

FELLOWS-IN-TRAINING & EARLY CAREER PAGE

Social Media in Medicine

A Podium Without Boundaries

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Social media has become increasingly popular not only in everyday personal life, but in the field of medicine as well. With more than 1.28 billion people worldwide using Facebook and 255 million using Twitter, social media has become intertwined with the personal and professional lives of physicians (1). With the freedom to convey information in a limitless manner comes responsibility, particularly for physicians and allied staff. It is not uncommon to hear anecdotes about members of the health care team being terminated from their occupation on the basis of misuse of social media. The Health Insurance Portability and Accountability Act, which gives patients peace of mind to fully confide in their health care team without consequence, is important to remember when using social media. Many health care facilities and organizations have guidelines to help direct the medical community in the proper use of social media. That being said, when used in the correct manner, social media allows for limitless opportunities to convey information to others.

There are 4 common uses of social media by the medical community.

PERSONAL

Facebook, MySpace, and other such electronic modes of communication have been used for over a decade. Facebook allows people to remain in touch, regardless of distance or frequency of correspondence. Considering its accessibility by almost anyone, members of the health care team need to understand the consequences that “posts” on Facebook can have, especially if seen by patients. Different privacy options exist for such social media platforms; yet, a general rule of thumb is that one should not post anything

that can negatively affect one’s character. To that same extent, many employers (including residency and fellowship program directors) can easily search for a Facebook page, and it may influence decisions of whether or not to select the candidate. Therefore, health care fellows and early career professionals should understand the potential consequences when using public forums for personal use.

NETWORKING

Social media is a great resource for networking with other colleagues globally. Facebook can be used as such, yet the development of other forums, such as Doximity and LinkedIn, allow people to create primarily professional profiles and connect with others. Doximity, a social networking and medical news site for physicians, has almost 500,000 members. It offers private physician-physician communication for further networking. LinkedIn is a professional forum in which members create a page that is representative of professional achievements, similar to an online curriculum vitae.

EDUCATION

Social media has recently been incorporated in the field of medical education. QuantiaMD, an online community collaboration for physicians, serves as a podium on which various expert physicians give presentations on topics within all realms of medicine. It gives the user an opportunity to post questions and comments on presentations that the expert can answer. Currently, with more than 200,000 users, the average user spends more than 19 min/session on the site.

Similarly, many residency and fellowship programs are resorting to social media to provide options to facilitate teaching. For instance, a study by Mallin et al. (2) found that almost 98% of emergency medicine residents at 12 different programs utilize some

form of social media for education at least 1 h/week (2). Different forms of social media are incorporated into education, including blogs, podcasts, and even videocasts. Currently, Mayo Clinic in Rochester, Minnesota, utilizes podcasts and the iTunes electronic curriculum as part of the cardiology rotation for internal medicine residents. Dr. Valentin Fuster, the editor of the *Journal*, offers an iTunes podcast commentary of each paper that appears in each issue.

Medical journals also have incorporated the use of social media in promoting content. A recent study by the *Journal of the American College of Radiology* found that the use of Twitter helps to increase readership (1); yet, a similar study by *Circulation* found that publications within their journal did not show increased traffic to the journal website following the use of social media (3). Although results differed, both studies concluded that social media does represent opportunities for the dissemination of medical knowledge.

One additional piece of evidence supporting social media in providing educational benefits is the Fellows-in-Training blog developed by the American College of Cardiology. Cardiology fellows are able to interact with and interview leaders in cardiology at national conferences. Recent interviews at the 2015 American College of Cardiology scientific sessions in San Diego included Dr. Fuster, the incoming president of the American College of Cardiology, a coauthor of the recently published valve guidelines, and late-breaking clinical trialists. The interviews are uploaded to YouTube, and since the blog's inception in 2012, there have been almost 45,000 individual views. Similarly, many other professional societies use Twitter to disseminate information during national conferences, allowing others to learn about events taking place, including late-breaking clinical trials. A recent study assessing Twitter use during the 2013 Cardiac Society of Australia and New Zealand using the hashtag #CSANZ2013 showed an average of 9 tweets/h during the conference hours, reaching a possible audience of >1.4 million people (4).

PUBLIC HEALTH

Social media is as important to the public as it is to providers. One-third of adults have used a form of social media to help diagnose a medical condition (5). Social media forums, such as Twitter, also are commonly used to disseminate information. For instance, in October 2014, there were more than 21 million tweets about the Ebola virus within the United States alone (6). Various medical blogs exist to help patients diagnose, cope, and even treat medical conditions. Additionally, several websites allow patients to ask physicians, either privately or publicly, for advice on medical conditions. Research institutions also have explored social media as a means to facilitate recruitment into clinical trials. Private physicians' offices have used social media, including Facebook, to keep in touch with patients. Similarly, the *Journal* and the *JACC* sister journals have a Facebook page to help disseminate up-to-date information about their clinical studies and review articles.

Also, various applications exist for smartphones to assist the public in the integration and understanding of published medical data.

Social media has become, and will continue to evolve as, an important means of communication within social and medical communities alike. As Dr. Charles Mayo once commented, "medicine is about as big or as little in any community, large or small, as the physicians make it" (7), illustrating the point that appropriate dissemination is important. Social media does carry consequences if it is used improperly; yet, the opportunities are almost endless. Social media will continue to become an important part of medicine, so it is important for physicians to understand and utilize its opportunities.

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REFERENCES

- Hawkins CM, Hillman BJ, Carlos RC, et al. The impact of social media on readership of a peer-reviewed medical journal. *J Am Coll Radiol* 2014;11:1038-43.
- Mallin M, Schlein S, Doctor S, et al. A survey of the current utilization of asynchronous education among emergency medicine residents in the United States. *Adac Med J Assoc Med Coll* 2014;89:598-601.
- Fox CS, Bonaca MA, Ryan JJ, et al. A randomized trial of social media from *Circulation*. *Circulation* 2015;131:28-33.
- Ferguson C, Inglis SC, Newton PJ, et al. Social media: a tool to spread information: a case study analysis of Twitter conversation at the Cardiac Society of Australia & New Zealand 61st Annual Scientific Meeting 2013. *Collegian* 2014;21:89-93.
- Avci K, Celikden SG, Eren S, et al. Assessment of medical students' attitudes on social media use in medicine: a cross-sectional study. *BMC Medical Education* 2015;15:18.
- The medium and the message of Ebola. *Lancet* 2014;384:1641.
- Huth EJ, Murray TJ. *Medicine in Quotations: Views of Health and Disease Through the Ages*. 2nd Edition. Philadelphia, PA: American College of Physicians; 2006.

RESPONSE: The Necessity of Social Media Literacy

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Dr. Snipelisky makes the case that social media and the digital age provide “almost endless” opportunities. He is correct. But, I would go further. I would argue that literacy in the “Digital Age” is more than an opportunity; it is a necessity. The 2 realities of the Digital Age are that you can create your online story, or someone else will do it for you.

Many have likened social media to the printing press. It is a good analogy, but it is also worth remembering that revolutions did not occur immediately. People first had to learn to read—which took 1 or more generations. Things move faster in 2015. The literacy lag of social media is over. The world is connected, and millions are digitally literate. As Dr. Snipelisky tells us, social media has already transformed education, improved public health, and expanded medical consultation to a global scale.

This has major implications for physicians. Information now flows freely. Doctors no longer control the health conversation. The brief patient-doctor encounter contributes less and less to a person’s knowledge-base of health. Freedom of information also has upended the vertical top-down hierarchy of traditional medicine. The culture of permission is gone. The rules of influence changed. Tomorrow’s leaders will be public physicians.

Dr. Richard Gunderman, a professor of radiology at Indiana University and an author and contributor to *The Atlantic*, recently told a group of medical students that “if you can tell a story, you are a leader... If you have the courage to say what needs to be said, you are a leader” (R. Gunderman, oral presentation, October 19,

2013). Dr. Bryan Vartabedian, author of *The Public Physician*, writes that “if you are authentic, you have no competition” (1). *New York Times* columnist Tom Friedman, writing on the interconnected world, said “there’s never been a time when we need more people living by the Golden Rule: Do unto others as you would have them do unto you” (2).

This is terrific news. Social media rewards those who bring value and candor to the public conversation. By virtue of our training, experience, altruism, and public respect, doctors are well-suited to speak publicly. Who better than physicians to provide context to the current health information overload? Think about the good you do when you help a patient quit smoking, eat less, or exercise more. Now, imagine the good that is possible if your successful argument employed with that individual patient went viral on the Internet.

Yet, social media as a force for good extends beyond translating health information. When one considers the collective wisdom of doctors and the potential we have to improve humanity, I would argue we have both a civic and moral responsibility to engage publicly.

On the matter of risk, Dr. Snipelisky warns us about the pitfalls of engaging in social media. I believe these fears are overestimated. Avoiding trouble in the Digital Age is easy—and no different from real life. If you respect privacy, listen more than you speak, see things from the perspective of others, and, if the purpose of your public voice is to do good, then there is little chance of trouble. It also helps to be nice.

There were many reasons I was attracted to a career in cardiology. One was that cardiologists are natural leaders. If we are to maintain that position of leadership, we must embrace the modern-day printing press.

REFERENCES

1. Vartabedian B. The Public Physician. Available at: <https://dashboard.tinypass.com/download?did=D0ku4nl>. Accessed April 27, 2015.
2. Friedman TL. Time for a pause. *The New York Times*. January 7, 2015:A23.