



Medical uses for the Internet

This column was written by Dr. Robert Patterson (robpatterson@msn.com), a Canadian general surgeon who is pursuing postgraduate training in medical informatics at the University of Utah. He describes the recent 5-day meeting of the American Medical Informatics Association (AMIA) in Washington, DC, which attracted more than 2000 people interested in this relatively new science. About half of the participants were physicians.

The AMIA meeting

“Man invented fire and then man invented the Internet, and nothing much happened in between.” This admittedly skewed view of history by a keynote speaker summarized the

theme of AMIA’s 1996 annual fall symposium - Beyond the superhighway: exploiting the Internet with medical informatics.

The exploding public interest in the Net has been paralleled by lagging interest within the medical community. A few years ago a MEDLINE search for the term “Internet” yielded zero matches, but today that same query will return hundreds of hits. The relatively few physicians who use the Net do so primarily to search for information, essentially treating the Net as a vast and somewhat unorganized library that has more than 30 000 medically oriented home pages scattered across the World Wide Web.

However, rather than just displaying text and pictures, emerging technologies will broaden Internet applications, and as more practical

applications develop more physicians will turn to the Internet. During the AMIA meeting this trend was foreshadowed by several presentations, including “Clinical decision support on the Internet” and “Health status assessment via the World Wide Web”; both examples involve user interaction with a site.

Despite the futuristic theme of the meeting, managing current technology proved difficult. Slide projectors and microphones malfunctioned, and some speakers appeared unsure of how to run presentations from their laptop computers.

The keynote speaker at the opening session was Tim Wild, vice-president of Tandem Computers. Wild, a futurist, was unfazed by the technical gaffes in his own presentation or by the larger problems facing the Net.

He believes the world is driven by commerce and that marketplace forces will find solutions to current difficulties, such as encryption of data for security purposes. Wild considers the Internet much more than a technical marvel; he considers it an extension of the human community, a meeting place where people satisfy the basic desire for interaction. At present only 35% of American homes have computers, and not all have Internet connections, but he thinks inexpensive ‘access devices’ that are similar to television sets will eventually be as ubiquitous as the telephone.

The Internet and its associated technologies are evolving at a dizzying pace, and Wild believes that radical changes will continue. He told listeners to consider how today’s autos bear little resemblance to the prototypes, which were built to resemble horseless carriages. “We are in the middle of a revolution the likes of which we have never seen,” he said. “There is no more here and there. There is only here.”

Cool sites

<http://www.hookup.net/~mezciems/csam/CSAM.html>

This striking site, set up and maintained by Dr. Peter Mezciems (mezciems@wat.hookup.net) for the Canadian Society of Addiction Medicine, illustrates how a medical body can use the World Wide Web to promote its mission and activities and encourage communication among members. The site includes the preliminary program for the October 1997 annual scientific meeting and recent issues of the society’s newsletter. Mezciems, director of undergraduate education at Homewood Addiction Services in Guelph, Ont., also administers an e-mail discussion group that focuses on addiction medicine.

<http://vh.radiology.uiowa.edu>

The Virtual Hospital, developed and maintained by the University of Iowa, does many things. It is an ambitious and successful digital health sciences library, content providers’ cooperative, information integrator and CME provider, all rolled into one. Resources for physicians include multimedia textbooks, teaching files, clinical practice guidelines and a 3D-imaging tutorial. Some of the multimedia textbooks were created by medical students, in collaboration with clinicians, from a library of complete cases and a review of key patient material. There are also resources for patients, notably the *Iowa Health Book*. Source: Dr. Philip Hall (phall@mail.sbgh.mb.ca).

The Canadian presence

Also meeting in Washington was the Scientific, Academic and Research Special Interest Group (SARSIG) section of COACH, the Canadian Organization for Advancement of Computers in Healthcare. COACH is the Canadian equivalent of AMIA and has several hundred members in both the medical and academic communities. The 35 members who were present discussed their own areas of research as well as challenges in medical informatics faced in Canada. Two related problems are poor national recognition of the field of informatics and the absence of a publication to publicize developments. Several members complained that they've had manuscripts rejected by Canadian journals only to have them readily accepted when submitted to American journals.

Recently an attempt was made to serve the Canadian market with a publication called *Canadian Medical Informatics/Revue Canadienne d'Informatique Medicale*. The magazine, which initially was mailed with *CMAJ*, folded after a few issues due to a lack of financial support.

We also discussed the role of informatics in the education of Canadian medical students and fellowship training within the specialty. Dr. Tom Rosenal of Calgary pointed out that only 2 of Canada's 16 medical schools have a division of health informatics.

In addition, computer facilities available to the students are often outdated. Many medical schools are rearranging their curriculum to add some informatics content, but what should be taught and by whom? One goal that has received broad agreement is to produce students who are able to become information literate without necessarily becoming technophiles.

With few exceptions, Canadian physicians seeking postgraduate fellowships in informatics migrate to the US. This leads to another problem — the loss of trained Canadians to the more lucrative American job market despite Canada's growing need for specialists in medical informatics.

Despite these difficulties, SARSIG members are optimistic about the future of informatics in Canada. Anyone wanting more information on COACH or SARSIG can contact the COACH home page, <http://www.agt.net/public/coachorg/>.

Highlights from CMA Online

You can now search the rich resources found at *CMA Online* with the Excite search engine, one of the Internet's most popular information-retrieval tools. Using Excite within *CMA Online*, you can limit your search to the information published within your association's site. To find out how to use Excite, visit the *CMA Online* home page (<http://www.cma.ca>).



CMA-AMC
ONLINE-EN DIRECT

<http://www.cma.ca>

Keep in touch

wherever you are

ASSOCIATION MÉDICALE CANADIENNE  CANADIAN MEDICAL ASSOCIATION

Therapeutic Index

Analgesic

Motrin IB 342, 443

Angiotensin converting enzyme inhibitor

Monopril 338, 383

Antibacterial agent

Cipro 357, 396, 446, 447

Antibiotic

Biaxin 370, 384, 447, 448

Ceftin 421, 424, 433

Antidepressant

Luvox 350, 451

Paxil 452, Inside Back Cover

Serzone 427, 429, 437

Zoloft 336, 337, 438, 439

Antihypertensive agent

Pendil 349, 441

Anti-inflammatory agent

Arthrotec 358, 450

Antiviral agent

Valtrex 346, 347, 404, 440, 441

Corticosteroid for inhalation

Flovent 332, 334, 392, 444, 445

Estrogen-Progestin

Estracomb 434, 435, Outside Back Cover

H⁺, K⁺ -ATPase inhibitor

Losec 331, 395, 400, 436

Prevacid Inside Front Cover, 329, 442, 443

Lipid metabolism regulator

Zocor 362, 449

Oral antidiabetic agent

Prandase 378, 432