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KNOWLEDGE ORGANIZATION

Official Journal of the International Society for Knowledge Organization

ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

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Tang, Xiao-Bo, Wei Wei, Guang-Chao Liu and Juan Zhu. 2017. "An Inference Model of Medical Insurance Fraud Detection: Based on Ontology and SWRL." *Knowledge Organization* 44(2): 84-96. 23 references.

**Abstract:** Medical insurance fraud is common in many countries' medical insurance systems and represents a serious threat to the insurance funds and the benefits of patients. In this paper, we present an inference model of medical insurance fraud detection, based on a medical detection domain ontology that incorporates the knowledge base provided by the Medical Terminology, NKIMed, and Chinese Library Classification systems. Through analyzing the behaviors of irregular and fraudulent medical services, we defined the scope of the medical domain ontology relevant to the task and built the ontology about medical sciences and medical service behaviors. The ontology then utilizes Semantic Web Rule Language (SWRL) and Java Expert System Shell (JESS) to detect medical irregularities and mine implicit knowledge. The system can be used to improve the management of medical insurance risks.

Hjørland, Birger. 2017. "Classification." *Knowledge Organization* 44(2): 97-128. 166 references.

**Abstract:** This article presents and discusses definitions of the term "classification" and the related concepts "Concept/con-

ceptualization," "categorization," "ordering," "taxonomy" and "typology." It further presents and discusses theories of classification including the influences of Aristotle and Wittgenstein. It presents different views on forming classes, including logical division, numerical taxonomy, historical classification, hermeneutical and pragmatic/critical views. Finally, issues related to artificial versus natural classification and taxonomic monism versus taxonomic pluralism are briefly presented and discussed.

Foskett, D. J.: Systems theory and its relevance to documentary classification. In: *Intern. Classificat.* 7 (1980) No. 1, p. 2-5.

**Abstract:** In view of the impact of systems theory for the construction of classification systems the two major contributions of Dewey are summarized as well as the new methods of facet analysis and organization brought into classification by Ranganathan. With the latter's "canonical" solution for the contents and arrangement of main classes, however, contemporary philosophical thought regarding the organization of knowledge seems to have been neglected. The work of the Classification Research Group and elsewhere considering integrative level theory will improve the science of classification systems construction. Besides this the influence from psychology and linguistics on the recognition of relationships between concepts is outlined as well as some practical implications of the systems approach on classification. (I.C.)