



NCVHS Full Committee Meeting November 30, 2023

# Can we avoid a Clinical Modification? A practical strategy to use ICD-11 for morbidity coding

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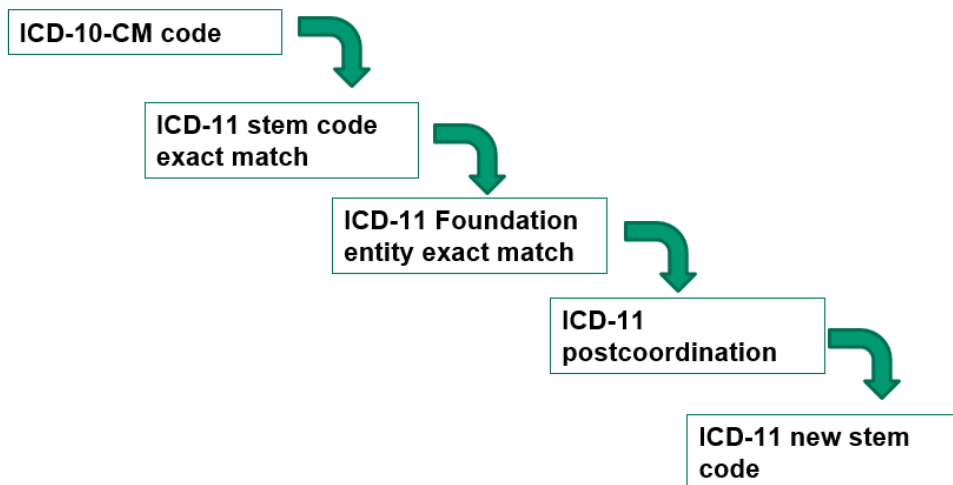
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# Study design

- Sample of 1,725 ICD-10-CM codes
  - 909 most commonly used codes from all chapters
  - 816 codes from whole chapter of digestive diseases
- Map to ICD-11 using 'waterfall' method



# Summary of recoding results

	<b>Count(%)</b>	<b>Cumulative %</b>
L1. Stem code	607(35.2%)	35.2%
L2. Foundation entity	195(11.3%)	46.5%
L3a. Postcoordination - existing code	740(42.9%)	89.4%
L3b. Postcoordination – new extension code	122(7.1%)	96.5%
L4. New stem code	61(3.5%)	100.0%
Total	1725(100%)	100.0%

# Interpretation of results

- Our findings represent the best-case scenario of replacing ICD-10-CM with ICD-11 codes
- Prerequisites to achieve these results
  - Postcoordination can be used, otherwise coverage will reduce drastically (from 96.5% → 46.5%)
    - Impact on tooling, coder education and coding variability
    - Need to be compatible with messaging and other standards (e.g., HL7, FHIR, NCPDP)

## Other prerequisites

- Residual categories are made compatible – needs alignment of hierarchical structure and coding guidelines
- Coding guidelines are harmonized
  - Inclusions, exclusions and an index provide guidance to coders and delineate the boundaries of a code
  - In our previous study, we found 10% code matches are associated with potential conflicts in the coding guidelines, which may affect coding in specific situations
  - The most severe coding guideline conflict can render a code unmappable

# Unmappable code K56.41 Fecal impaction

- ▼ ⓘ K00-K95: Diseases of the digestive system (K00-K95)
  - ▼ ⓘ K55-K64: Other diseases of intestines (K55-K64)
    - ▼ ⓘ K56: Paralytic ileus and intestinal obstruction without hernia
      - ▼ ⓘ K56.4: Other impaction of intestine
        - ✍ ⓘ K56.41 : Fecal impaction

## Exclusion

- EXCLUDES1: constipation (K59.0-)
- EXCLUDES2: incomplete defecation (R15.0)

## Preferred

- Fecal impaction

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## ICD-11 for Mortality and Morbidity Statistics

Search  [ Advanced Search ] Home Foundation Coding Tool Proposals Info

ME05.0 Constipation [Foundation URI : http://id.who.int/icd/entity/502284069](http://id.who.int/icd/entity/502284069)

- ▶ ME05.1 Diarrhoea
- ME05.Z Other and unspecified change in bowel habit
- ME06 Chronic enteritis of uncertain aetiology
- ▶ ME07 Faecal incontinence
- ME08 Flatulence and related conditions
- ME09 Rectal tenesmus
- ME0A Visible peristalsis
- ME0B Problems with defaecation, not otherwise specified
- ME24.A3 Haematochezia
- ▶ ME24.A1 Haemorrhage of anus and rectum
- KB87.2 Meconium ileus without perforation
- ME24.A4 Melaena
- ME0Y Other specified symptoms related to the lower gastrointestinal tract or abdomen
- ▶ ME10 Abnormalities related to hepatobiliary system

### ME05.0 Constipation

**Parent**  
ME05 Change in bowel habit [Show all ancestors](#)

**Description**  
Constipation is an acute or chronic condition in which bowel movements occur less often than usual or consist of hard, dry stools that are often painful or difficult to pass. Here constipation other than specifically described elsewhere, such as in motility disorders of intestine or in functional bowel diseases, is described.

**Inclusions**  
• faecal impaction

**Exclusions**  
• Functional constipation (DD91.1)  
• Functional constipation of infants, toddlers or children (DD93)

# Conclusion

- Using a U.S. linearization augmented by postcoordination, the existing content of ICD-11 can fully represent 89.4% of the ICD-10-CM codes examined in our study
- It will be a huge missed opportunity if we embark on creating a full Clinical Modification without considering alternative approaches

# Benefits of avoiding a Clinical Modification

- Avoid the cost of creating and maintaining ICD-11-CM
- Earlier use of an up-to-date, international medical classification
- Avoid divergence of the US Clinical Modification from the international core
  - Theoretically, ICD-10-CM should be totally compatible with ICD-10
  - However, significant differences can be observed e.g.
    - *E14 Unspecified diabetes mellitus* is not found in ICD-10-CM (diabetes unspecified is coded as type 2)
    - *K68 Disorders of retroperitoneum* is not found in ICD-10
- ICD-11 Foundation can be leveraged for
  - Alignment with other terminologies e.g., SNOMED CT
    - In the original design, SNOMED CT was to be used directly to build the Foundation. However, that was not realized for various reasons.
    - There is renewed interest to align the Foundation with SNOMED CT, a pilot project mapped a sample of codes.
  - Automated coding





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*Thank you!*