Focusing Search of Diabetes Websites

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Abstract
Health On the Net Foundation (HON) certifies health websites that provide high quality health information. We describe the topology of diabetes websites certified by HON and compare HON certified search with full Google search. The USA has the most sites (41%), and English is the main language (63%). The HON restriction reduces the search space by three orders of magnitude. Information retrieved by full Google search is frequently not up to date.

Background
The World Health Organization recognizes diabetes as a burgeoning worldwide disease. The management of diabetes is improved with effective knowledge transfer to patients and clinicians. The Internet has the potential to be the greatest information transfer tool in the history of healthcare, however the benefits may be limited by poor quality information. Health On the Net Foundation is a Geneva based not-for-profit organization who’s aim is to guide the growing healthcare consumers and providers on the World Wide Web to sound, reliable, medical information and expertise.

Methodology
We develop a unique database of all diabetes related websites currently certified by HON. A diabetes related website is identified during the HON certification process by matching content with diabetes medical subject heading (MeSH) terms. During certification reviewers also identify several categories that we examine including country of origin, language, type of organization, password protection, and the presence of advertising. We posed 10 consumer oriented clinical questions and used the Google search engine either restricting retrieval to HON certified or not.

Results
A total of 144 HON certified diabetes sites are identified. Domain names from 22 countries provide diabetes content with the USA providing the most (41%). Information is presented in eight languages with English the most common (63%). Commercial organizations identify with 35% of sites and password protection occurs on 6%. Advertising is present on 46% of websites. A total of 844 HON certified web pages were retrieved from 10 consumer oriented clinical searches compared to 9,430,800 Google search. Only 8% of the web pages retrieved from HON sites were in the top 10 web pages retrieved from a full Google search. Thirty-seven percent of web-pages from a full Google search were either older than 4 years or had no time attribution.

Discussion
The restriction of search to HON certification reduces search retrieval by 3 orders of magnitude. Moreover, the information retrieved is more timely and authoritative than information retrieved from a full Google search. We conclude this type of search restriction might be useful for citizens.

References