

## ICD-11: towards better capture of quality and safety events in hospital

Southern, Danielle<sup>1\*</sup>, Quan, Hude<sup>1</sup>, and Ghali, William<sup>1</sup><sup>1</sup>University of Calgary

### Background

The Quality and Patient Safety TAG (Q&S TAG) is charged with reviewing ICD-10, ICD-10CM and progressive drafts of ICD-11 to inform the development of the ICD-11, focusing on identifying practical modifications for ICD 11 drafts that would enable better measurement of quality and safety.

### Approach

The tasks of the Q&S TAG include: Horizontally crossing all ICD-11 chapters to advise on optimizing the entire classification's content, structure and coding rules for enhanced application in both existing; Developing an inventory of existing quality of care and patient safety indicators and potentially novel quality and safety indicators; Assessing potential uses of ICD-11 for health services, quality and patient-centered outcomes research; Reviewing and critiquing the ICD-11 beta draft from the perspective of the quality and safety use case; Reviewing and critiquing Volume II work from the perspective of quality and safety use case and Designing field trials for the beta version of ICD-11. The Q&S TAG has held meetings in both New York, NY and Washington, D.C. where members have reviewed the status of discussions around coding rules (main condition, diagnosis timing, coding field), Chapter 19&20 content and associated clustering mechanisms and presented these concepts in emails to WHO and prepared to undertake a granular review of the content in chapters 1-20 and devised a committee work plan to do this.

### Results

Six manuscripts have come from meetings. The QS-TAG has also devised a matrix model for considering potential ICD-11 field trials. The matrix categorizes cross-tabulates topic areas (e.g., validity of coded concepts, completeness of capture of critical patient safety and quality concepts, reliability and feasibility of various coding rules, opinions of stakeholders on various issues) against the methodologies that would be used for the field trials (i.e., code-recode studies using real medical records, coding studies assessing completeness of capture of

key safety/quality concepts, surveys of stakeholders, heuristic evaluations of ICD-11 on various user interfaces, etc). Q&S TAG has completed 2 field trials, with 2 more in development phases.

### Conclusions

Ultimately, an enhanced classification system will permit expanded use of coded health data for large-scale quality and safety surveillance in health care systems internationally.

\*Corresponding Author:

Email Address: [dasouth@ucalgary.ca](mailto:dasouth@ucalgary.ca) (D. Southern)