Implementation of SNOMED CT in Dutch hospitals

Dutch Hospital Data

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content

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introduction

• Dutch Hospital Data (DHD)
  – non-profit organisation founded by NVZ & NFU in 2008
  – national health care data benchmarking for university and general hospitals
  – trusted third party for national registrations
  – maintenance and helpdesk coding systems (ICD-10, CBV, diagnosethesaurus)
introduction

• continued
  – health care information products, projects and services

• “better data, better decision making, better care”
diagnosethesaurus

- *the* Dutch reference set of clinical diagnoses
- standardized, point-of-care registration of clinical diagnoses
background

• lack of national standardized registration of diagnoses
  – free text, ICD-9/10, DBC-code system, local reference set
• possible missaprehension could harm patient safety
• hinders exchange of clinical information, data purposes
background

• national health care project of the NFU
• point-of-care registration of diagnoses:
  – registration by physicians instead of medical coders
  – one-time registration for multiple use (statistics, financial)
background

• first version created by UMC Utrecht and UMC Leiden
  – mappings ICD-10, DBC
  – classification terminology

• management and further development to DHD in 2012
project diagnosethesaurus

- terminology reference set of diagnoses
- based on and matched to SNOMED CT
  - preferred term
  - synonyms
- cross-mapping to ICD-10
- cross-mapping to DBC-codes
keygoals

• increasing quality and efficiency of registration
  – one-time registration for multiple use

• usable in everyday practice
  – “doctor friendly”, terminology recognised and used by physicians
  – compatible with different EHR-programs used by hospitals
development

prefered term

synonym(s)

ICD-10

DBC

SNOMED ID
diagnosethesaurus

- updated content
  - 95% of registered diagnoses in last 5 years from National Medical Registration (LMR)
  - input from existing users
- reference set of 18.000 concepts, but:
  - complete?
  - correct diagnoses?
  - correct mappings?
validation and authorization

• validation diagnoses and mappings
  – completeness reference set
  – correct diagnoses (content)
  – correct mappings

• cooperation with hospitals and national expert organizations
method of validation

- DT devided in subsets per specialism
- respective medical specialist organization
- 2 different university hospitals per subset
- differences on specific terms were re-evaluated
authorization

- correct mappings
  - ICD-10
  - DBC codesystem
methods of authorization

• authorization cross-mappings:
  – ICD-10 mappings authorized by National Institute for Public Health and the Environment (RIVM), Dutch WHO-FIC collaboration centre
  – DBC-codesystem mappings authorized by medical specialist organizations and DBC-Onderhoud
methods of authorization

• DBC-mappings
  – DT divided in subsets per specialism
  – respective medical specialist organizations evaluated DBC cross-mappings per diagnosis
  – DBC-Onderhoud evaluated the result and advised about alternative possible mappings
  – final authorization by medical specialist organization
preliminary results

• 14270 active concepts
• validation in progress
  – 4 specialisms done, 22 in progress
• authorization in progress
  – 22 specialisms done, 4 in progress
• processing results of validation and authorization
preliminary results

• DT concept only gets an authorized status when it’s content is validated and mappings are authorized
  – concept status is transparent for users

• authorized and validated version expected early 2015
information

• Dutch Hospital Data (DHD)
  – [http://www.dutchhospitaldata.nl](http://www.dutchhospitaldata.nl)

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