# "When the market decides Internet companies need

an Henry, international president of China.com

## Online Outpatients

Internet consumers demand better health, not just better information. The new health-care sites must provide it. BY STAN BERNARD, M.D., MBA

onsumers are hungry for health-care information. Some 70 million people searched the Web for health-care information last year, according to an August 1999 Harris Poll. "Healthmed retrievers" seek disease and wellness information, share information in online support groups and communities, and participate in expert chats and online consultations. However, despite the existence of about 15,000 health-care "content" sites, consumers seek more from the Internet than better information—they want better health.

Generalized health-care information can enlighten but does not necessarily empower consumers to improve their health. They want the ability to control their health online.

Welcome to the next generation of health-care sites, which I call the "care space." These new care sites promise to help consumers and patients monitor, coordinate, and, ultimately,

*improve* their health care. They may provide consumers with disease-specific training, customized tools, and professional assistance to help them manage their own care.

For example, LifeMasters exemplifies the new online "interactive care" model. The company, based in Newport

Beach and South San Francisco, Calif.,

offers Web-based disease-training modules, self-care tools to track disease-specific measures, and a "virtual coach" that sends customized email messages to encourage appropriate behavior.

Other firms offer Web-based devices to help monitor

the health status of patients with particular diseases. Atherton, Calif.-based Diabetes Well uses an Internet-enabled diabetes monitor to upload blood glucose levels directly into a health record on the patient's personal Webpage. Abnormal levels trigger an alert to a nurse who can immediately adjust the patient's medication based on the glucose reading and the patient's online medical record.

Ironically, "interactive care" has typically not included direct online interactions between patients and their physicians. A survey conducted by

that 77 percent of patients *prefer* to get online health information directly from their physicians, but just 10 percent of doctors have a Webpage and give out their email address. Several companies are trying to "re-intermediate" doctors and improve care by linking patients with their physicians online.

DigitalDoctor.com of Atlanta works with doctors to create personal physician Webpages featuring disease-specific curricula that have been verified by that physician. Once a patient has been diagnosed, the physician electronically "prescribes" and emails appropriate information from his DigitalDoctor.com site to the patient. The patient can then choose to maintain that information along with health records on a personal DigitalPatient Webpage. Patients and their physicians can continuously interact via the Internet with electronic drug prescriptions, wellness and prevention updates, and appointment dates.

### Blurbage...



"You make the most amount of money in three-minute intervals every three years."

—Jeff Taylor, CEO of Monster.com

"Once a garbage-bag salesman, always a garbage-bag salesman."

—**Mark Cuban,** vice president of Yahoo! Broadcast Services, referring to his first job as a door-to-door garbage bag salesman at age 11.



"The Internet sells better than sex or crime."

—John Huey Fortune's managing editor, who finally gets it.



"Before the Web existed, it was very difficult to explain what the Web was."

-**Tim Berners-Lee** inventor of the World Wide Web



IDEAS

### Healthy market opportunity

The care space represents a huge potential market: More than \$700 billion was spent in 1998 on health-care services in the United States alone. That amount dwarfs the combined 1998 market sizes of the three other Internet health-care segments—content (\$7.5 billion), connectivity (\$10 billion), and commerce (\$157 billion), according to investment banker Hambrecht & Quist. Still, the window of Internet health-care opportunity is clearly widening for companies offering services.

For patients, Internet-delivered care will not substitute for physical care delivery services, but it offers the potential to reduce or eliminate hospitalizations and other services through improved The Internet patient-care management.

Care sites will capture this market in several ways: using direct-to-consumer strategies and charging patients subscription fees to access ongoing monitoring or medical-management services; and receiving traditional third-party reimbursement through health plans and employers.

Offline organizations, such as hospitals and doctor's groups, that leverage the Web to provide care services will capture greater market share by offering more complete and more competitive care-management solutions to third-party payers.

Interactive care still has a number of legal, cultural, and technological hurdles to overcome before becoming a mainstream approach to delivering care. For one, patient confidentiality must be maintained. And medical privacy laws could support or thwart such initiatives. Doctors and other health-care providers may resist Webbased care activities, particularly with concerns over

liabilities and lack of reimbursement for such efforts.

Economic, regulatory, competitive, and clinical imperatives will help push interactive care through these barriers. Health plans will drive the use of Web-based care as they seek more cost-effective ways to deliver care and higher "report card" accreditation ratings on measures such as rates of mammography screening and eye exams for patients with diabetes. The competitive landscape on the Internet will dramatically change as content, connectivity, and commerce players jump into this space. In particular, large health-care portals will build, buy, or ally with care sites to offer the full range of care services that consumers demand. Offline players leverag-

ing the Web to deliver care will attract consumers and market share, creating significant pressure on competitors to follow suit.

The most substantial reason health and quality that Internet-based care will become a reality is that interactive care will improve health-care quality, measured in, for example, reduced heart attacks or days of hospitalization. It's too early

to see the impact of interactive care on medical outcomes and overall quality of life, just as it is too early to discern which care-space business models will prove successful. However, offline quality improvement initiatives have repeatedly demonstrated the positive benefits of regular patient monitoring, improved patient compliance, enhanced care coordination, and outcomes tracking. The Internet has the potential to deliver these types of results and significantly more.

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## Twenty thousand people now make a IIVI

on eBay, and a lot of them used to be on



### Doonesbury





can improve

of life.





BY GARRY TRUDEAU