PERSPECTIVES

Physicians, Social Media, and Conflict of Interest

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Physicians and patients increasingly use social media technologies, such as Facebook, Twitter, and weblogs (blogs), both professionally and personally. Amidst recent reports of physician misbehavior online, as well as concerns about social media's potential negative effect on trust in the medical profession, several national-level physician organizations have created professional guidelines on social media use by physicians. Missing from these guidelines is adequate attention to conflict of interest. Some guidelines do not explicitly mention conflict of interest; others recommend only disclosure. Recommending disclosure fails to appreciate the unique features of social media that make adequate disclosure difficult to accomplish. Moreover, in emphasizing disclosure alone, current guidelines are inconsistent with medicine's general trend toward management or elimination, not just disclosure, of potential conflicts. Because social media sites typically rely on physicians' voluntary compliance with professional norms, physicians necessarily play a major role in shaping these norms' content and scope. To achieve the benefits of social media and ensure the veracity of social media content while preserving trust in the profession, physicians must reaffirm their commitment to disclose potential conflicts; advocate for better electronic disclosure mechanisms; and develop concrete management strategies—including, where necessary, the elimination of conflicts altogether.

KEY WORDS: professionalism; ethics; internet; conflict of interest; blogging; social media.

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Research consistently demonstrates that personal and professional use of social media among physicians and patients is common and likely increasing.^{1–5} Facebook, Twitter, and weblogs (blogs) are well-known technologies, but other platforms similarly facilitate novel online interactions. These interactions occur between physicians (e.g., at Sermo.com or Floatingdoctors.com); between patients

(e.g., at PatientsLikeMe.com); and between physicians and patients (e.g., at HealthTap.com).

Social media already impact medical practice, research, and education. In medical practice, social media are proving useful for disaster response⁶ and for rapid, point-of-care consultation. For example, the “Curbside” consultation feature of Sermo.com is now available as an iConsult App for iPhones, and in a recent survey, over 85 % of Sermo's 125,000-plus members thought Sermo improved their patient care.⁷ In medical research, PatientsLikeMe.com collects participant information with consent and sells it to companies to aid product development or evaluation; its novel methods have produced several publications.^{8,9} In medical education, innovative uses of social media show promise for enhancing undergraduate, graduate, and continuing medical education (CME).^{10–12}

Integrating social media into medicine has obvious potential to improve patient care and trust in the profession, in part by meeting patients “where they are,” i.e., online. It also raises a number of ethical issues, however, including protecting patient and physician privacy; setting appropriate online boundaries; and delineating personal and professional identities, among others. Such issues are not entirely new; similar issues arose with the telephone in the 19th and 20th centuries,¹³ and may accompany all novel technologies. Nonetheless, social media, unlike the traditional Internet “one-to-many” communication, represent paradigmatically “many-to-many” communication, and cause these issues to manifest in unique ways. In addition, considerable uncertainty exists about appropriate behavior on social media,^{14,15} with standards described recently as the “Wild West.”¹⁶ For example, in spite of early arguments against “friending” patients on Facebook,¹⁷ in a recent national survey, only 68% of medical students, residents, and practicing physicians found interacting with patients on social media “ethically unacceptable” for either personal or patient-care related reasons.⁵

Recognizing this, as well as empirical research documenting physician¹⁸ and medical student^{19,20} misbehavior online, national organizations in the United States,^{21–23} Canada,²⁴ United Kingdom,^{25,26} and Australia and New Zealand²⁷ have issued guidelines on professionalism and social media. Professionalism and social media has also attracted attention from various scholars^{17,28–31} and medical schools³² hoping to realize social media's benefits while

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minimizing inherent ethical risks. Current guidelines, however, fail to address adequately the risk conflicts of interest present for physician use of social media. This failure is surprising, given the potential for conflicts to arise within social media; difficulties with accomplishing adequate disclosure online; and the recent trend toward management, not just disclosure, of potential conflicts throughout medicine.

EXAMPLES OF CONFLICTS OF INTEREST ON SOCIAL MEDIA

In medical practice, conflicts might bias treatment recommendations^{33,34} obtained via rapid consult technologies. Suppose an internist seeks treatment advice on an additional anti-hypertensive agent for a particular patient. Having near immediate access to a recommendation via social media can be tremendously useful. However, whether a recommender within a social network has a potential conflict (e.g., a financial relationship with a particular drug company) would be critical to interpreting advice on a particular product. Unlike a close professional colleague, however, the broad reach of a social network might make it less likely for the internist to know the recommenders' potential conflicts; social media's format and brevity also make them difficult to discover.

In research, industry funding and promotional material on social networks^{35,36} raise concerns about potential bias in the choice of research question, recruitment, or analysis similar to those in clinical research more generally.³⁷ For example, patient recruitment companies increasingly use social media to boost trial recruitment.³⁸ One company specifically encourages physician involvement to increase perceived credibility of the trial.³⁹ Imagine a patient discussing a particular clinical trial with a physician on a social media site. If that physician has a potential conflict related to the sponsoring company or drug, the patient deserves to know for informed decision-making. While boosting recruitment is laudable, patients within a social network might feel undue pressure or preferentially participate in industry-funded research. One can similarly envision possible conflict of interest concerns had successful social networking studies about substance abuse⁴⁰ been funded by the tobacco industry.

In medical education, incorporating social media without adequate attention to potential conflicts might create biased educational experiences with unintended future consequences. For instance, medical students and residents sometimes visit online forums seeking advice on particular diagnostic or treatment options during clinical rotations. At the same time, prescribing and practice patterns form during training and are influenced by industry interactions.⁴¹ Whether a forum participant has a potential conflict, such as funding from the diagnostic's developer, would be important for the

trainee to know when evaluating online recommendations. Social media—particularly the social media narratives of patients, advocates, and experts—might enhance medical education,⁴² but trainees must be aware of a source's potential conflicts.

CURRENT SOCIAL MEDIA GUIDANCE

In spite of the potential for conflicts of interest in social media, several national-level social media guidelines do not explicitly mention them.^{21,22,27} Such guidelines might refer instead to existing conflict of interest guidelines, but this appears inadequate. Empirical studies already document undisclosed conflicts in social media content,^{18,43} despite existing conflict of interest guidelines. Whether such lapses result from physicians' thinking such policies do not apply online, simple forgetfulness, or something else, deserves further study. Nonetheless, explicitly acknowledging the potential for conflicts is critical to begin addressing them.

Other national-level organizations recommend disclosure of potential conflicts on social media.^{23–26} This is important, but underestimates the challenges social media present for adequate disclosure. First, unlike traditional material posted statically online, social media content spreads more easily, rapidly, and in abridged forms often intermingled with other ideas beyond an individual physician's control. Subsequent messages might carry the originating physician's endorsement within a social network but not the original disclosure, if one were present. Second, social media content is frequently brief, such that including a disclosure might be infeasible. Twitter, for example, allows 140 characters, but the following generic disclosure has 71: "The author has no conflict of interest to report related to this Tweet."

These two features must be interpreted in conjunction with a third: the relative trustworthiness of social media, which remains relatively unknown. For example, the Health Information National Trends survey (HINTS) in 2002–2003 reported that about 65 % of patients trusted cancer information from the Internet "some or a lot;" 93 % trusted information from physicians.⁴⁴ HINTS, however, does not include items about the relative trustworthiness of social media sources. In a recent consumer survey, respondents reported trusting content from patients they knew (46 %) more than patients they did not (25 %); trust of physician content was 60 %, compared to 54 % for patient advocacy groups and 36 % for pharmaceutical companies.⁴⁵ Interestingly, however, respondents 18–24 years of age trusted patients they knew (63 %) almost as much as physicians (67 %), suggesting that some demographics trust physician and patient-contributed content equally within social media.⁴⁵ A better understanding of what it means to "know" and "trust" social media sources is critical, because context influences how individuals interpret conflict disclosures.⁴⁶

MANAGING CONFLICTS ON SOCIAL MEDIA

In addition to underestimating the difficulties of disclosure online, current social media guidelines mistake disclosure with management of potential conflicts. Disclosure in medical research, education, and practice is already a nearly universal ethical obligation in professional guidelines and a legal obligation of manufacturers in the United States.⁴⁷ Importantly, as with established ethics guidance on health-related online sites,⁴⁸ physicians' obligation to disclose exists independently of a fiduciary physician-patient relationship (though its presence arguably makes this obligation stronger). Part of the obligation arises out of the need to maintain trust in the medical profession, which could be negatively affected by failure to disclose.⁴⁹ This obligation therefore similarly arises even if physicians post anonymously as physicians (and consensus might be developing against completely anonymous posting of content related to one's professional capacities^{25,26}).

Disclosure, however, is only the first step in managing potential conflicts. This point was well recognized by the Institute of Medicine, whose 2009 report characterized different conflicts, and recommended tailoring management strategies to their magnitude and likelihood of causing harm.⁵⁰ Elsewhere in medicine, for example, some activities, such as research with human subjects, might require eliminating potential conflicts or recusal for investigators with a financial interest in the outcome. Others, such as committee development of clinical practice guidelines, might allow participation but limit voting privileges. Accordingly, the Council of Medical Specialty Societies recommends the committee chair and a majority of committee members be free of conflicts for practice guideline development.⁵¹ Recent CME guidelines similarly emphasize managing and resolving potential conflicts.⁵²

In light of the trend toward *management* of potential conflicts of interest in all areas of medicine, requiring mere *disclosure* on social media appears ethically inconsistent. At present, norms regarding disclosure and management will likely arise from physicians, i.e., from within the medical profession; current social media sites (e.g., Sermo) recommend voluntary disclosure and do not engage in active monitoring. This has important implications for how physicians and the medical profession should respond to potential conflicts of interest on social media.

First, physicians seeking advice via social media must be aware of preliminary evidence suggesting undisclosed potential conflicts online. Physicians undeniably have the obligation to evaluate critically all medical information on which they base treatment decisions. Because social media guidelines on disclosure and management of potential conflicts currently lag behind policies in other areas, this responsibility is arguably greater regarding social media content.

Second, physicians who contribute to social media should recognize growing consensus around the general ethical obligation to disclose potential conflicts and be especially cognizant of disclosing on social media. This includes personal and professional sites, i.e., any site where the conflict of interest is relevant. Examples of ways to accomplish disclosure are listed in Table 1.

Third, the aforementioned difficulties with truly adequate disclosure and the obvious burden of accomplishing and monitoring it (see Table 1) implore creation of novel disclosure mechanisms. An example might include permanent electronic "tags" on social media content for which an individual has a potential conflict, including linkages to full disclosure forms and public databases, when available. If done in a standardized format, as previously recommended by the Institute of Medicine (IOM)⁵⁰ or as developed by the

Table 1. Examples of Ways Physicians Might Accomplish Disclosure on Social Media

Media	Type of user	Disclosure
Weblog ("blog"), Facebook, or social media forum	Occasional contributor	Disclose potential conflicts explicitly within posts where conflict is relevant Ensure explicit conflict disclosure does not become "lost" within future or follow-up posts
	Main "blogger," moderator, or regular contributor	<i>All of the above, plus:</i> Post standardized disclosure form (e.g., ICMJE ⁵³) and update annually on main blog page Link to public disclosure databases (when available) Monitor contributors for appropriate disclosures
Rapid consultation	Requestor	Apply appropriate scrutiny to online consultations When in doubt, ask consultants about potential conflicts, search within public disclosure databases (when available), and seek second opinions
Twitter	Consultant	Disclose potential conflicts explicitly within response
	Members	Brief format complicates disclosure; consider avoiding topics relevant to potential conflicts Make standardized disclosure form available (e.g., ICMJE ⁵³) and update annually
All Media	All Users	Advocate for novel electronic methods to facilitate standardized disclosure, ensure permanent attachment to relevant content, and link directly to public disclosure databases (when available)

International Committee of Medical Journal Editors (ICJME),⁵³ some well-known challenges of disclosure might be overcome.⁵⁴ Although social media companies might justifiably eschew ethical obligations to enable or monitor disclosure, the physician users essential to their success should advocate for building such novel mechanisms into technology platforms.

Fourth, recent behavioral approaches to medical professionalism⁵⁵ demand development of specific management strategies to assist physicians' ethical decision-making about managing conflicts in social media. Accomplishing this will require coordinated discussion among physicians and guideline drafters to develop consensus and to modify existing guidance. For example, the United Kingdom's General Medical Council recently held an open online consultation on its draft guidelines.²⁶ Such consultative efforts should be replicated, expanded, and coordinated internationally because of social media's global reach. Due to current uncertainties about the adequacy of disclosure, one proposal worth considering would recommend physicians forego participation in social media related to research, education, and practice areas where they have potential conflicts.

Finally, an ongoing research need exists for comprehensive data on the prevalence, types, and effects of physicians' conflicts of interest in social media, including evaluations of the costs and benefits of management strategies. For example, some features of social media, such as the capacity for rapid "second opinions" as an adjunct to rapid consultation, might mitigate some risks of conflict of interest. Only with high quality research can evidence-based guidelines and management strategies be further refined.

CONCLUSION

As physicians and patients increasingly interact via social media, the failure to disclose and manage conflicts of interest threatens both patient care and trust in the profession. Use patterns continue to emerge, and technology changes rapidly. Nonetheless, recent highly-publicized and damaging cases of undisclosed conflicts in medicine argue for a proactive approach by physicians to disclose, manage, and eliminate, where necessary, all potential conflicts on social media.

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