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CONFERENCE ABSTRACT

ICD-10-AM to CCS diagnostic codes: an exercise in clinical process mapping

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Introduction: There is an increasing need for accurate hospital and health metrics in a bid to continue to improve the quality and delivery of health care. Using ICD-10-AM, the Irish health service has access to a diagnostic database that allows for richer and more flexible coding of conditions.

Unfortunately, a rich database with 19,000 commonly reported diagnoses makes clinical coding and reporting more onerous. The Clinical Classification Software (CCS) collapses the 19,000 ICD codes into a more manageable 260 clinically more meaningful codes.

Clinician feedback and intuitive study have shown a number of areas where we believe that there has been inappropriate mapping of ICD to CCS codes.

Our aim was to identify any areas of clinical ambiguity, and to suggest changes on the basis of: a number of parameters (see Table 1).

Method: In an attempt to identify possible changes that may be required to make the coding allocation more clinician friendly, we undertook a review of both ICD databases, the mapping algorithm provided by CCS, and the final CCS designations for ICD-10-AM diagnostic codes.

Results: On initial study, we identified 1674 ICD1-10-AM codes for review. Of these, 1455 were believed to warrant re-coding, either to a different CCS code; a different CCS category; or a different clinical specialty (see below).

Suggested changes based on:

Accuracy: 2 changes

Alcohol: 6

Anatomical site: 442

Cause: 437

Clinical specialty: 481

Sepsis: 7

Stroke: 61

Tuberculosis: 5

Residual: 14

Discussion: We determined that a little over 7% of the current ICD-10-AM codes could be recoded under a more clinical focus. Stroke is a special case in point. Different causes of stroke are treated differently, and this must be reflected in the coding. In partnership with the National Clinical Programme for Stroke, we have suggested re-mapping these codes to six new CCS groups. We have suggested that a number of other codes should be re-mapped using similar parameters

Lessons Learned: We have developed a dialogue with the Healthcare Cost and Utilization Project (HCUP) in Washington, D.C., a division of the Agency of Healthcare Research and Quality. We have made suggestions on the basis of our findings and feedback from our clinical colleagues, and we hope that these suggestions can be added to future iterations of the CCS diagnostic codes and categories.

Suggestions for future research: We believe that this is an example of inter-disciplinary and international co-operation in a bid to map together clinical codes in a manner which best represents the process flow and management protocols used to treat those conditions. Ultimately, this will make clinical coding more meaningful for the clinician, as well as providing increased accuracy and richness of hospital data. This will allow much greater access by clinicians to their own data in a manner that makes sense, and allows them to participate more fully in clinical audit and research and to drive service and quality improvement.

Keywords: icd-10; ccs; mapping; coding; clinical