

# Use of Social Media in the Practice of Medicine



Social media use is common among health care professionals.<sup>1</sup> Various platforms facilitate social networking and interactions: Facebook, Twitter, and LinkedIn are well known to the general public, while physician-only platforms such as Sermo, and the Health Insurance Portability and Accountability Act-compliant Doximity, have arisen in recent years. One survey of over 4000 physicians estimated that “more than 90% of physicians use some form of social media for personal activities, whereas only 65% use these sites for professional reasons.”<sup>1</sup> A recent commentary in *The American Journal of Medicine* expressed concerns over physician use of social media.<sup>2</sup> As physicians who use social media personally and professionally, we believe in social media as an important tool for scientific collaboration, education, advocacy, patient engagement, and improved patient care.

## SCIENTIFIC DISSEMINATION, COLLABORATION, AND PROFESSIONAL DEVELOPMENT

With thousands of papers published each week with a rapidly evolving, and sometimes conflicting, literature base, it is impossible for any clinician to stay informed of all key papers and practice-changing updates. In our field of thrombosis and hemostasis, Twitter provided a virtual platform to connect colleagues from around the world as we discussed, almost in real time, evolving management strategies for anticoagulation and venous thromboembolism risk reduction in COVID-19 patients. This became even more important when the first cases of vaccine-induced thrombotic thrombocytopenia were reported in April 2021.<sup>3</sup> Through Twitter, scientists and clinicians came together to develop and disseminate algorithms for diagnosis and treatment for a disease entity that had not existed only a few days previously.

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Requests for reprints should be addressed to Nathan T. Connell, MD, MPH, Hematology Division, Brigham and Women’s Hospital, SR322, 75 Francis Street, Boston, MA 02115.

E-mail address: [NTConnell@bwh.harvard.edu](mailto:NTConnell@bwh.harvard.edu)

Social media also has much greater reach than traditional publication methods, often limited by subscription fees or firewalls to access. As an example, two key thrombosis papers were cited 215 and 151 times in the first several months of the COVID-19 pandemic, but had reached over 1 million and 3 million impressions, respectively, on Twitter during that same time.<sup>4</sup> Many professional societies have appointed “social media ambassadors” to disseminate scientific conference findings and key articles from flagship journals.<sup>5-7</sup> Journals promoting their research via Twitter saw a 34% increase in subsequent citations than journals without Twitter presence.<sup>7</sup> Our own personal experience with social media has led to collaborative publications with co-authors that we would otherwise have not interacted with.

Social media has the potential to improve care through rapid dissemination of scientific findings and serves to foster new collaborations between clinicians and scientists who may not have otherwise interacted. This is particularly valuable for clinicians who may not have access to collaborators or mentors at their workplace.

## TRAINEE EDUCATION

Medical training programs utilize social media to engage applicants and disseminate knowledge. Many surgery programs use social media to recruit potential applicants, with studies documenting social media’s influences on the choice of program application, choice to interview, and rank list order by applicants.<sup>8,9</sup> Restrictions placed on medical training programs during the COVID-19 pandemic have led to an increase in social media use by programs to provide critical online engagement for applicants.<sup>10</sup>

Social media has also broadened access to medical education, including the use of Twitter Journal Clubs and Tweetorials, both popularized by leading clinician educators (eg, [cardionerds.com](http://cardionerds.com)). Sharing clinical information through these formats (one discussing a relevant article, the other a series of clinical knowledge items often paired with a relevant image) democratizes medical education by providing free access to participation without geographic or significant financial restrictions. Social media flattens the hierarchy of medicine, facilitating interactions between trainees and attending physicians.

## PATIENT EDUCATION, ENGAGEMENT, AND ADVOCACY

Patients also use social media sites to engage with clinicians and each other, seeking education and a support network to discuss the patient experience. A Facebook support group for liver transplant patients provided support to 350 users, with over 6000 reactions recorded.<sup>11</sup> When surveyed, 95% of the participants reported a positive impact on their care, with the authors concluding that “integration of social media into clinical practice can empower surgeons to synthesize effectively a patient support community that augments patient engagement and satisfaction.” One prominent example is Dr. Kimberly Manning, who has used Twitter (@GradyDoctor) to educate clinicians and patients about health education communication, most recently on effective ways to address vaccine hesitancy.

A number of studies have also evaluated the use of social media among young adults with cancer,<sup>12</sup> and social media interventions are effective in targeting education at historically disadvantaged populations.<sup>13</sup> A systematic review of 15 studies evaluating social media to screen for depression showed differences in number and linguistic content of posts between patients with and without depression, providing a potential option for depression screening.<sup>14</sup> The quality of the content posted on social media varies, suggesting that health care professionals who participate in these platforms have the ability and responsibility to provide valuable education and offers an opportunity to correct misinformation.

Finally, clinicians increasingly leverage social media to advocate on behalf of patients. Successful efforts include increasing participation in the Make-a-Wish Foundation (Phoenix, Ariz) for patients with sickle cell disease, coordination of personal protective equipment for health care workers through Get Us PPE (Washington, DC), as well as raising over \$350,000 in 1 week for “Health Care Workers versus Hunger” via the Twitter hashtag #HCWvsHunger.

## PROFESSIONALISM

Social media users must also be aware of potential inappropriate uses. In line with guidelines proposed by others,<sup>15</sup> we suggest 1) focusing on evidence-based facts, 2) acknowledge limitations of knowledge and personal biases when applicable, 3) maintain respect for others in all interactions, 4) maintain patient confidentiality, and 5) maintain appropriate physician–patient boundaries. While trainees often feel comfortable with social media and engage with each other for support during rotations and information about clinical topics, responsible use of social media should be included in professionalism training for all medical professionals.<sup>16</sup> Social media has the potential to occupy increasing amounts of time, and engagement needs to be consciously planned to avoid focusing on virtual interactions at the peril of in-person interactions.

## CONCLUSIONS

Overall, we believe there is strong value in the appropriate use of social media by the health care community based on its ability to amplify science dissemination, to engage patients and provide evidence-based education, and to engage trainees in innovative ways. Additionally, social media has value to address inequities such as racial inequality and gender bias in science and health care delivery.

As with any tool, use can lead to unintended negative consequences, but the scientific literature supports the use of social media by physicians. We recommend that physicians looking to expand use of social media educate themselves on various platforms as well as the social media policies of their institutions. Many institutions ask that employees posting on social media provide a disclaimer that the views posted are their own and not official positions of their employers. It is also important to understand how a post may be interpreted and to carefully craft content that would not be confused with specific medical advice. Ultimately, the decision to use social media is an individual choice, but we believe social media offers a unique opportunity to interact with colleagues and patients in a productive manner.

Nathan T. Connell, MD, MPH<sup>a</sup>

Angela C. Weyand, MD<sup>b</sup>

Geoffrey D. Barnes, MD, MSc<sup>c</sup>

<sup>a</sup>Hematology Division, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, Mass

<sup>b</sup>Division of Pediatric Hematology Oncology, Department of Pediatrics, University of Michigan Medical School, Ann Arbor

<sup>c</sup>Frankel Cardiovascular Center and Michigan Program on Value Enhancement, University of Michigan Health System, Ann Arbor

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