICD-10 was endorsed by the WHA, a timeframe for the next revision was also specified
• Medical knowledge has continued to progress
• WHO’s answer was yes
WHO’s Timeline for ICD-11

• 2007: ICD-11 development began
  – Revision structures established
  – Various countries’ clinical modifications of ICD-10 were entered into foundation layer
• 2011: Alpha draft
• 2012: Beta draft; field trials
• 2015: Present to World Health Assembly
• 2016: Countries could begin to implement
Aspirations for ICD-11: Process

• Open development to wider participation
• Use of new tools to develop
• Revision structures in addition to public comment
Aspirations for ICD-11: Content

• Address the needs of many users
• Foundation layer more robust, include terminology, definitions, functional criteria
• Improve connections
  – Align or harmonize with other classifications
  – Link with terminology standards (e.g., SNOMED CT)
• Ease transition for users
How’s ICD-11 coming along?

• Few changes to timeline, although many content and structure issues are outstanding
• Deliverables haven’t been as mature as expected
• Everything remains fluid as public comment period begins and field trials are planned
• Most expect they will be unable to implement for 5+ years after WHA endorsement
ICD brings focus to blur of experience

ICD Stands Between the Multitude of Individual Conditions and Informative Health Statistics
Age-adjusted death rates for motor-vehicle deaths by sex: United States, 1906-2010

NOTE: 2010 data are preliminary. Cause of death coded according to applicable revision of the ICD. 1906-1932 data are for a registration area; 1933-present data are for the US.
Percent distribution of the leading causes of death by age group: United States, 2010

Note: 2010 data are preliminary
Thank you for your attention.

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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.