

## ICHI Categorial Structure: a WHO-FIC Tool for Semantic Interoperability of Procedures Classifications

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### Abstract

Casemix grouping using procedures classifications has become an important use case for health care terminologies. There are so many different national procedures classifications used for Casemix grouping that it is not possible to agree on a worldwide standard. ICHI (International Classification of Health Interventions) is proposing an approach that standardises only the terminologies' model structure. The poster shows the use of the ICHI alpha to replace ICD9 CM Volume 3 in the UNU-CBG International Casemix grouper.

### Keywords:

Procedures Classifications; Casemix Grouper; ICD 9CM; ICHI.

### Introduction

National case mix projects developed around the world have been facilitated by the use of WHO International Classification of Diseases (from ICD 8 to ICD 10 [1] and ICD 9 CM and ICD 10 AM. However, national case mix projects been hampered by the absence of an international classification of procedures.

Since 2006, the WHO-FIC Family Development Committee has been developing ICHI based on an ontology framework defined in ENISO 1828 named Categorial structure [2] and the UNU-CBG Casemix grouper has been developed at National University of Malaysia [3].

### Materials and Methods

ICHI alpha is available at [4]. The coding scheme comprises a seven-character structure for the three axes and two semantic links.

The UNU-CBG Casemix system uses ICD-10 for diagnoses and ICD9-CM for procedure coding. The grouper also used WHO-Disability Assessment Scale (WHO-DAS) and 12-Item version 2.0 for evaluation of Activity of daily living.

Mapping was done in two steps. Lexical mappings and semantic mapping and comparative grouping is represented in

a work flow figure named Mapping Process ICD9-CM to ICHI in UNU-CBG Casemix Grouper with two outputs to be compared.

### Results

When OUTPUT 1 and OUTPUT 2 were compared, 31,703 out 34,978 cases (90.6%) produced the same Case-Based Group(CBG) codes. Two tables summarise and explain the differences.

### Conclusion

The results challenge a basic statement of ICHI developers that ICHI alpha must be able to replace ICD 9 CM volume 3 because ICHI is less granular.

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### References

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