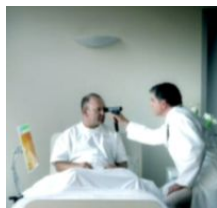


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The future of  
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Microsoft

## **Microsoft Diagnosis: Cyberchondria**

### *The escalation of medical concerns in web search*

Cyberchondria is a diagnosis for patients/users at the intersection of illness-related information and web search engines. According to Microsoft, although the Internet represents a critical resource when it comes down to sources of medical information, it is the way that information is used that can generate Cyberchondria.

In a Microsoft Research study put together by Ryen W. White and Eric Horvitz, and titled [Cyberchondria: Studies of the Escalation of Medical Concerns in Web Search](#), the Redmond company indicated that search was not by any means a viable diagnostic procedure for people lacking medical training.

"The use of Web search as a diagnostic procedure&mdash;where queries describing symptoms are input and the rank and information of results are interpreted as diagnostic conclusions&mdash;can lead users to believe that common symptoms are likely the result of serious illnesses," White and Horvitz revealed.

"Such escalations from common symptoms to serious concerns may lead to unnecessary anxiety, investment of time, and expensive engagements with healthcare professionals. We use the term cyberchondria to refer to the unfounded escalation of concerns about common symptomatology, based on the review of search results and literature on the Web."

The Microsoft Research study revealed that the results returned to end-users queries could easily lead to escalated medical concerns. The data was supported by the health-related search experiences of 515 people surveyed, which confirmed that searching for a diagnostic involving innocuous symptoms could lead users to believe that they were affected by severe conditions.

White and Horvitz concluded that it was the responsibility of search engine architects to ensure that Cyberchondria was avoided, by connecting symptoms with common medical answers, rather than with high ranked severe illnesses.

"Search engine architects have a responsibility to ensure that searchers do not experience unnecessary concern generated by the ranking algorithms their engines use. They must be cognizant of the potential problems caused by cyberchondria, and focused on serving medical search results that are reliable, complete, and timely, as well as topically relevant. Directly tackling cyberchondria is an opportunity to leverage readily-available expertise in the information-retrieval and medical informatics communities in areas such as document ranking, user modeling, machine learning, and user interface design for the direct benefit of the many people turning to the Web to interpret common medical symptoms."