Intelligent Information Access (IIA) Techniques for Online Health Information Search: A Survey of Non-Physicians

Natalia Pletneva1, Lonneke van der Plas2, Célia Boyer1

(1) Health on the Net Foundation, (2) IMS – University of Stuttgart

Natalia.Pletneva@HealthOnNet.org, Celia.Boyer@HealthOnNet.org

The available online health information varies widely depending on the level of quality, trustworthiness and readability, and often it is not customized to users’ needs. The aim of the study was to assess whether the previously identified impediments to laypersons’ online searching for health-related information still apply to Europeans and the possible improvements IIA techniques could bring. These findings serve to develop a new retrieval system for various biomedical documents, KHRESMOI.

### Difficulties:

How often do you face situations where you cannot find the answer to a medical question in the Internet?

![Difficulties](image)

### Wishlist and solutions:

What are the most important characteristics of a search engine for you?

![Wishlist](image)

### Conclusions:

The goal of KHRESMOI is to offer only webpages that are from trustworthy sources that have either been certified or stem from public institutions or recognized sources. Most of the aims of KHRESMOI are supported by our survey findings, i.e., provision of trustworthy content, readability level customization, geographical and language customization, categorization of the results, query formulation support and search for multimedia files. However, survey results have also allowed us to add a few points in the agenda, such as the integration of a medical thesaurus, relevant topic suggestion and 3D body visualization. A wide range of NLP and IIA techniques are used to return results that are customized and suitable to the user’s knowledge.