"Web Revolution" Is Changing Healthcare

BY THOMAS C. LAWRY

The Web is the most important advance in medical communication since the printing press.
　　—George Lundberg, MD, chief editor, Medscape, a clinical information Web site, and former editor, *JAMA*, October 1998.

We all know that the Internet is changing the way people communicate, get information, and entertain themselves. The question for healthcare leaders is, How is it changing the way your organization works and fulfills its mission? If your answer is, "I don't know," then you are probably among the majority—short on time, long on other issues demanding attention.

In a year of declining reimbursement and year 2000 computer issues, healthcare systems are struggling to preserve mission and improve operational performance. Meanwhile, the Web revolution continues. The Internet is changing both consumer expectations and the rules governing delivery of services. "Intranets" are transforming the way physicians and hospital

Mr. Lawry is president, Verus, Bellevue, WA.

staffs communicate and do their work. "Extranets" are reducing barriers between hospitals, referral sources, and trading partners (see **Box**, p. 13).

FIVE REASONS LEADERS SHOULD WORK THE WEB
If there is one thing for you to recognize, it is this: The Web revolution is not about computers or technology. It is about giving staff better tools so they can improve processes. It is about finding innovative ways to communicate within our organizations and with those we seek to serve. It is about improving customer service while streamlining costs and turnaround time. There are many reasons to be knowledgeable about the Web revolution.

The Internet Has Reached "Critical Mass" It is the fastest-growing communication medium in human history. In this country, the number of e-mails sent each day now surpasses the daily mail handled by the U.S. Postal Service. It took television 13 years to reach 50 million viewers; it took the Internet less than five. Half the U.S. population will be on the Internet by 2000. And the Internet is still in its infancy.

The Online Population Includes the People You Serve The Internet is no longer the bastion of white, upper-income males. The two fastest-growing segments of the online population are women and people over the age of 50. The proportion of minority members using the Internet now nearly mirrors their proportion of the U.S. population.

Shortly after the turn of the new century, the number of women online is expected to surpass that of men. In light of the role women play in making healthcare decisions for themselves and their families, this factor itself should have a

WEB WATCH

Following are useful Web sites; future columns will list other sites.

National Guideline Clearinghouse This is a resource for evidence-based clinical practice guidelines. It is sponsored by the Agency for Health Care Policy and Research in partnership with the American Medical Association and the American Association of Health Plans. A search engine allows users to access a comprehensive collection of clinical guidelines. *www.guideline.gov/index.asp*

Ethics in Medicine: University of Washington School of Medicine This resource contains information on such topics as advance directives, do-not-resuscitate orders, breaking bad news, complementary medicine, informed consent, legal issues, and termination of life-sustaining treatment. It includes tools for bioethics, including concepts and methodologies used in medical decision making. *http://eduserv.hscer.washington.edu/bioethics/*

great impact on how healthcare systems use Web services to better serve this important population.

What group is most likely to conduct actual transactions via the Web? The answer surprises many. Internet users age 50 or older are most likely to seek out and pay for services delivered electronically. Cross-check this against the age group most likely to turn to your organization for service.

The Web Is a Communications Medium through Which You Can Actually Deliver Services Your organization will not be performing surgery on the Web (although Providence Seattle Medical Center is credited with being the first to "webcast" a live open-heart surgery procedure). But prospective customers can now go online to complete a health risk appraisal, select a physician, or have a prescription refilled. With an intranet, you can give your staff immediate access to convenient and inexpensive human resource services.

Your Competitors May Already Be Using Web Services to Gain Market Advantage In 1998 *PC Week* magazine studied the use of Internet technology by top U.S. corporations. Which company ranked highest for its innovation in delivery of services? Columbia/HCA! That healthcare behemoth is using both the Internet and intranets to connect with customers and reduce the cost of internal operations.

Intranets Are the Fastest-Growing Information Technology Trend among Fortune 500 Companies An intranet enables an organization to connect staff members electronically and thus improve information sharing.

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HARNESSING THE WEB REVOLUTION
In future columns, I will discuss specific ways CHA members are harnessing the power of the Web revolution. If your organization is using Web technology to improve how it works or communicates, I would like to hear from you. This column will explain and showcase innovative work that is furthering the mission and goals of the Catholic health ministry. □

Contact Tom Lawry at tlawry@verus-tech.com, or at 4628 175th Ave., SE, Bellevue, WA 98006; phone: 425-643-7117; Fax: 425-643-0302.

GLOSSARY

Internet: A worldwide computer network that, using a common set of protocols and computer languages, links government agencies, businesses, private organizations, and individuals.

Intranet: The use of Internet protocols, software, and hardware within a hospital or health system. Intranets are used to improve communication and information sharing within the organization and among staff.

Extranet: The use of Internet protocols, software, and hardware to improve communication and information sharing among referral sources or trading partners.

Illustration by Mike Reed