An eHealth System for Complementary Medicine

Dipl.-Inform. Venus Ogultarhan
Bioinformatics / Medical Informatics Department
Faculty of Technology
Bielefeld University
KATIS: An eHealth System for Complementary Medicine

Overview

- Introduction
- Data integration
- Data fusion
- Implementation
- Result
- Outlook
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Introduction

- What is complementary medicine?
- Summarizes several specialist fields, which do not belong to the conventional medicine
- can supplement the conventional medicine
- Patients with mild or chronic diseases
- Data is available and easy to find
- Resources are limited to one specialist field
- Resources do not offer an indication check
- Identify appropriate therapies based on specific symptoms and diagnoses
- Developed a new eHealth system named KATIS
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Data integration

- Several parsers were developed to integrate information into „ALTMEDA“
- Filters the text
- Transformation into a unified character encoding
- Separation symptoms and diagnoses
- ICD-10 were used to distinguish by searching in the DB „GELBE LISTE“
- Each hit is a diagnosis
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Data fusion

- Data were mapped to the DB „Priscus-Liste“, „ABDAMED“ and „CYP“
- Priscus-Liste is a list of 83 drugs from 18 drug classes
- ABDAMED contains approved drug-related data
- CYP includes information on cytochrome P450
- Basis for an interaction check and to enhance the data quality
- 17 remedy categories in the raw DB structure was reduced to a total number of 10
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Data fusion

- 116 relations was reduced to 16 relations
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Implementation

- based on a common client/server-architecture
- separation and decoupling of GUI, application logic and data management
- PHP, HTML, CSS and jQuery
- Good scalability and maintenance
- Inputs were sent to a web server
- PHP scripts generate HTML and response the result back to the client
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Result

- Data of 10 specialist fields
- 2,700 remedies and more than 4,000 synonyms
- 9,100 indications and 2,500 additional information
- KATIS was implementend based on ALTMEDA
- Efficient search for therapies
- Main feature is the indication check
- ALMEKO was also realized based on ALTMEDA
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Outlook

- Several languages
- Identification and assignment of active agents to each remedy
- Will allow filtering by using with similar active agents
- Better results by mapping to other databases with drug interactions
- Identify side effects and drug interactions of remedies
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Thank you for your attention