

Current and Expected Future of Consumer Health Informatics in the Era of IE 7

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Introduction

With the evolution of RSS (first RDF Site Summary, now Really Simple Syndication) format^[1], and inclusion of podcasting (2004)^[2], and Web log ('blog') in RSS/Atom feeds^[3], there has been a phenomenal increase in the availability of resources in one place to the average Web user. Myriads of feed Reader/Aggregator software are in existence.^[4] Now Microsoft has released its beta 1 version of Internet Explorer 7 (IE 7) that promises to render third-party aggregators redundant, besides providing facilities for auto-discovery and XSL-formatted display of newsfeeds.^[5,6]

Teething Problems

Microsoft's venture has its hiccoughs; viz. support of publisher-defined XSL stylesheet; user-customizability of IE7's feedview; inconspicuous web feed button on the toolbar; automatic finding of feed links buried in a page; discovery of feeds linked to somewhere on a publisher's page; suppression of active content embedded in feeds, etc.^[5]

Many have claimed it has plagiarized ideas from others; auto-discovery and pretty printing from Safari, NewsMonster and Mozilla FireFox; the feed icon from Firefox etc.^[5] Moreover, not all users prefer complete estrangement from third-party aggregators.^[5]

Relevance to Public Healthcare

The key question that begs for an answer is will the auto-discovery and display of RSS feeds (which Microsoft plans to rename 'Web feeds' amidst a lot of flak),^[5,6] without the necessity for external news reader make health news more easily accessible to the consumer? Not much, at least not in the initial stages of IE 7 release, is my conservative guesstimate.

Surveys in 2000-01 showed 40-54% of patients accessed medical information via the Internet.^[7] By mid-2005 80% of Internet users (equating to 95 million American adults) were looking online for information on at least one of 16 health topics.^[8] While some of these may have been through the health/medical blog feeds^[3], the fact is that RSS/web feeds are not very well known to the health information-seeking public. The furor about the Beta 1 release of IE 7 concerns those who develop on or work actively with the web. Most ordinary web-users still have no clue what 'RSS' or 'feed' is.^[5]



Then there is the nature of the feed itself to consider. The material is presented by date/time of feed received, not sorted by topic. It may not coincide with the specific information the public wants. Somebody has therefore suggested presenting the matter topic-wise, to be read like a newspaper, rather than going to each site suggested by the feed.^[5]

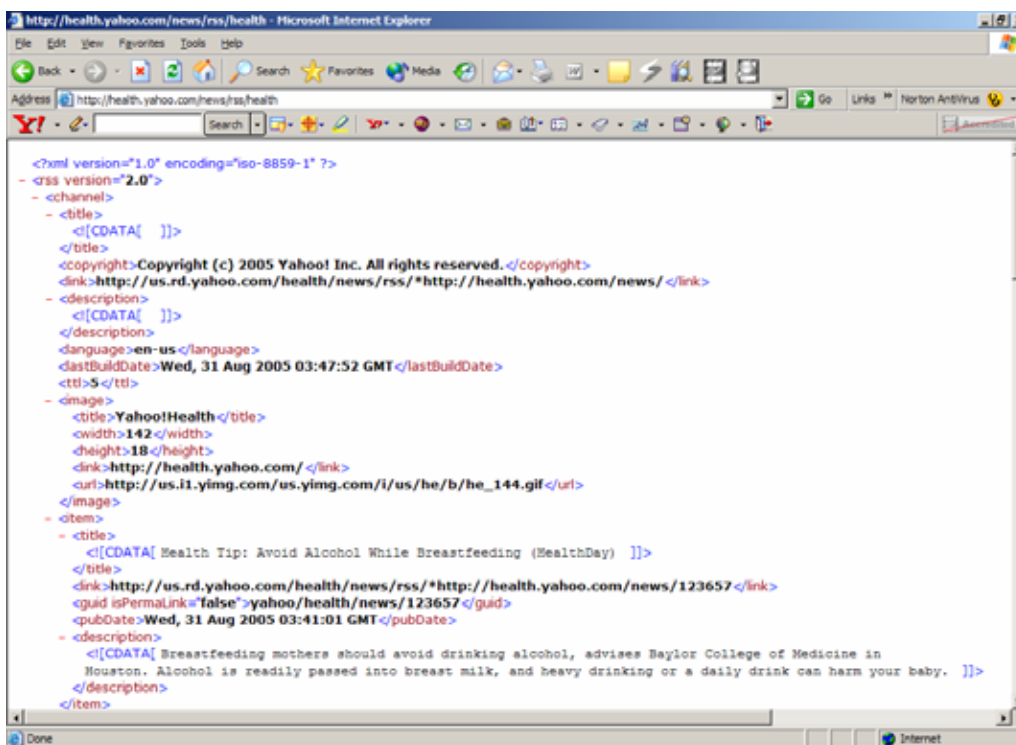
Consumer Health Webfeeds

A quick look at some health/medical news feeds will be an eye-opener. The NHS Trent Improvement Network (TIN) website gives healthcare-related RSS feeds (viz. cancer plan, children's National Service Framework (NSF), diabetes NSF, mental health NSF, older people NSF, renal services NSF, health promotion, and public health newsfeeds). But all these appear to be more provider-oriented.^[9]

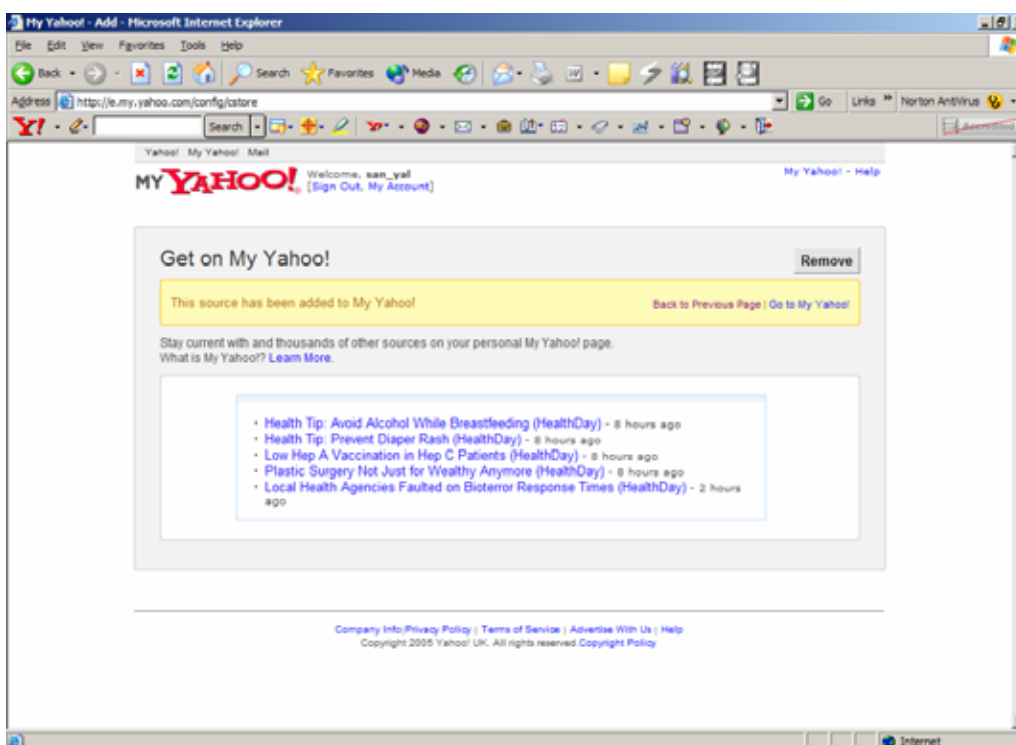
The California Healthcare Foundation (CHCF) website is concerned with providing news services to organizations interested in providing the latest healthcare news on their websites.^[10] Again, how useful they are going to be from the consumer health informatics perspective remains a moot question.

The United Kingdom Health Informatics (UKHi) page by Michael Humber provides links to newsfeeds from 'Latest medical news'^[11] and "Hitting the headlines" from *NeLH*^[12]. While the feeds are good, they suffer from the usual malady of being sorted by date/time (most recent first) rather than by topic. So the consumer still has to search for the specific information (s)he wants.

The Yahoo health website gives links to health newsfeeds.^[13] Clicking the orange 'XML' button () gives the raw XML file (screenshot-1). The blue-and-red '+MY Yahoo!' button () gives the latest health newsfeeds on the user's MyYahoo page sorted in reverse chronological order (screenshot-2).^[13,14] Additionally it gives health news alerts and health blogs from celebrities.^[13]



Screenshot 1: Clicking XML button gives this XML file



Screenshot 2: Newsfeed in reverse chronological order

Conclusion

RSS links gives raw unformatted XML files, which are not very useful to the user. All health news feeds are sorted chronologically, not topic-wise. Not many users are aware of the intricacies of RSS/Atom feeds; most do not know what a 'feed' is. The average consumer searching for specific health information (diabetes, for example) is not likely to be helped much by an assortment of latest health news collection presented to him/her in the form of an RSS news feed. IE 7, while carrying more functionality than IE 6 SP 2, is not likely to benefit the consumer health beneficiary. After its present shortcomings have been ironed out, its native RSS auto-discovery / display feature may help the expert web user more than the average public.

Reference

1. RSS (file format). From Wikipedia, the free encyclopedia. Page last modified 02:38, 11 August 2005. URL: [http://en.wikipedia.org/wiki/RSS_\(protocol\)](http://en.wikipedia.org/wiki/RSS_(protocol)) (Accessed 22 August 2005).
2. Podcasting. From Wikipedia, the free encyclopedia. Page last modified 01:52, 12 August 2005. URL: <http://en.wikipedia.org/wiki/Podcast> (Accessed 22 August 2005).
3. Weblog. From Wikipedia, the free encyclopedia. Page last modified 17:16, 13 August 2005. URL: <http://en.wikipedia.org/wiki/Blogs> (Accessed 22 August 2005).
4. Yahoo! Directory: RSS News Aggregators. Copyright 2005 Yahoo! UK. URL: http://dir.yahoo.com/Computers_and_Internet/Data_Formats/XML_eXtensible_Markup_Language_/RSS/Aggregators/ (Accessed 22 August 2005).
5. RSS Features in IE 7 for XP and Windows Vista Beta1. URL: <http://blogs.msdn.com/ie/archive/2005/08/02/446280.aspx> (Accessed 22 August 2005)
6. Montalbano E. Is Microsoft Trying to Rename RSS? IDG News Service. Tuesday August 16 2005. URL: http://news.yahoo.com/s/pcworld/20050816/tc_pcworld/122222 (Accessed 22 August 2005)
7. Meric F, Bernstam EV, Mirza NQ, Hunt KK, Ames FC, Ross MI, Kuerer HM, Pollock RE, Musen MA and Singletary Eva S. Breast cancer on the world wide web: cross sectional survey of quality of information and popularity of websites. BMJ 2002;324;577-581. URL: <http://bmj.com/cgi/content/full/324/7337/577> (Accessed 22 August 2005).
8. Health Information online: an American survey from the Pew Internet Project. May 2005. URL: http://www.pewinternet.org/pdfs/PIP_Healthtopics_May05.pdf (Accessed 22 August 2005).
9. NHS Trent Improvement Network. Site modified 9 August 2005 by Brunt D. URL: <http://www.tin.nhs.uk/welcome/keeping-up-to-date/rss-newsfeed-menu/> (Accessed 22 August 2005)
10. Syndication. California Healthcare Foundation website. © 2005 California Healthcare Foundation. URL: <https://secure.chcf.org/syndication/> (Accessed 22 August 2005)
11. Humber M. UKHI-Newsfeed-UK Medical. NTLWorld Homepage of Michael Humber. Site last modified December 2004. URL: http://homepage.ntlworld.com/michael.humber/news_ukmedical.html (Accessed 22 August 2005).
12. Humber M. UKHI-Newsfeed-NHS "Hitting the Headlines" from NeLH. NTLWorld Homepage of Michael Humber. Site last modified December 2004. URL: http://homepage.ntlworld.com/michael.humber/newsfeed_nhs_hitting_the_headlines.html (Accessed 22 August 2005).
13. Yahoo! Health. Yahoo website. Copyright 2005 Yahoo! UK. URL: <http://health.yahoo.com/> (Accessed 22 August 2005).
14. What is RSS? Yahoo website. Copyright 2005 Yahoo! UK. URL: <http://news.yahoo.com/rss> (Accessed 22 August 2005).

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