# Web 2.0: A New Vocabulary for Health Policy

Richard Toner Research Study Coordinator Department of Health Policy Jefferson Medical College

Effective health policy requires information to be transparent and accessible. Given the World Wide Web thrives on transparency and accessibility, its makes sense for us to pay attention to Web innovations as they arise. This article provides an overview of how the Web has evolved from a simple "read-only" Web (also known as Web 1.0), to a fully interactive Web composed of new, powerful tools (Web 2.0).<sup>1,2</sup> The intent is to facilitate a basic understanding of this new Web vocabulary (eg, blogs, wikis, RSS Feed), how it applies to specific areas of health policy, and to provide a foundation for future analysis on the impact of the Web on healthcare.

#### **The Web Today**

A recent survey by the Pew Internet & American Life Project found that 73% of adults in the U.S. are Internet users, up from only nine percent of adults in 1995.<sup>3</sup> Over 40 million businesses have a registered dot.com website today.<sup>4</sup> Few businesses exist without some level of online identity, and some companies operate exclusively online, foregoing a physical, "brick-and-mortar" location. The home page of a website is the face of the organization to anyone searching online. Since the website has become fundamental to most business models, the need for a greater selection of digital media has emerged.

Moving from Web 1.0 to Web 2.0 means that websites no longer just contain "static content," but instead allow users to collaborate, share information, and develop new services online. Individuals and organizations alike are now using new tools to compete for visibility, starting with increasingly sophisticated search engines.

# **Search Engines: The Power of Linkage**

Familiar companies such as Google<sup>™</sup> and Yahoo! (now household names) offer search engines to sift through the limitless contents of the Web (Google<sup>™</sup> indexed eight billion web pages in 2005).<sup>⁴</sup> The power exercised by these companies is enormous, given they have become the de facto gateways to the Web and, in effect, control what is made visible to everyday users.

For the most part, the algorithms these companies use for ranking the returns for a search query work as follows: the more websites that link to your website, the more likely your website shows up in the first page of returns for a Google™ search. Eighty percent of Internet traffic goes to those websites in the first half of the first page of search results.⁵ Verbally referring a customer to your company is now synonymous with a company embedding a link to your website on their home page.

"The new reality: Your CV is no longer what you send to your employer – it's the first 10 things that show up on Google, TM" according to Michael Fertik, whose company, Reputation Defender, manages Internet reputations. For healthcare academics and others whose life work—countless publications, quotations, presentations, and other miscellaneous information—is stored in digital space, this reality can be a mixed blessing. Furthermore, the segregation of one's personal and professional life in the physical world does not carry over to the Web; a search shows no discretion. Half of Internet users have searched for themselves online and 38% took steps to restrict and remove some of the information they found.

#### **Blogs: A New Platform for Dialogue**

The word blog is simply the words "web" and "log" merged, ie, a blog is simply a web page created by an individual or group for the purpose of logging their own reflections, ideas, news and opinions. Most blogs act as discussion platforms, allowing the blog host to converse with other Internet users. With names like "The Angry Pharmacist," "White Coat Rants," and "PharmaGossip," it's not difficult to see the roles these blogs play in health policy. Even the Secretary of the Department of Health and Human Services maintains a blog. The transparency and open conversation created by blogs affords everyone a seat at the table, regardless of age, title, or achievement.

## **Internet-Video & Podcasts: Convenience and Accessibility**

Video via the Internet has become increasingly popular, especially with its widespread use in enhancing political campaigns during this presidential election cycle. Well over half of Internet users have watched videos online and almost 20% do so every day. In the healthcare arena, Internet-video has very practical uses. Websites like YouTube can be used to broadcast and view panel discussions between some of healthcare's foremost leaders. Conferences often post video clips of popular presentations and speeches. These media services are available free of charge, as websites are more interested in attracting Internet traffic to sell advertising space, as opposed to charging a fee to post a video.

In a similar fashion, podcasts—audio files that can be downloaded to a computer or portable audio player—offer yet another media outlet for Internet users. While perhaps not as entertaining as real-time video or webcasts, audio files are generally smaller and easier to share with others. Recording and posting an audio clip online is also generally less labor-intensive compared to capturing and displaying the same content via video.

#### Wikis and Social Networks: Power in Numbers

Rarely is a manuscript published in a medical journal before it has undergone extensive peer-review and editing. This is done to ensure accuracy and improve the quality of the content. Building on these concepts of peer-review and peer-editing, a wiki is a collection of web pages specifically designed to be interactive, enabling anyone who accesses its content to make improvements to it in real-time (the word "wiki" comes from the Hawaiian word for "quick"). <sup>4,10</sup> Given that health research and technology are constantly evolving and improving, wikis could facilitate the translation of research into practice. However, the upside and downside of wikis are one and the same... the ability of anyone to edit content.

Until recently, policy makers and industry stakeholders were the primary authority behind health policy initiatives. Today, online social networks, eg, MySpace and Facebook, have become conduits for individuals to organize and mobilize behind a shared interest or cause (cancer survivorship, universal insurance coverage, etc). Philanthropists and advocates for specific causes are increasingly using these sites to garner attention and recruit members to support their efforts.

# Really Simply Syndication (RSS): Streamlining the Web Experience

Second only to search engines, Really Simple Syndication (RSS) feed has been most useful in streamlining the Internet experience. Most Internet users have their favorite websites. By subscribing to a website or blog's RSS feed, the Internet user establishes a digital connection with that site that allows the user to receive notices of updates and information of interest as soon as it is posted to the site. One could argue that relying on email alerts for news might be somewhat outdated with the advent of RSS. A good way to measure the success of a website is to monitor how many Internet users have subscribed to the RSS feed.

The application of these web-based tools to health policy is already happening and could potentially influence policy-making at the highest levels. However, the application and impact of Web 2.0 on the actual healthcare seeking patterns of individuals and populations is a more widely appealing and significantly more important subject. New websites are popping up every day that offer some solution to a different healthcare problem. Google<sup>TM</sup> and Microsoft have created online personal health records to

address the lack of continuity of care; websites like DoubleCheckMD allow individuals to enter drug information and check for potential drug interactions and side effects. Further attention should be focused on how the Web is impacting the actual health and care of individuals.

The author can be reached at richard.toner@jefferson.edu.

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