lic has a right to know about all possible adverse drug effects. But frequent announcements of possible hazards that may not be real can themselves harm public health. An excessively high threshold for warnings would keep real risks hidden too long, but an excessively low threshold could undermine public trust in drugs, in the surveillance system itself, and in the entire medical enterprise. In Britain in the 1990s, poor management of public cautions about the thrombogenicity of third-generation oral contraceptives resulted in widespread noncompliance with all oral birth-control regimens, which appears to have led to more health problems due to unwanted pregnancies and abortions than would have been caused by the drugs' side effects.[5] Proper implementation of the Sentinel system will require expertise in intelligibly communicating information about risks — in relation to benefits — to clinicians and patients alike.

The Sentinel system will have the potential to identify and quantify adverse-event signals with unprecedented power and speed. In doing so, it could help to optimize medications' safety and benefit–risk relationships. Getting the system to function will be daunting but achievable, but making sure the numbers it generates are epidemiologically rigorous and clinically helpful will be of paramount importance. Ultimately, knowing what those numbers mean for practice and communicating that meaning effectively will present the biggest challenges of all.

Drs. Avorn and Schneeweiss report being named as participating faculty on an application for a research grant from HealthCore and on a proposal to the FDA for implementation of the Sentinel system. Dr. Schneeweiss reports receiving consulting fees from HealthCore, RTI International, and World Health Information Science Consultants. No other potential conflict of interest relevant to this article was reported.

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BECOMING A PHYSICIAN

Practicing Medicine in the Age of Facebook

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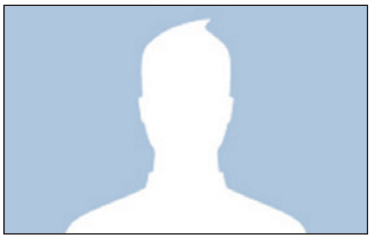
In my second week of medical internship, I received a "friend request" on Facebook, the popular social-networking Web site. The name of the requester was familiar: Erica Baxter. Three years earlier, as a medical student, I had participated in the delivery of Ms. Baxter's baby. Now, apparently, she wanted to be back in touch.

Despite certain reservations, I clicked "confirm," and Ms. Baxter joined my list of Facebook "friends." I was curious to hear about the progress of her baby girl, but I wondered about the appropriateness of this interaction. Was Ms. Baxter simply a grateful patient interested in sharing news about her child — as a follow-up to our professional interaction — or did she have other motives that weren't apparent to me? In confirming this patient as my "friend" on Facebook, I was merging my professional and personal lives. From my Facebook page, Ms. Baxter could identify and reach anyone in my network of friends, view an extensive collection of personal photographs, read my personal blog, and review notations that others had left on my "wall." The anxiety I felt about crossing boundaries is an old problem in clinical medicine, but it has taken a different shape as it has migrated to this new medium.

Over the past 5 years, social-networking sites have evolved from a preoccupation of high-school and college students to a mainstream form of social interaction that spans divisions of age, profession, and socioeconomic status. At the hospital where I'm

in training, medical students, nurses, residents, fellows, attending physicians, and service chiefs can all be found linked to one another as active members of social-networking sites. The technology facilitates communication, with personal Web pages that permit users to post information about events in their lives, advertise social activities, and share photographs. Users are prompted by Facebook to carve out a digital identity by disclosing their political affiliations, sexual orientation, and relationship status. Those who do so can readily communicate and associate with other users who have similar interests — a feature of these sites that facilitates collective action across spans of geography and time. In the 2008 presidential campaign, the group Doctors for Obama used Facebook to rapidly mobilize thousands of doctors to communicate their views on health policy to the Obama headquarters. This group of physicians continues to have a voice in the Obama administration, largely on the strength of its Facebook-created network of members. Similarly, Facebook networking groups have been created with a focus on specific medical specialties or diseases. Doctors or patients can interact with one another in groups such as "Diabetes Daily" and "I Support Cystic Fibrosis Research and Awareness!," each of which boasts thousands of Facebook members. Hundreds of thousands of philanthropic dollars can be traced back to initiatives publicized on social-networking sites.

By creating a new environment for individual and group interaction, social-networking sites also create new challenges for those who work in clinical settings. Take, for example, the MICU nurse who blogs about her experiences in dealing with a difficult patient, forgetting that one of the patient's family members — a recent addition to her network of friends — has access to



her blog. Or the dermatology resident who is asked on a date by a clinic patient after he learns from her online profile that she is single — information that he would have hesitated to draw out of her in person. Or the medical attending whose clinical judgment is questioned because of photographs posted online, showing him in progressive stages of apparent inebriation at a department holiday party. Although many Web sites allow users to choose higher privacy settings and to control which personal content is available to whom, it is clear that there is no longer a professional remove between many clinicians and their patients.

Physicians, medical centers, and medical schools are trying to keep pace with the potential effects of such networking on clinical practice. In an e-mail to students and faculty of Harvard Medical School, Dean for Medical Education Jules Dienstag wrote: "Caution is recommended . . . in using social networking sites such as Facebook or MySpace. Items that represent unprofessional behavior that are posted by you on such networking sites reflect poorly on you and the medical profession. Such items may become public and could subject you to unintended exposure and consequences." At the Drexel University College of Medicine, medical students are warned about the possibility that information placed on social-networking sites might influence the fate of their applications for postgraduate training: "Programs/employers are increasingly gaining access to social networking sites such as Facebook and MySpace to see what they can learn about candidates." Although legal questions surrounding the relationship between clinical medicine and social networking are as yet undefined, there are obvious concerns for individuals and institutions, since their Internet presence makes clinicians' attitudes and activities increasingly visible.

The issues raised by access to online media are in many ways similar to issues that physicians and medical institutions have dealt with for generations. Physicians, after all, are members of real-life communities and might be observed in public behaving in ways that are discordant with their professional personas. During medical training, the importance of maintaining professional distance — however much one desires to have a close, meaningful relationship with one's patients — is taught by educators and reinforced by the use of beepers and paging services meant to shield physicians from their patients. What is different about the online arena is the po-

tential size of the community and the still-evolving rules of etiquette.

After becoming my Facebook friend and exchanging a few friendly e-mails, Ms. Baxter divulged the reason she had gotten back in touch. Having tired of her job as a fitness instructor, she had decided to apply to medical school and wanted some advice. Relieved to be back in a semiprofessional realm, I began a correspondence with her and shared a few thoughts and suggestions. Among other things, I recommended that she carefully consider her online identity.

The name and identifying characteristics of the patient have been changed to protect her privacy.

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