

Approaches to Tagging Resources: A Design Exploration with Physicians

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Abstract

Tagging provides a way to organize information that can facilitate personal information retrieval and resource discovery. In the medical community, tagging is not well understood. We conducted seven semi-structured interviews with physicians during February-March 2009 to identify information seeking and organization habits relevant to tagging. We find that personal organization motives are fairly uncommon. However, incentives to tag resources could be sufficient to support a community in specific subspecialty domains rather than in the general case.

Introduction

Clinical online communities provide potential to enhance the information-seeking behavior and collaboration of healthcare professionals [1]. In this research, we explored the potential for tagging-based clinical online communities to support information seeking and discovery by healthcare professionals.

Methods

The 7 physician semi-structured interview participants were at various stages of their careers (e.g. resident, fellow, mid-career attending physician, retired), in 4 different Seattle-based healthcare organizations. Interview notes were independently coded by three researchers, each using a different method (case vignette, inductive coding, and frequency counts). Researchers triangulated concepts across methods to congruently represent results.

Results

What clinical resources are useful for tagging?

Physicians use active searching to find relevant literature for a specific question and passive discovery for learning about new clinical care research potentially relevant for future cases. This kind of information discovery usually involves receiving email newsletters, listservs or RSS feeds on a daily basis in order to keep informed in a field.

What purpose would tagged resources best serve?

Information Organization. Any tool for using tags to organize clinical content should be a “time-saver” or it will fail to gain adoption. The physicians

interviewed now rely on personal search skills, often recreating queries to retrieve information seen before. *Information Sharing.* The needs of physicians to share information with other colleagues varies. One general internist claimed not to share information electronically at all, while one subspecialist found material shared by others on a worldwide pediatric rheumatology email list “useful” and “interesting”. Despite the differences in how each participant shares information, most participants supported the idea of discovery of clinical information through peers.

What are implications for tagging design?

1. *Support multiple information seeking methods.* Physicians use many information seeking methods. Tagging retrieval features should be supplemented by other features that afford accurate active searching.
2. *Suggest tags from a predefined vocabulary.* Most physicians are uninterested in exhaustively tagging content for themselves. We propose using a standard tagging vocabulary based on existing terminologies.
3. *Support flexible free-entry tags for personal information management.* The system should also support individual custom tagging. This way, physicians can classify and organize content from a specific case or a particular need.

Conclusion

Tagging may not be used often by physicians in general, but tagged resources can support information sharing in specific subspecialty communities. Further research into clinical online community development can shed light on how to appeal to a physician's personal motives for information seeking and organization while creating broader utility for peers.

References

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