

Title: Graph-Representation of Patient Data
A Systematic Literature Review

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Suppl. Fig. 3: coding system created in MAXQDA

Codesystem [211]

- categorization [0]
- heterogeneous data mining [1]
- causal networking [2]
- database/data structure approach, SNOMED [1]
- structure representation [2]
- temporal event data mining [6]
- data source [0]
 - free-text records [1]
 - paper health records [1]
 - image-based information [2]
 - UNMC de-identified clinical research database [1]
 - SNOMED CT clinical findings [2]
 - Electronic Health Record (EHR) [11]
 - healthcare information system [2]
- overall purpose / function [0]
 - drug investigation [1]
 - information gaining [3]
 - quality improvement [2]
 - population management [1]
 - data mining [1]
 - data warehouse [1]
 - predictive modeling [2]
 - disease diagnosis [2]
 - disease pattern [1]
 - patient segmentation [2]
 - personalized medicine [6]
- graph [1]
 - patient graph [4]
 - node content [0]
 - chemical structure of drug [1]
 - words [1]
 - observation [1]

- emotion [1]
- procedures [2]
- functional vertices [4]
- matter [1]
- anatomic parts [3]
- patient [2]
- diagnosis [7]
- Electronic Health Records [1]
- clinical notes [1]
- problems [2]
- medications [5]
- vital signs [1]
- laboratory data [7]
- edge content [0]
 - causal relation [2]
 - properties [1]
 - word link [1]
 - patient drug prior associations [1]
 - drug similarity [1]
 - patient similarity [1]
 - number of combinations between nodes [0]
 - Anatomo-Functional relations [1]
 - matter relation [1]
 - spatial relations [2]
 - taxonomical relation [1]
 - status and date [1]
 - temporal relationships [6]
- graph properties [0]
 - undirected [0]
 - directed [8]
 - unweighted graph [0]
 - weighted graph [5]
 - average duration [2]
 - content of subgraphs [0]
 - detected phenotypes [1]
- supervision of information [0]
 - supervised information [2]
 - semi-supervised information [2]
 - unsupervised information [1]
- investigated diseases [0]
 - (childhood) leukemia [1]
 - coronary heart diseases (CHD) [1]
 - COPD [1]
 - hypercholesterolemia [1]
 - diabetes [1]
 - kardiovascular disease [1]
 - kidney failure [1]
 - geriatric diseases [1]
 - brain tumors [1]
 - pleural effusion [1]
 - Congestive Heart Failure (CHF) [2]
 - CHF with COPD precondition [2]
 - pneumonia due to an influenza [1]
 - parainfluenza virus [1]
 - breast cancer [2]
- investigated diseases ICD [0]
 - C71.* | D33.* | D43.* brain tumors [1]
 - C50.* breast cancer [2]

- C95.* (childhood) leukemia [1]
- I25.* coronary heart diseases (CHD) [1]
- I25.* | I51.9 kardiovascular disease [1]
- I50.9 Congestive Heart Failure (CHF) [2]
- I50.9 | J44.* CHF with COPD precondition [2]
- J44.* COPD [1]
- J90.* pleural effusion [1]
- J10.0 pneumonia due to an influenza [1]
- J12.2 parainfluenza virus [1]
- E78.0 hypercholesterolemia [1]
- E11.* diabetes [1]
- N19.* kidney failure [1]
- geriatric diseases [1]
- investigated diseases zusammengefasst [0]
 - cancer [4]
 - heart disease [6]
 - lung disease [6]
 - E78.0 hypercholesterolemia [1]
 - E11.* diabetes [1]
 - N19.* kidney failure [1]
 - geriatric diseases [1]
- processing of graph (technical) [0]
 - predictive modeling [1]
 - kind of storage [0]
 - GraphML [2]
 - graph database [1]
 - MongoDB [1]
 - neo4j [2]
 - SNOMED [2]
 - RDF [1]
 - conversion [0]
 - SNOMED to neo4j [1]
 - clustering [2]
 - similarity comparison of graphs [3]
- Sets [0]