Open-Source, Collaborative Initiative to Research and Develop Consumer Health Vocabularies

What are consumer health vocabularies?

Consumer health vocabularies link everyday words and phrases about health ("heart attack") to technical terms or jargon used by health care professionals ("myocardial infarction").

Why are consumer health vocabularies important?

Patients often have difficulty understanding information provided to them by health care professionals, such as instructions for taking medications and options for treating disease. At the same time, health-related computer applications— and sometimes even health care professionals— have difficulty interpreting expressions used by laypeople. Much of the problem stems from differences between the language used by clinicians and that used by the lay public. Not understanding medical concepts could have significant consequences for patients and their health care providers.

The aim of consumer health vocabularies is to help bridge the communication gap between consumers and health care professionals. Using such vocabularies, technical terms may be "translated" into lay language, such as "exanthema" into "rash."

How can consumer health vocabularies help me?

Such vocabularies may be used by computers to help patients and members of the lay public find and understand health-related text and manage their own health better.

For example, an estimated 100 million Americans search for health information on the Internet. For such online health information seekers, it is often difficult to remember the technical name of a disease or medicine. Search engines with access to consumer health vocabularies would be able to find relevant documents about a health topic, even if the searcher types a nontechnical term— searching for "clot busters" or "heart doctor" may result in a search for documents on "thrombolytic agents" or "cardiologist," respectively.

Another common problem for laypeople is reading and understanding information in health-related documents. For example, a brochure on treatments for heart attack might read, "Thrombolytic agents may be indicated for myocardial infarction." A program with access to consumer health vocabularies could identify technical terms and add everyday language to improve understanding: "Drugs that break up clots ("thrombolytic agents") are used to treat ("indicated") heart attacks ("myocardial infarction").

Many other potential uses of consumer health vocabularies may be developed once they are available.

Why "open source" and "collaborative"?

"Open source" products are freely available to everyone. Because health care is a vital issue for public health, all consumer health vocabularies need to be open source to encourage widespread use and further development. Research and development of such vocabularies are painstaking tasks. Many researchers working together on the problem will speed up the time to create and evaluate high-quality consumer health vocabularies.

Questions about this initiative should be directed to:

Qing T. Zeng, PhD

Director Biomedical Informatics Center The George Washington University zengq@email.gwu.edu