

## **Abstract for the PCSI Conference 2022**

### **Abstract title:**

The dog bit the man, or was it the other way around? Maintaining the syntax of patient record narrative in coded reporting

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### **Subject area:**

### **Abstract:**

#### *Introduction*

The narrative text in the patient record shall be converted into codes for reporting to statistical analyses. In some natural languages, certain information is captured by pre- or suffixes attached to particular words (example: grammatical cases in German or Latin languages) while in other languages such as English or Swedish, the order of the words in a narrative text, the syntax, may contain similar specific information that is not contained in the individual words (example: “the dog bit the man” versus “the man bit the dog”).

The classical way to code medical information for statistics has been to focus on epidemiology and report the underlying cause of disease as the main focus. However, in modern medical practice, there is a tendency to focus information on the reason for activity at the present encounter instead of on the underlying cause of disease.

#### *Methods*

The International Classification of Diseases and Related Health Problems (ICD) has mechanisms to capture the differences of a focus on the underlying cause versus focus on a certain manifestation of disease. One important example is the dagger and asterisk system presented in the ICD-10. Initially the asterisk component (the manifestation of disease) was regarded as a supplementary information to the dagger code (etiology) but after international discussions in the WHO-FIC Update and Revision Committee 2007-2008 it was decided that the narrative focus in the records should be reflected in the sequence of codes in the dagger and asterisk system.

#### *Results and Conclusion*

Example of this important change can be visualized as follows:

- 1) The patient has Type 2 Diabetes Mellitus with diabetic complications.  
A patient who is treated for Type 2 Diabetes mellitus and has diabetic ophthalmic complications is coded E11.3 which is the focus on the endocrine disease

2) The patient has complications due to Type 2 Diabetes Mellitus.

A patient treated by the ophthalmologist for a diabetic retinopathy (due to Type 2 DM) is coded H36.0\* E11.3†.

The syntax (sequence) is important and the opportunities for expressing detailed information with extension codes as well as the sequence of codes is greatly expanded in the revised and updated version of the International Classification for Diseases , the ICD-11.

More examples and discussions will be presented.