

Promoting the Usability of Online AMIA Symposium Proceedings

George R Kim, MD, Caroline Zambrowicz, BA¹, Dongming Zhang, MS¹,
Paul Fontelo, MD MPH², Patricia A Abbott RN PhD¹

¹Division of Health Sciences Informatics, Johns Hopkins University School of Medicine, Baltimore, MD, ²Office of High Performance Computing and Communications, Lister Hill Center for Biomedical Communications, National Library of Medicine, Bethesda, MD

ABSTRACT

A semi-automatic procedure that extracts metadata from MEDLINE was used to develop a search tool that facilitates online location and (free) access to full-text electronic documents from the Proceedings of the American Medical Informatics Association (AMIA) Annual Symposia (1997-2003). Log file analysis for six months showed steady use of the tool, with most queries originating from hosts in the US (60%), Canada (15.3%), Argentina (10.2%) and Australia (9.6%) for common informatics topics.

Introduction

Online full-text documents from *Proceedings of the American Medical Informatics Association (AMIA) Annual Symposia* have been available but difficult to locate, creating a barrier to their usability and use.

Methods

User metadata needs were assessed at two points in the Symposium life cycle. *During* symposia, users focus on events, times, places and speakers, whereas *after* symposia, users focus on topics, titles and authors of documents. Previous online interfaces to *Proceedings* documents have focused on user needs *during* Symposia.

For available electronic documents (papers, posters, panels, demonstrations) from the *Proceedings* (1997-2003), metadata (titles, file identifiers, all authors, publication year, PubMed® Unique Identifiers and MeSH® terms) were collected semi-automatically (from MEDLINE®) and stored in HTML/XML form for use in a Web-based search tool to match documents to user queries. Collected metadata also facilitated linkage to related articles (via PubMed). The interface was deployed on the AMIA Website for free access (with registration) in May 2004.

Results

Log files for six months of continuous operation (7/1-12/31/2004) showed steady use with 8000 unique requests. Most requests (60%) were from US hosts with 44% from educational institutions and 40% from commercial hosts. Non-US requests came from 38 nations, including Canada (15.3%), Argentina

(10.2%), Australia (9.6%), Netherlands (6.9%), Taiwan (5.7%), Brazil (5.6%), Germany (5.6%), France (4.2%) and Austria (3.4%). Most commonly entered (non-name) queries included:

Query	Frequency
CPOE	0.66%
EMR	0.57%
PDA	0.53%
SNOMED	0.46%
Data mining	0.39%
Telemedicine	0.38%
UMLS	0.36%
Electronic medical record	0.34%
Nursing	0.34%
Decision Support	0.33%
HL7	0.30%

Conclusion

The *Proceedings of the AMIA Annual Symposia* are a unique and valuable source of information about the history and progress of medical informatics. Simplifying open access to these electronic documents extends their value beyond the event to researchers around the world.

Reference

Lindberg DAB, Humphreys BL. 'You Have To Be There': Twenty-five Years of SCAMC/AMIA Symposia. *J Am Med Inform Assoc* 2002;9(4):332-345.

Acknowledgements

We would like to thank Charles Safran, MD, Randy Miller, MD and the staff from AMIA, Tony Tse, PhD from the National Library of Medicine, Chris Lehmann, MD from Johns Hopkins Division of Health Sciences Informatics and usability testers from Johns Hopkins and NLM.

Dr. George Kim was supported by NLM Training Grant T15 LM07452-01.