



National Committee on Vital and Health Statistics
Advising the HHS Secretary on National Health Information Policy

Summary of ICD-11 Workgroup Small Group Discussions

July 27, 2023

NCVHS ICD-11 Workgroup Break-out Group 1 Discussion

Summary Pre-Work Virtual Meeting

July 27, 2023

Geoffrey Reed (WHO Collaborating Center)

Mike Hogarth (UCSD Research, California Decedent Registry)

Vickie Mays (Mental Health and Population Health /Facilitator)

Andrea Hazeley (Coding)

Rebekah Fiehn (Dental and oral care)

Amy Sitapati (UCSD Biomedical Informatics, Researcher, Decedent Registry, CMIO/EMR registries)

ICD-11 Break-out Discussion Question 1

Group 1

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Investigate and define how ICD-11 may have strengths over ICD-10 in caseness, equity, SDoH, population health and oral health
- Investigate if downstream impacts of coding such as disease surveillance, payment, quality metrics are affected by improvement or require rethinking
- Identify and define benefits and challenges in ICD-11 uptake for monitoring and uptake for surveillance for morbidity
- Identify key domains that we need content coverage (i.e. vision, dental, etc.)
- Deepen the evaluation of gap analysis in the health care delivery domain since EMRs now use terminologies to directly drive care delivery.
- Identify current published literature or working knowledge as well as gap in content coverage.

ICD-11 Break-out Discussion Question 2

Group 1

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Define approaches to **highest risk stakeholders** (i.e. CFO, public health, solo practices, dental)
- Identify key opportunities that mitigate risk.
- How do new terminologies in ICD-11 impact the complex web of infrastructure for instance from the lens of **health delivery systems**
 - (i.e. What about the impact to the CMS Hierarchical categories that are leading to the HCC-RAF scoring?, custom or vendor patient risk scores within an EMR?, registries in an EMR that also drive patient outreach/best practice alerts? Linkage alerts to what is paid by Medicare?, etc.).
 - (i.e. health system can have 190 registries with nearly 8,700 metrics a single metric can have up to 1,000 ICD codes with more than 30,000 clinical terms that drive 50 decision support tools, all custom mapped).

ICD-11 Break-out Discussion Question 3

Group 1

What's missing you would like to weigh in on?

- Expand how we accomplish ICD-11 adoption sequencing and timing in a complex ecosystem with so much change on the horizon at the same time.
- Consider a mock implementation in a real environment with measurable quantification of key measures of interest to identify unforeseen consequence.
- Define role of education and training to front line stakeholders who perform coding.
- Evaluate unintended consequence to payers and denials of claims.
- Engage software stakeholders for input.
- Refine tools that further enable 'reading the codes' since face review reads of them will no longer be possible

**NCVHS ICD-11 Workgroup
Break-out
Group 2 Discussion Summary**

ICD-11 Break-out Discussion Question 1

Group 2

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Transition
 - Cost (dollars and time) for each industry segment
 - Managing overlap of data coded in ICD-10-CM from some sources and ICD-11 from others
- Post coordination impacts on primary care data collection, health information exchange, public health and research
- Opportunity to correlate SDOH data with disparities
- U.S. linearization pros and cons

ICD-11 Break-out Discussion Question 1.a

Group 2

What work is needed to ensure the U.S. does not need a CM?

- Well defined, tested, responsive, robust, and trusted maintenance process
- U.S. coordination center
- U.S. community of interest

ICD-11 Break-out Discussion Question 2

Group 2

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Those who must pay for the transition, e.g.,
 - Health systems, including small healthcare delivery entities
 - Commercial payers, Electronic Health Record vendors
 - Medical professional associations
- Benefits
 - Computability – content *and* tools
 - Last ICD update
 - International comparability – facilitating research

ICD-11 Break-out Discussion Question 1

Group 2

What's missing you would like to weigh in on?

- Confidence that everything in ICD-10-CM truly supported in ICD-11
- Guidance for longitudinal data comparison
- Artificial Intelligence implementation support
- Federal agency funded pilot to test WHO maintenance process
 - Identify gaps
 - Gain confidence in the process

NCVHS ICD-11 Workgroup Break-out Group Summary

**Pre-Work Virtual Meeting
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ICD-11 Break-out Discussion Question 1

Group 3

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Impact on practicing clinicians
- Post-coordination
 - How to handle in claim forms, EHRs, etc
 - For some use cases, will it be necessary for the US to pre-coordinate some concepts that are post-coordinated in ICD-11?
- Role of automated coding and the impact on EHRs
- Need stronger evidence that US clinical modification is not needed

ICD-11 Break-out Discussion Question 1.a

Group 3

What work is needed to ensure the U.S. does not need a CM?

- Need comprehensive evaluation of impact of not creating US clinical modification
 - Analysis of clinical concepts in ICD-10-CM that are not in ICD-11 (What is missing and how important is it? To what extent are these differences attributes of a clinical concept, such as anatomic specificity, laterality, severity, vs. base clinical concepts? Is the detail technically included in ICD-11 but just handled differently, such as a different severity staging system? What about content in ICD-10-CM specifically requested by medical specialty societies that is not in ICD-11?)
 - Are US concepts missing from ICD-11 Foundation or MMS?
- Need understanding of what the governance process would look like and how it would work (How would it work to go through the WHO for code additions/modifications rather than the current US Coordination and Maintenance Committee process?)
 - Update schedule (US updates are bi-annual, WHO updates are annual)
 - CDC should explore with WHO acceptable options for incorporating country-specific clinical detail, such as a US linearization, and how that would work (e.g., code change request process)
 - What US governance process is needed for submission of code proposals to WHO (irrespective of CM)?
- Full mapping between ICD-10-CM and ICD-11 is needed (and electronic tools to support this mapping) ³

ICD-11 Break-out Discussion Question 2

Group 3

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Physicians
- Health plans
- Need to get EHR vendors on board to ensure diagnosis calculators are simpler
- Communication strategies to debunk myths and point out the value are needed
- Education on proper use of the codes is important (we can't only focus on technical aspects of the transition) – e.g., increased specificity doesn't mean unspecified codes should never be used
- Benefits need to focus on value of moving from ICD-10-CM to ICD-11 and not mirror the benefits cited for the ICD-10 transition
- Lesson learned from the ICD-10 transition is to not make any benefit claims that cannot be supported with evidence

ICD-11 Break-out Discussion Question 1

Group 3

What's missing you would like to weigh in on?

- Need additional representation on the ICD-11 workgroup:
 - Indian Health Service
 - Practicing clinicians
 - Medical office coding/billing personnel
 - EHR vendors
 - Practice management system vendors
 - Claims standards organizations (e.g., X12)
 - Coding and billing companies
- Consider surveying the different EHR functionalities to understand how each functionality would be impacted with the transition to ICD-11

NCVHS ICD-11 Pre-work meeting Break-out Group 4

- **Denise Love**
- **Charles Hawley**
- **Jeffery Swanson**
- **Preeta Chidambaran**
- **Rod Hill**
- **Kin-Wah Fung**

Q1. What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Different pilot (“sandbox”) demonstrations for various segments (health care, public health, clinicians, payers, etc.) to demonstrate value and the need for change:
 - Problems and solutions
 - Benefits (including potential cost savings)
 - Information gains
- Key benefits - some benefits might be greater than others
 - Specific domains: e.g., mental health, safety and quality measurement, SDOH
 - Integration of clinical and administrative coding (e.g., between SNOMED CT and ICD-11 which are complementary and will coexist)
 - It’s possible benefits take time to accrue

Q1. What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- What are the costs (monetary and other) to not adopting ICD-11 in the near and long-term?
 - ICD-10 will not be maintained, making it difficult and wasteful to keep ICD-10-CM up-to-date
 - Missed opportunity – to take advantage of new knowledge and abilities of ICD-11
- *How will we know when the research is good enough? When to commit rather than wait for potentially endlessly improving research?*

Q1a. What work is needed to ensure the U.S. does not need a CM?

- The burden to transition should be on the SYSTEM, not the clinicians
- Customize messaging and training materials and harmonize coding standards across specialties

Q2. Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Those that benefit from the current coding system may resist change
- Payers are likely to resist because of the cost of conversion/implementation
 - *Value-based care data capture improvement for risk adjustment/payment?*
- Public health data suppliers (e.g., hospital and provider groups) provide primary and secondary data for public health, policy, transparency initiatives, etc.
 - *Can an automated ICD-11 reporting system provide reporting simplification (less duplicate reporting, better SDOH, more clinical detail)?*

Q2. Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Clinicians were a vocal, resistant group during conversion to ICD-10-CM:
 - *Coding should happen seamlessly with clinical documentation, not as an additional burden, automated coding is more likely with ICD-11 because of its design*
 - *Anything reducing the burden on the clinician is valuable*
 - *Benefits will include capture of more detailed clinical information in a standard way*
 - *ICD-11 should make it easier to find what they need*

Q3. What's missing you would like to weigh in on?

- ICD-11 is needed for modernization of health care and health information applications, demonstrate how automation benefits provider workflows
- Voluntary adoption not realistic
- As we approach different groups and pilots, how do we manage misinformation and disinformation?

Key Themes

- Modernization is needed:
 - ICD-11 shift is preferable over periodic, iterative tweaks
- Targeted research and pilots for key health care segments
- Be ready with standardized messaging, tools, findings early

- No major divergence of opinions in Breakout Group 4:

NCVHS ICD-11 Workgroup Break-out Group Discussion Summary

Group 5

**Pre-Work Virtual Meeting
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ICD-11 Break-out Discussion Question 1

Group 5

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Evidence of the benefits of ICD-11 data (over ICD-10-CM)
- Comparative case studies demonstrating the differences between ICD-10-CM for data input, use, output, exchange (syntactic and semantic)
- Mapping and validation of maps between ICD-11 MMS and foundation, and U.S. clinical coding systems as well as other administrative classifications (SNOMED, LOINC, RxNORM, MedDRA, ICD-10-CM, CPT, etc.)
- Studies that evaluate opportunities for automation (e.g., automated mapping between terminologies)
- More information needed on interoperability, how will ICD-11 work with HIPAA standards, Population health programs, as well as workforce education, implementation costs, and timelines

ICD-11 Break-out Discussion Question 1.a

Group 5

What work is needed to ensure the U.S. does not need a CM?

- How well does ICD-11 MMS content address the primary uses of ICD-10-CM in the US (including for reimbursement, clinical quality measures, identifying fraud/abuse)
- Need a better understanding of technical issues:
 - Whether and how the Foundation would be implemented,
 - How would post-coordination be implemented,
 - What U.S. specific extension codes are needed, and
 - How will the WHO address post-coordinated expression equivalence from a technical standpoint
- Evidence on WHO's resources and their resource constraints to address content requests; we need to understand the resource dynamics and consider interim approaches, if needed
- Dual coding studies (with both ICD-10-CM and ICD-11 MMS)

ICD-11 Break-out Discussion Question 2

Group 5

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Large system vendors who would have to completely restructure their systems at significant cost
- Providers, who have not yet realized the benefit of ICD-10-CM, need to see a compelling benefit in their work/workflow
- Payers would need to understand the benefit for evolving/innovative payment models; need studies on whether/how ICD-11 could help address fraud/abuse
- The most compelling benefits are for secondary users of the data (e.g. quality and safety professionals), not necessarily those who bear the cost and have to capture the detailed data (e.g. providers)

ICD-11 Break-out Discussion Question 1

Group 5

What's missing you would like to weigh in on?

- Need another RFI, with more time for interested parties to respond, and sufficient time to gather significant operational input from stakeholders. Consider a 60- or 90- day comment period.
- How does ICD-11 facilitate risk management, is there a benefit for risk-adjustment, and if so, who benefits?

NCVHS ICD-11 Workgroup Break-out Group Summary

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ICD-11 Break-out Discussion Question 1

Group 6

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- Understand coverage: gaps, coding rules, post-coordination
- Getting to implementation: experience with post-coordination, new workflows, demonstrate feasibility
- Impact of updates: adapting to changes, redundant expressions, semantic drift
- Moving to automation: training computer models (cost?), coding in the background with human verification
- Acceptance: articulation of high-level purposes (WHO reporting; values to who else?), embracing change

ICD-11 Break-out Discussion Question 1.a

Group 6

What work is needed to ensure the U.S. does not need a CM?

- Development of a general approach to post-coordination, including:
 - Requiring use of extension codes that US stakeholders need
 - Testing specific rules to implement a US linearization
- Tolerance for longer clusters of codes
- Redesign data sets and flows to accommodate
- Tolerance for free-text extensions where fully coded post-coordination is not possible
- Tolerance for redundant expressions

ICD-11 Break-out Discussion Question 2

Group 6

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- Resisters:
 - Physicians – need to see quality and clarity as compelling reasons
 - Frontline care givers – need simple codes for reimbursement
 - Those who fear claim rejection – need automated tools
 - Stakeholder organizations – sensitive to many constituencies (e.g., small practices)
- Compelling benefits
 - Use for details related to many components of care, e.g., social determinants of health
 - Can tell the progression of the patients' journey through health care system
 - Built with the idea of automated coding and concepts for mapping

ICD-11 Break-out Discussion Question 3

Group 6

What's missing you would like to weigh in on?

- Importance of making the point that it is both a classification system and a terminology
- Stressing the consumer side:
 - Direct implications and indirect “How many lives will be saved by the switch”?
 - Will the consumers experience be enhanced, and their needs be served by this system?
 - Will the system be able to better capture their clinical information?
 - Will consumers be able to see more easily what is in their records?

NCVHS ICD-11 Workgroup Break-out Group Discussion Summary

Group 7

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ICD-11 Break-out Discussion Question 1

Group 7

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- What is the broader business problem, the value proposition, that we expect to be solved with ICD11?
- What is the cost? The ROI?
- Could ICD-11 go beyond the clinical modification?
- What were the advantages of ICD-9 to ICD-10? Increase in specificity?
- We need CMS and payers to create a broad dataset to evaluate these clinical modifications, need to look at claims data to look at impact on different populations such as pediatric
- What percent of current ICD-10-CM is a unique clinical modification?
 - What has been the utilization of that clinical modification?
 - What has been the benefit of having that differentiation in the code set?
 - Once we identify the clinical modification portion, how much is reflected in ICD-11?

ICD-11 Break-out Discussion Question 1.a

Group 7

What work is needed to ensure the U.S. does not need a CM?

- More research is needed in the following areas:
 - Determine how we are utilizing the modifications that we have up to the point that we need additional modifications
 - Identify the clinical modifications we have
 - Establish the gaps in the modifications
 - Determine the use cases that are needed to fill the gaps
 - Establish how ICD-11 will fill the gaps of what is missing in ICD-10-CM
 - Determine the value, ROI, incentive to move to ICD-11.

ICD-11 Break-out Discussion Question 2

Group 7

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- *Theme: Stakeholders told this would solve many problems in the past but not sure it has as some are still struggling with ICD-10-CM*
- Physicians/Advanced Practice Providers (APP)
- Hospitals
- Payers? Payers would have to recreate algorithms, increase cost
- Billing systems and their clients
- Vendors of EHR systems: increase costs and may not see the benefit
- Coders (job security in question, additional education, training, certification, advanced automated systems to learn etc.)
- Payment models would be affected.
- A compelling argument would be for higher reimbursement but that isn't likely
- Is there an improvement in patient care, safety, continuity of care? Perhaps looking at patients that have popular chronic conditions that are high cost, high risk. Does that additional specificity/detail help with improving patient care?

ICD-11 Break-out Discussion Question 1

Group 7

What's missing you would like to weigh in on?

- What was the impact of ICD-9 vs ICD-10? There was greater specificity in certain areas, what was the cost, the ROI, the benefits vs the negatives
- And the impact, healthcare policy, patient safety, quality of care, and then what do we anticipate?
- Need to show benefits from a practical level ---Why am I and my staff going through this? What will we get for this?
- What can be extrapolated for the conversion from ICD10 to ICD11?
- ICD11 is digital – not in books, will be on the web—coding tool, browser, API [ICD-11 coding tools](#)
- ICD11 will connect to EHR's via SNOMED
- Need to demonstrate the advantages and value such as how ICD-11 will include advancements in medical care, digital medicine, SDOH, behavioral health/psychiatry (to reflect DSM-5), alcohol use, abuse and dependence, etc.
- Timeline, workflows, training.
- Overcommunicate the transition

NCVHS ICD-11 Workgroup Break-out Group Discussion

Group 8

**Pre-Work Virtual Meeting
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ICD-11 Break-out Discussion Question 1

Group 8

What are the most important research questions remaining, and what is needed to accomplish a national research agenda in a timely manner?

- How will ICD-11 work with EHRs? We need practicable demonstrations and implementation guidance especially for organizations with fewer resources (e.g., small, rural).
- How will ICD-11 change the flow and content of information? Consider the benefits relative to costs given the current ecosystem for terminologies available or mandated for use, (e.g., SNOMED).
- What benefits can be expected from ICD-11 in various use cases? In pilot tests or empirical simulations, would this rich data have appreciable impacts?
- Need to assign agency responsibilities with timelines, milestones, and resources. There might be a confederated funding approach including interested private organizations. Encourage industry collaborations around common input tools and methods, e.g., EHR vendors, which can inform implementation guidelines as well as the content and value of the richer information.

ICD-11 Break-out Discussion Question 1.a

Group 8

What work is needed to ensure the U.S. does not need a CM?

- Bring together stakeholders to discuss options and to operationally define what is “good enough,” short of perfection, to avoid a full CM. For example, should the U.S. version mimic ICD-10-CM code for code, concept for concept? How much must it rely on precoordinated codes or switch to post-coordinated code clusters?
- Propose one or more alternatives to a CM and integrate them into the testing, demonstrations, and simulation studies of information flow, and benefits in relation to cost.
- Advance the leading alternative(s) until each is eliminated (or combined), and a single approach is chosen.
- Refine the chosen method and develop supporting tools to make it user-friendly and more economical to implement. Pre-implementation versions should be beta tested in the field.

ICD-11 Break-out Discussion Question 2

Group 8

Which stakeholders are likely to resist ICD-11, and what benefits are most compelling for key stakeholders?

- There are different reasons for “resistance.” For example, some organizations (e.g., small or rural providers) might support the goals and capabilities of ICD-11 but appear to resist adoption out of concern for burden, lack of support, or inability to capitalize on the benefits.
- Big changes can affect who wins and loses. Some stakeholder types or organizations might fear disruption to their business model or profitability under current arrangements.
- Not everyone wants to generate or distribute better information. The system emphasizes accountability, often linked to financial consequences (e.g., documenting errors and complications; or measuring case mix better to reward value rather than circumstances).
- Main compelling benefits are richer and more complete information. Also, ICD-11 and associated IT could better automate coding and lessen burden in the steady state.

ICD-11 Break-out Discussion Question 1

Group 8

What's missing you would like to weigh in on?

- ICD-11 could be last revision of this nature (momentous, discontinuous) given it is dynamic, malleable, and infinitely expandable. WHO has ended support for ICD-10 and there is no realistic option to skip 11 and wait for “12.”
- How will adoption of AI affect the process and content of coding, especially post-coordination? AI could alleviate some training requirements.
- An education campaign should begin even while research questions and technical specifications are being addressed. Education can proceed with a practical orientation to ICD-11 and include the reasons why was it developed, and how it promises to be an improvement.
- Could implementation be facilitated by new authority for a sub-regulatory process or by using an expedited rule-making process being developed by CMS (June 2019)? Status update?
- Also, implementation grants could facilitate adoption especially by small providers, or subsidize and encourage collaborative tools among payors, EHR vendors, and supporting infrastructure.