Online Networks Present Challenges, Opportunities for Oncology

By Karyn Hede

The rise in physician use of online networking sites, both professionally and personally, is changing how physicians interact with each other and with patients, and oncolgists are leading the way.

Tracking physician use of online networks, including social media and professional networking sites, isn’t easy. Estimates of use vary widely. For example, a 2011 e-mail survey of more than 4,000 physicians and users of the physician community QuantiaMD found that more than 90% of physicians are now using social media for personal use, whereas two-thirds or more have at least dabbled in online physician communities. Of course, this survey included only self-selected physicians who either have visited QuantiaMD or at least use e-mail. A similar survey conducted by mail in 2010 and published in the *Journal of General Internal Medicine* in 2011 indicated that slightly less than half of physicians used such sites.

But compared with other specialists, oncologists appear to be among the heaviest users of online content. The market research company Manhattan Research, which tracks physician use of technology, found that oncologists are three times more likely than physicians overall to be high-frequency users and contributors online and are the most likely to communicate with patients online.

People who track usage trends say that moving to an online medical world is inevitable. As more practices move to digital patient records and systems, sharing anonymized patient data for referrals and second opinions—and in the next few years, real-time remote tracking of patient vital signs and test results—will further drive the shift online. How quickly this shift happens may revolve around physician attitudes about whether engaging patients and peers digitally will save time or demand more time, said Len Starnes, a digital health care consultant and former pharmaceutical company executive based in Berlin.

“The division goes right to the middle of the profession,” he said. “Young doctors believe it will save time, because it means they won’t have to see patients physically. If they can monitor vitals by telemonitoring and reassure patients via an e-mail, that will save them time. If you are an older doctor, they tend to be vehemently against this sort of thing.”

Debate about how various social media networks might facilitate communication continues, but Starnes said that in the E7 countries—those with emerging economies—these networks are already well established. Through his own research, Starnes tracks 75–80 physician networks with 4 million members worldwide. One of the largest, dxy.cn, which has been operating for 12 years, claims more than 1 million physician members in China. The site offers a platform for exchanging ideas, finding collaborators, and disseminating findings through a Twitter-like functionality.

Physicians access case discussions, medical news, and continuing-education webinars. A similar site in Australia, ehealthspace.org, drew 16,000 members within 12 months of launch, Starnes said.

In the U.S., prominent platforms such as Sermo and PhysicianConnect compete with the predominantly mobile device–oriented service Doximity. These services bill themselves as a means to connect and get referrals, but all are hoping to profit by offering access to a physician audience. Sermo has clients in the pharmaceutical and medical device industries that engage physicians in market research or track how doctors respond to their products. Such interactions will change the dynamic between doctors and the pharmaceutical industry, said Starnes. He predicts fewer in-person sales calls and more online dialogue—at least that’s what he said he’s telling his pharmaceutical company clients, who he acknowledged have been slow to embrace social media because of legal and proprietary concerns.

Meanwhile, professional membership groups such as the American Society of Clinical Oncology (ASCO) have tried to create their own online communities. ASCO Connection, ASCOconnection.org bills itself as a professional networking site. An ASCO Connection spokesperson, who asked not to be named, said in an e-mail that “ASCO [is] a forward-looking organization and could see that open dialogue and interactive discussions are the future of communication. It’s no longer a one-way street. We really wanted to build a community, an ‘open marketplace of ideas,’ if you will, in which members could speak directly with one another without a filter. This kind of discourse is happening and available all over the Internet, so why not create a platform within our own community?”
According to ASCO, member usage surpassed goals by 40% in the first year and a half of operations. However, ASCO declined to reveal the number of registered site users. The ASCO spokesperson also pointed out that the oncologist-only nature of the site has encouraged open dialogue about costs, palliative care issues, and frustrations about drug shortages. For readers who prefer print, ASCO is also reprinting select online conversations in its member magazine.

“I think the word is out that if you are not online, if you are not connected with social networks or social media . . . there’s this perception that you are square or behind the times,” said Ryan Greysen, M.D., an assistant clinical professor of hospital medicine at the University of California, San Francisco, who studies medical ethics and social media use by physicians. “A lot of hospitals and medical societies and journals are putting up our Facebook pages and our Twitter accounts, but I think relatively few know how to use the technology smartly.”

Changing Professional Norms
Greysen and his former colleagues at Yale University recently surveyed U.S. state medical boards to determine whether social media use by physicians caused actionable ethical lapses. The results, published in the March 21 *Journal of the American Medical Association*, indicated that nearly all state boards had dealt with at least one case of ethical misconduct related to social media use.

“This was an issue state medical boards were concerned about,” said Greysen. “The concern is that this could be something that they’re seeing more and more, if we don’t get ahead of it and raise awareness of this issue.” The boards had meted out serious discipline of license restriction, suspension, or revocation more than half the time (27 of 48). Some cases were clear-cut, as when physicians misrepresented credentials online, but more and more cases could enter gray areas, such as commenting on or “friending” patients. “The state medical boards are in the same sticky situations as medical school deans, division chiefs at hospitals, or whoever is in a supervising role to make that judgment call,” Greysen said.

In November 2010, the American Medical Association became one of the first medical societies to adopt a stance on professionalism in use of social media. It states that physicians have a responsibility to report behavior that “significantly violates professional norms” to “appropriate authorities.”

But Greysen and others, such as Lindsay Thompson, M.D., a pediatrician at the University of Florida, Gainesville, who has studied social media usage by the university’s medical students, believe that “if you are going to ask the state medical boards, which I think would be ill equipped to handle that kind of volume [to oversee behavior on social networks], it would be a poor use of their resources and could overwhelm them.” Thompson has published two studies of social media use among medical students and recently completed a survey that included faculty and house staff that found widespread use and a few instances of ethically questionable use.

“There is definitely an [age] divide,” Thompson said. “It becomes increasingly viewed as less professional as you age. But I also see that we are all just really undecided and uncertain even among our peers . . . Professionalism has always been one those nebulous core competencies anyway, and this only makes it harder,” she added.

Because of her findings, the University of Florida now explicitly teaches medical students strict boundaries about acceptable ethical practices online, including respecting patient confidentiality and doctor–patient relationships. A few other institutions have followed suit. The Ohio State Medical Association now offers a tool kit for physicians on professional use of social media (http://www.osma.org/news/release.dT/osma-releases-social-mediatoolkit-for-physicians-office-staff-and-patients/1412).

Getting It Right
“Increasingly, I think the focus ought to be on how do we get beyond avoiding these pitfalls and get into how can we use this technology because patients and doctors want to be online and want to interact with each other in this space in a positive way,” Greysen said. “There’s a lot of work to be done on how do we do it and do it right.”

Some argue that the rise of social media will permanently change the relationship between physicians and patients.

“We are peeling back the layers, getting critical information to the patient and consumers,” said Eric J. Topol, M.D., professor of translational medicine at Scripps Research Institute in La Jolla, Calif., and author of *The Creative Destruction of Medicine: How the Digital Revolution Will Create Better Health Care*. “There’s an equilibration of information with the physician, and that overrides the previous, very different setting of ‘doctor knows best.’”

Of course, clinical judgment and experience is a vital, durable skill set that will continue to be valuable, he added, but that patients are now sharing so much information and organizing themselves into social networks (see “Cancer Patients Connect and organizing themselves into social networks ([see “Cancer Patients Connect](http://www.osma.org/news/release.dT/osma-releases-social-mediatoolkit-for-physicians-office-staff-and-patients/1412)”)) is changing their relationship to the medical profession.

For an example, Topol cites that patients have no say in what happens to their own tumor sections and biopsy material. He expects that, as inexpensive whole-genome sequencing becomes available, patients who organize online will demand that their tumors be frozen instead of fixed in formalin to be available for such testing.

“The opaqueness of information available to patients is going to fade away fairly quickly in the next 5 years,” said Topol. “This is part of a consumer-driven health care revolution.”

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