Update on ICD-11

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NCHS Board of Scientific Counselors
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# ICD Revision History (Mortality and Morbidity)

<table>
<thead>
<tr>
<th>ICD Revision No.</th>
<th>Year of Conference When Adopted</th>
<th>Year in Use in the U.S. Mortality</th>
<th>Year in Use in the U.S. Morbidity</th>
<th>ICD, Clinical Modification</th>
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</thead>
<tbody>
<tr>
<td>First</td>
<td>1900</td>
<td>1900-1909</td>
<td></td>
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<tr>
<td>Second</td>
<td>1909</td>
<td>1910-1920</td>
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<tr>
<td>Third</td>
<td>1920</td>
<td>1921-1929</td>
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<td>Fourth</td>
<td>1929</td>
<td>1930-1938</td>
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<td>Fifth</td>
<td>1938</td>
<td>1939-1948</td>
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<tr>
<td>Sixth</td>
<td>1948</td>
<td>1949-1957</td>
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<tr>
<td>Seventh</td>
<td>1955</td>
<td>1958-1967</td>
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Need for an 11th Revision

• ICD-10, despite the updating process, ICD-10 is clinically outdated
• Structural changes were needed to some chapters
• Increasing need to operate in an electronic environment
• Need to capture more information for morbidity use cases
ICD-11 Revision Goals

• Ensure that ICD-11 will function in an electronic environment
  • Will be a digital product
  • Link with terminologies (e.g., SNOMED)
    • 22 July 2010 - WHO and the International Health Terminology Standard Development Organisation (IHTSDO) have worked on a collaborative arrangement to link the WHO Family of Classifications and the Standardized Nomenclature of Medicine - Clinical Terms (SNOMED CT). This arrangement enables the linkage of terminologies and classifications. In the era of computerization of health information and electronic health records, it represents a major achievement.

• ICD Categories
  • "defined" by "logical operational rules" on their associations and details
  • Support electronic health records and information systems
ICD-11 Revision Goals (cont’d)

• Multi-purpose and coherent classification
  • Mortality, morbidity, primary care, clinical care, research, public health...
  • Consistency & interoperability across different uses

• International multilingual reference standard for scientific comparability
  • English, French, Spanish, Russian, Chinese, Arabic
ICD-11 Development Process
U.S. Involvement

• RSG & RSG-SEG chair: Dr. Christopher Chute, Johns Hopkins

• Cross-cutting Topic Advisory Groups (TAGs):
  • Co-chair Mortality TAG – Robert Anderson, NCHS
  • Co-chair Morbidity TAG – Donna Pickett, NCHS
  • Co-chair Functioning TAG – Cille Kennedy, ASPE

• Joint Task Force (JTF)
  • Robert Anderson, NCHS
  • Dr. Christopher Chute, Johns Hopkins
  • Donna Pickett, NCHS

• MSAC and CSAC
  • Dr. Christopher Chute, Johns Hopkins (MSAC)
  • Donna Pickett, NCHS (CSAC)
PHASE 1 – Design

- Project planning
- Setting up working groups
- Setting up IT infrastructure
- Free authoring
- Review of process in 2015 for priority setting
Phase 2 – Consolidation 2015-2018

- Formation of Joint Task Force: support to priority decisions
- End of Topic Advisory Groups
- Chapter reviews and editing to become statistical classification
- Improve user guidance
  - Index, notes, postcoordination
  - Reference guide – explanations, rules, forms
- Implementation package
  - Advocacy
  - Training
  - Transition tables
  - Classification + Index (browser + coding tool)
  - Transition guide
  - IT services
- Governance for maintenance
Phase 3 – Implementation

2018-2021

- Release version for implementation June 2018
- Countries start implementation process
- MSAC up and running
- CSAC up and running
- End of maintenance of ICD-10 (except for correction of errors)
- Finalization of mortality rules
- Updates to ICD-11 based on input from implementation
  - Additional user guidance / clarifications / adding or removing few individual categories
- Updates to ICD-11 based on other proposals
- 1st update after 3 years
Phase 4 – Regular maintenance from 2021

- Updates based on proposals
  - Scientific innovation
  - Needs of different use cases
  - User guidance
  - Index
  - ...

Flowchart:
- Proposal
  - General proposal submitted
  - Proposal complete
  - Foundation impact
    - Complete
      - MMS impact
        - Yes
          - Approved by CSAC
            - Yes
              - Implement
            - No
              - Explain and decline
        - No
          - Implement
      - None
        - Implement
    - None
      - Implement
  - No
    - Back to author
Field Trials

• WHO will develop a framework to ensure standardization of beta testing

• Goals
  • Test fitness of ICD-11 for multiple purposes (mortality, morbidity, quality, other use cases)
  • Ensure comparability between ICD-10 and ICD-11
  • Increase consistency, identify improvement paths, reduce errors
Field Trials (cont’d)

• Assessments
  • Applicability (feasibility): ease of use
  • Reliability (consistency): same results by all each time

• Utility (added value): renders useful information
  • Mortality: cause of death coding, verbal autopsy
  • Morbidity: hospital discharge, outpatient, casemix

• Different settings
  • Primary care: high and low resource settings
  • General health care
  • Research settings: population health, clinical research
ICD-11 Tools  apps.who.int/classifications/icd11/browse

- Coding tool: spelling-synonyms
  - icd11ct.cloudapp.net/ct#

- ICD-11 browser
  - See foundation and linearization – grid view
  - Download versions
  - ‘Frozen’ versions
  - See differences

- Proposal tool
  - Make suggestions and discuss them
  - Notifications

- Review tool

- Translation tool
  - Translate in your language

- Mapping tool
  - See mapping at detailed level
  - Comment mapping to and from ICD-10
www.who.int/classifications/icd/revision/

Online information:

• FAQ
• Video
• Working groups
• ICD-11 features
The International Classification of Diseases 11th Revision is due by 2018

Participate in the ICD Revision
Data phase participants will have the opportunity to:
• Make Comments
• Make Proposals
• Propose definitions of diseases in a structured way
• Participate in Field Trials
• Assist in translating ICD into other languages

Video Invitation to participate
Frequently Asked Questions About ICD-11
ICD Information Sheet
ICD Revision Information Notes
ICD-11 Browser for browsing the classification and participating the development

ICD-11 Highlights

ICD-11 Newsletter - November 2015 (full 2016)
A quarterly update from the WHO team on the ICD-11 progress, accomplishments, and ongoing work.

Register to become involved
WHO wants to know if you are interested in being involved in the ICD Revision.

Timelines
Learn about the ICD-11 Timelines

New ICD-11 Features

Context Model
Definitions
Field Tests
ICD Revision
Revision News
Steering Group
Topic Advisory Groups
External Review of the ICD-11 Revision
ICD-11 Project Plan
ICD-11 Implementation Considerations/Challenges (Morbidity)

• WHO Licensing implications
  • Operational mechanisms regarding copyright restrictions have not been spelled out
  • How will “for US government purposes” defined? 1990 NCVHS Report stated that in the US, “government use” is not a single definition…….
  • Impact that copyright on ICD-11 would have on cost and use in the US
    • Vendor implications
• WHO intention to limit development of national modifications
  • Specific limitations have not been spelled out
• Revisions to existing HIPAA standards to accommodate ICD-11 including:
  • Changes in structure and conventions
  • Changes to X12 (for example change to 5010 from 4010)
  • Post coordination
  • Clustering
ICD-11 Implementation Considerations/Challenges (Mortality)

• Revision of automated coding system
  • Decision tables – international effort
  • Extension codes and cluster coding

• Retraining of coders
  • Revision of coder training materials and electronic tools

• Revision of
  • File formats
  • Edits
  • Instruction manuals
  • Tabulation lists

• Comparability study – bridge coding
ICD-10-CM Implementation Timeline

  Summary document available at http://www.ncvhs.hhs.gov/031105a1.htm
  Summary document available at http://www.ncvhs.hhs.gov/031105a2.htm
- NPRM (2008)
- Final Rule (2009)
- NPRM (2012)
- Final Rule (2012)
- Interim Final Rule (2014)
ICD-10-CM Implementation Timeline and
ICD-11 Implications for Morbidity

• NCVHS Hearings (2021-2027?)
• NPRM (?)
• Final Rule (?)
• NPRM (?)
• Final Rule (?)
• Interim Final Rule (?)
Thank You

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