

Medicine Online

Welcome to the ever-changing world of the Internet. Like it or not, new technology is altering science and medicine in ways never imagined. This issue of *Kidney News* includes discussions of these changes and what they mean to nephrology. Walter Jessen, PhD, a bio-informatician at Cincinnati Children's Hospital, provides a summary of the challenges we face in this new online world. Tejas Desai, MD, of East Carolina University, has developed a collaborative blog for point-of-service nephrology reference. Many readers, though, are at a more basic level. For you, we have the following Q&A.



What is a blog?

A blog, short for web log, is a user-generated web site. It may serve as a personal diary, an educational tool, a social outlet, or the web presence for a business. Blogs can be text and pictures, but may also include audio or video files. Blogs generally link to other websites such as source materials, and most include a mechanism for comments to generate online discussion. For an excellent example of useful blogs, see Renal Fellow Network (<http://renal fellow.blogspot.com/>).

What is a wiki?

A wiki is a group-edited document. One person may write an entry, but later readers may rewrite sections, make additions, or provide references or photographs. Reference links are common; comments are not. The most famous of these sites is the online encyclopedia, Wikipedia (http://en.wikipedia.org/wiki/Main_Page). The information on Web 2.0 in Table 1 comes from Wikipedia.

What is a folksonomie?

On these sites viewers vote for content or label it. For example, Digg (<http://digg.com/>) consists of content submitted from the web. As other readers view it, they can vote it up (digg it). Popularity of the content pushes it farther up its topic page on the Digg site. One labeling site, Delicious (<http://delicious.com/>), calls itself a social bookmarking site. Users assign searchable tags, which are informal labels or categories, to content. Sites can have multiple tags from multiple users, increasing the likelihood that the term you use to search for it will be associated.

What are social networks?

The biggest social network at the moment is Facebook (<http://www.facebook.com>), and baby boomers make up much of its membership. This site resembles a scrapbook, family dinner, event calendar, and high school reunion all rolled up into a big pretty package. It also offers games and other amusements.

Describing itself as “Facebook for professionals,” LinkedIn (<http://www.linkedin.com>) provides a more formal atmosphere. Tools include resume uploads and recommendations. Collaboration with travel management sites lets you connect with others during trips. Groups can have discussions, and employers can find potential new hires within the site. Introductions to secondary links (the contacts of your contacts) can be requested, giving this power as a networking tool.

Twitter (<http://twitter.com/>), the newest net phenomenon, bills itself as a microblogging service to provide brief updates, or tweets, limited to 140 characters. Twitter provides highly interactive information in near real-time. CNN was reporting peaceful elections in June 2009 while Iranians were tweeting of deaths in the streets. The twitter hashtag, its labeling system, lets users search out content related to their interests. Various conferences now include a hashtag for tweets so everything said about the meeting can be found using search tools within the service.

A host of other sites serve other needs. Everyone has surely heard of YouTube (<http://www.youtube.com/>) where your home videos could be the next big thing. Other sites store photos. Some services provide location-based services using the GPS in your smart phone. Want to find the nearest pizza? Or know which friends are standing on the same street? Foursquare (<http://foursquare.com/>) and similar services can tell you. More than 30 sites allow sharing content in some form, as demonstrated by the automatic share icon collections available online (see figure).



The only constant in this brave new online world is change. By the time you read this column, something new will have begun online. Your patients may be using it; do you know what that means for you? ●

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Table 1. What Is Web 2.0?

Search	Find things without prior categorization
Links	Connect people and things in an organic matter
Authoring	User-generated content including blogs and wikis
Tags	So-called “folksonomies” where users assign labels to sites
Extensions	Allow web sites to be applications, not just passive document presenters
Signals	Automatic notification of updated material, such as really simple syndication (RSS)

Adapted from http://en.wikipedia.org/wiki/Web_2.0

Did you know?

U.S. physicians show continued adoption of mobile and social media for professional purposes, as well as increasing dependency on digital resources at the point of care.

- About 99 percent of physicians are online. The average physician spends about eight hours online each week for professional purposes, up from just 2.5 hours in 2002.
- By May 2010, 72 percent of U.S. physicians owned smartphones, up from half owning these devices in 2007.
- Use of digital resources at the point of care has increased. A significant share of physicians go online during patient consultations. Most of this time is spent on handheld devices.
- An increasing number of patients are bringing health information they found online to the doctor's office—and more than half of physicians believe this research leads to a better informed patient.
- Two-thirds of physicians consume user-generated content for professional purposes.

Source: *Taking the Pulse® v10.0: Physicians and Emerging Information Technologies*, Manhattan Research