



VIRTUALLY CAHSPR 2022 AUDIENCE CHOICE POSTER WINNER

"Assessing ICD-11's Potential for Improved Mental Health Reporting in Canada"

Janice McNeil, Sharon Baker, Keith Denny, Elana Valente, Sanjin Sabljakovic

BACKGROUND AND OBJECTIVES

CIHI reports on mental health using data from different sources coded with the International Statistical Classification of Disease, Tenth revision, Canada (ICD-10-CA) and the Diagnostic and Statistical Manual of Mental Disorders, 5th Revision (DSM-5). To ensure comparable pan-Canadian reporting, conversion algorithms between DSM-5 and ICD-10-CA are currently needed. CIHI is assessing the implications of implementing ICD-11 in Canada. This project contributes to that assessment by comparing the content of ICD-11's Chapter 06 on Mental, behavioural or neurodevelopmental disorders, with DSM-5.

APPROACH

A sample of DSM-5 clinical concepts were assessed for comparability in ICD-11. The DSM-5 concepts were mapped using DSM-5 concept titles to ICD-11 target codes and titles with the specificity of the match assigned an outcome type. These outcome types included exact (or conceptual) match, ICD-11 code less specific than DSM-5 concept, ICD-11 code more specific than DSM-5 concept, and no match found. For cases where ICD-11 was less specific than DSM-5, we assessed whether combining multiple ICD-11 codes ("post coordination") could improve code matching. Reliability was optimized via dual mapping and validation of all concepts.

RESULTS

Of the 820 DSM-5 clinical concepts assessed, 77.4% (n = 635) were found to have an equivalent conceptual match with ICD-11 when mapped to a single or combination of ICD-11 codes. Whereas 19.9% (n = 163) of DSM-5 concepts were less specific in ICD-11 when mapped to a single or combination of ICD-11 codes, representing a loss of detail. Conversely, 2% (n = 16) of DSM-5 concepts were more specific in ICD-11. For the remaining 0.7% (n = 6) of DSM-5 concepts, there were no match, meaning that the DSM-5 concept could not be found in ICD-11.

CONCLUSION

Based on this sample, we found that only 20.6% (n = 169) of DSM-5 concepts are less specific or have no equivalency in ICD-11. This level of alignment is sufficient for pan-Canadian reporting purposes, and it suggests that the current model of conversion algorithms may no longer be required to ensure comparability. With ICD-11's new structure and updated clinical content, DSM-5 and ICD-11 information will be much more comparable. Better coding can support improved capture of mental health data for research, policy, and decision-making in Canada. With the improved clinical content coverage of ICD-11, there will be potential opportunities for enhanced reporting of mental health data. The results of this project will contribute to the preparation for ICD-11 implementation in Canada.



Janice MacNeil is a Program Lead with the Classifications and Terminologies team at the Canadian Institute for Health Information. Janice provides support for the WHO Canadian Collaborating Centre for the WHO Family of International Classifications, which CIHI hosts, including leading activities related to the assessment of ICD-11 for health system use in Canada. Over the past three years, she has also led the enhancement of the Canadian Coding Standards for v2022 of ICD-10-CA and CCI to support pan-Canadian data capture in acute and ambulatory care settings. Prior to joining CIHI, Janice was a senior analyst and Provincial Manager of Coding and Abstracting in Nova Scotia.