

How Can Social Media Get Us in Trouble?

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Abstract

Keywords

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When utilized properly, social media offers several personal and professional benefits for the practicing surgeon, including peer networking, education, e-mentorship, marketing, recruitment, and patient outreach. However, unprofessional online behavior is common among surgeons, and this improper use of social media can be quite dangerous. This article reviews the dangers of social media and illustrates this with examples of unprofessional behavior and the associated consequences. It also provides recommendations for maintaining a professional and productive online persona. Surgeons must understand the various social media platforms and their target audience while upholding online professionalism at all times.

Social media has become ubiquitous in recent years, and it carries the ability to connect people across the world in ways previously unimaginable. For the practicing surgeon, social media offers several personal and professional benefits, including peer networking, education, e-mentorship, marketing, recruitment, and patient outreach. However, most social media platforms were not designed for professional use, and surgeons can suffer negative consequences from improper social media use that can overshadow the proposed benefits.

To avoid the dangers and pitfalls of social media, surgeons must understand the technology and the associated risks. This will allow them to maintain online professionalism at all times. This article focuses on the different ways that improper use of social media can damage the surgeon if he or she does not approach the concept carefully.

Social Media Utilization

Without a doubt, social media is becoming more prevalent and more powerful over time. Facebook¹ is perhaps the best-known example, boasting 1.74 billion monthly active users worldwide,² including 71% of Americans. Facebook's yearly revenue continues to increase at nearly exponential rates, and was estimated to be \$27.64 billion dollars for 2016.³ Twitter, Inc.⁴ is another well-known social media platform with an estimated 317 million monthly active users in 2016.⁵

While Facebook and Twitter have long been seen as the towering leaders in social media, it is evident that new platforms will continue to emerge while others lose prominence over time, reflecting the general public's relatively short attention span. For example, Instagram⁶ recently surpassed Twitter in popularity with 600 million monthly active users in 2016.⁷

Social media use among health care workers in the United States has typically mirrored that of most Americans, although reported statistics have varied based on study methods. For example, anonymous surveys have reported higher rates of utilization for physicians and trainees, while other studies that relied on third-party identification of profiles likely underestimated utilization, perhaps due to the widespread use of pseudonyms and other methods to maintain anonymity.

We recently published two studies regarding Facebook use among surgical residents and faculty surgeons, and determined utilization to be a modest 32 and 26%, respectively.^{8,9} We then conducted a survey of general surgery program directors, where we found a self-reported rate of Facebook use to be much higher at 67%.¹⁰ This is similar to a 2010 survey conducted by the American College of Surgeons (ACS) that found utilization of Facebook among surgeons to be 54.8%.¹¹ Since that survey was conducted 7 years ago, it is safe to assume that utilization has increased over this time.

Table 1 Important social media tenets

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|---------------------------------------|
| Social media is powerful |
| The audience is poorly defined |
| Accuracy is not guaranteed |
| Nothing is truly private or temporary |
| Fairness is irrelevant |
| Consequences are real |

Another important measurement of utilization among health care professionals comes from the growing body of peer-reviewed literature on the subject. A recent PubMed¹² search for the term “social media” revealed 5,728 results, with more than 2,700 of the studies being published within the past 2 years. Based on this statistical data, social media is certainly experiencing an increased emphasis in the medical community.

Shifting attention toward Twitter, the increasing prevalence of social media in surgery is demonstrated in the use of health care hashtags. The hashtag “#ACSCC14” was used to promote the American College of Surgeons 2014 Clinical Congress in San Francisco.¹³ This hashtag was included in 5,354 tweets created by 1,000 unique users, generating 14.7 million impressions, meaning that the hashtag was viewed on an individual’s Twitter feed 14.7 million times. The following year, “#ACSCC15” was used for the Clinical Congress in Chicago, and dwarfed the 2014 numbers with nearly 56 million impressions.¹⁴ For the 2016 Clinical Congress in Washington, DC, “#ACSCC16” was included in over 20,000 tweets by almost 5,000 individual users, and generated nearly 80 million impressions.¹³ This exponential growth speaks to the growing popularity of the social media platform.

The Dangers of Social Media

The previous section highlighted the profound reach of social media because this frames a discussion of risk. Social media is “big business” because it has such a large audience and demonstrates very high utilization among surgeons and patients alike. Therefore, consequences of bad behavior can be swift and severe. This section outlines the reasons why social media can be dangerous to surgeons and trainees alike (► **Table 1**).

Audience Is Poorly Defined

As stated previously, the most prevalent social media platforms were not designed for professional use. Additionally,

Table 2 Guidelines for professional social media use

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|--|
| Understand social media and study institutional policies |
| Know your audience |
| Police your profiles |
| Measure twice, post once |
| Never stop learning |

physicians receive little to no education on how to properly maintain online professionalism. As a result, there is often an unintentional overlap between the surgeon’s personal and professional lives on platforms such as Facebook and Twitter. Some pictures and comments may have been meant for a surgeon’s friends and family, while others were aimed at professional colleagues, patients, or the general public. Short of creating entirely separate accounts for each intended purpose, there is no good way to separate these potential uses. If a user posts links to funny cat videos, pictures of dinner plates, and discussion of politics, then switches gears and posts journal articles or links that promote the surgeon’s hospital or practice, it is unlikely that a single platform will hit these different targets with equal efficacy. The intended audience may not have an interest in (or worse: may take offense to) the posts aimed at a different demographic.

Another potential consequence of the poorly defined audience is a surgeon unintentionally sharing content with the public. Twitter is relatively straightforward as all posted content is viewable by the public. However, Facebook can be more confusing to the novice user, as the privacy settings contain several options designed to limit the ability of the general public to view certain posts. These settings can be adjusted for different content, sharing one picture with the public while reserving others for “friends only.” This level of complexity can lead to mistakes, and content intended for friends and family can be seen by patients and professional contacts, a misstep which will be further highlighted in the upcoming section on “examples of bad behavior.” Similarly, if shared or re-posted by a contact who does not have such privacy settings in place, these posts intended to the “private” may be discoverable by a wider audience. Thus, there is no guarantee that any posting will not eventually be able to be viewed by the general public.

Accuracy Is Not Guaranteed

Even when personal and professional lives are kept separate, surgeons using social media are still subject to the enormous body of misinformation on the Internet. In general, the accuracy of what is being said by surgeons or about surgeons cannot be guaranteed and there is no good way to separate fact from opinion.

Unlike medical journals, content on the Internet is typically not subjected to rigorous peer review, and so biased opinions and unproven interventions may receive undeserved attention. Similarly, regional and national scientific meetings require the presenters to possess a certain level of expertise in the chosen subject of discussion to be given the privilege of time on the podium. On Twitter or Facebook, there is no such requirement for expertise to speak from this “virtual podium.” Instead, the only necessity is an audience. Celebrity Jenny McCarthy has been known to share her opinions on diseases such as autism with her 1.4 million followers on Twitter.¹⁵ Kim Kardashian West has 54.9 million Twitter followers.¹⁶ Meanwhile, the *Annals of Surgery*¹⁷ has 20,200 followers and the American College of Surgeons¹⁸ has 34,800. In considering the integrity of the source vis-à-vis the size of the audience, consider

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the following: If a scientific journal publishes conflicting (but peer-reviewed) information to a pop culture icon's opinion, which information is more likely to be disseminated, dare we say believed as fact (see the articles in this issue about how social media information gets disseminated and about verifying information).

Adding to the inaccuracy of information presented on social media is the presence of fake profiles. Essentially any Internet user can create a profile and claim names and pictures; so, a surgeon or institution's identity can be stolen and their image subsequently damaged. In 2014, the American Society of Colon and Rectal Surgeons had their logo used in the profile of a South American hospital, potentially giving the impression of authenticity or endorsement. It took several months to get this changed and there is little authority to police against such actions. Other accounts may not steal identities, but can still cause significant damage through spamming users or promoting other agendas and products. Consider also that many people have the same or similar names. Consider the difference between @HillaryClinton (described as "I am not Hillary Clinton nor am I affiliated with her. Just a parody account") and @HillaryClinton. One letter makes a big difference.

Nothing Is Truly Private

With the advent of social media and Internet search engines, it has become much more difficult for surgeons to remain anonymous and hidden from their patients when they engage in activity that they would prefer to keep separate from their professional identity. If this behavior is shared on social media, perhaps with friends and family as the intended audience, there is potential for the general public to receive a more intimate and untarnished snapshot of their surgeon. This can include undesirable behavior such as binge drinking, foul language, and sexually explicit or politically charged remarks. Even if none of the behavior could be interpreted as unprofessional, there is still potential for breaches in privacy, and the public can obtain access to family facts and photos that the surgeon did not intend to share with them.

Several avenues for undesirable dissemination of this content exist, but one that likely does not receive enough emphasis is the surgeon's extended network. Often a Facebook user will have hundreds of "friends," and these people have access to most of the surgeon's Facebook content. While these friends may be close to the surgeon, they often also include networking contacts, childhood and school acquaintances, and perhaps even people disguised as friends who actually have malicious intent. If a member of this extended network posts, reposts, or tags/identifies the surgeon in a potentially unprofessional picture or statement, the surgeon himself/herself has no control over who can view this information. For this reason, it is important for the surgeon to police his or her network, including Facebook friends and Twitter followers, to identify potential problems.

Privacy settings attempt to limit and possibly avoid the above-mentioned situations, but the process is imperfect, both by design and due to user error. Social media platforms do not contain the level of security necessary to fully protect

user privacy, and so the user should never assume that posts and pictures are fully restricted from public view. These platforms also do not have adequate security to prevent Health Insurance Portability and Accountability Act (HIPAA) violations; so, any identifiable patient information shared on these sites, even if "protected" by the user's privacy status or the use of a private group, is a direct violation that can result in patient compromise and physician punishment (that can include substantial fines or penalties, employment termination, or other adverse consequences).

Fairness Is Seemingly Irrelevant

Any discussion of online professionalism will eventually come to a disagreement about what is considered unprofessional behavior for surgeons, a label that is inherently subjective. Some would opine that online demonstrations of binge drinking, shooting guns, and discussing polarizing, religious, and political topics are inappropriate for physicians. Others would argue that physicians should have the right to express themselves as long as their behavior is legal, and being held to higher levels of scrutiny is unfair.

Regardless of opinions or perceived justice, the surgeon is ultimately subject to the court of public opinion. Posts and pictures may be unfairly scrutinized and viewed out of context. Jokes may be misinterpreted, and viewers of the material may ultimately take offense even if this was not the user's intent. Blame is often assigned in situations where the surgeon has been misidentified, or perhaps incriminated only by association with another party.

Within social media, swift judgments are often made, and this can inflict heavy damage on the reputation of the surgeon and his or her institution. It can have even wider implications, with damaging effects on the public's perception of surgeons or physicians in general. Such a process is often unfair, but can occur nonetheless. Surgeons must remember that while they are not celebrities, they are public figures, and so they act as ambassadors for their academic institution, hospital, and their profession.

Nothing Is Temporary, and the Past Can Haunt You

Most social media platforms allow users to modify and even delete content. However, the surgeon must remember that once something has been placed on the Internet, there is a permanent digital footprint. Simply altering or eliminating content will not reliably erase this footprint.

Because content never completely goes away, old indiscretions can remain unnoticed for a long period of time, only to resurface when a surgeon's professionalism has been called into question. Surgeons who feel protected because of a seemingly small audience to their comments and pictures must remember this, as the number of friends or followers is unimportant once a single party or a small group have been adequately angered or offended by the surgeon. This minority can then embark on a fact-finding mission, and bring up content from the past that may be out of context or no longer relevant, but which can support their agenda or illustrate their bias.

For example, if a surgeon is being investigated for a malpractice suit, old pictures of binge drinking or drug use may help tarnish their reputation, even if it was many years ago (such as an old picture taken and posted as part of a #TBT or throwback Thursday recollection). Similarly, since content is usually time stamped, surgeons who utilized social media during a time period when a jury of his or her peers believes greater attention should have been given to a clinical situation, the plaintiff's attorneys may inquire why the surgeon was taking "selfies" or even posting any content at all when he should have been working hard to save their client's life.¹⁹ An example of this could include tweeting or posting while waiting for an elevator or going between two operating rooms during noncritical portions of a procedure, operation, or endoscopy that was being performed by a resident or other surrogate. The conflicting timestamps of the social media post in the middle of the procedure could be very damaging in to court of public opinion.

Bad Behavior and Consequences

Unprofessional conduct among physicians on social media is more than hypothetical. Unfortunately, many incidents have been documented in the media and the medical literature, some of which will be illustrated below, along with some of the consequences of these actions.

Unprofessional Conduct among Physicians on Facebook

Our group conducted a 2014 study focusing on unprofessional conduct among surgical residents on Facebook.⁸ This was done with the intent of identifying problem behavior and developing a solution for program directors (PDs) who are entrusted with the education and professional development of these residents. Unfortunately, we found that 12.2% of surgical residents on Facebook had clearly unprofessional behavior, including HIPAA violations, binge drinking, drug use, and racist or sexist material. We also found that an additional 14.1% demonstrated potentially unprofessional behavior, including polarizing religious and political statements, inappropriate costumes or revealing swimwear, and the use of alcohol and tobacco. We also looked at trends across post-graduate years (PGY), and found that bad behavior was equally prevalent among interns (PGY-1) and chief residents (PGY-5), suggesting a lack of professional maturation during residency. Some surgeons felt that our study unfairly categorized behavior as "potentially unprofessional" when it seemed relatively benign to them, and we agreed that such categories were inherently subjective, but responded with comments similar to what was made in the "Fairness Is Seemingly Irrelevant" section above.

We conducted a follow-up study in 2015 which shifted attention toward attending surgeons.⁹ In this population of practicing physicians, we found that 5.1% of Facebook users had clearly unprofessional content and 10.3% had potentially unprofessional content. While this was certainly better than resident behavior, it still seemed unacceptably high. Interestingly, we found that sex and years in practice impacted

behavior, with males in practice less than 5 years demonstrating a significantly higher rate of unprofessional behavior (11.1%). This study had a high rate of inter-rater reliability (88.9% agreement, kappa = 0.784). It also illustrated the previously highlighted concept that "the past can haunt you," as much of the unprofessional behavior pre-dated the surgeon's graduation from medical school and/or residency.

Examples of Bad Behavior and Consequences

Among celebrities and political figures, one does not have to look far to discover consequences from inappropriate comments on social media. Those without celebrity status have also suffered the consequences of unprofessional online behavior, some of which have become newsworthy while others have not.

Several examples of unprofessional online behavior among physicians exist. In late 2016, a pediatric anesthesiologist was fired from the University of Colorado after an inappropriate comment on Facebook calling Michelle Obama a "monkey face."²⁰ She had practiced at Denver Health for 10 years prior to this incident. A Google search of the physician's name highlights the large amount of press coverage of the incident,²¹ including the comment that the post became public when "a complaint by fellow Facebook user Joann Nieto was sent to the Colorado University Board of Regents."²²

In 2011, a 48-year-old emergency physician in Rhode Island was fired for discussing patient care on Facebook.²³ The media reported that the doctor's post "did not include the patient's name, but she wrote enough that others in the community could identify the patient, according to a board filing."

Perhaps one of the most infamous examples of bad behavior occurred in 2013 when an obstetrician practicing in St. Louis, MO, made unflattering comments about a patient on Facebook.²⁴ Her comments were intended for her friends and family, but unintentionally shared with the public. This doctor vented that her pregnant patient "has chosen to either no-show or be late (sometimes hours) for all of her prenatal visits, ultrasounds, and nonstress tests. She is now 3 hours late for her induction. Should I show up late to her delivery?" This post and its subsequent comments from other health care workers became viral, and was soon national and international news.^{9,24} Thousands of people arranged online petitions and phone calls to the physician's hospital demanding punishment. While this doctor was not ultimately fired for her offense, she faced several professional and personal consequences from which she is likely still recovering years later.

Consequences in the Medical Literature

Beyond the above-mentioned examples of bad behavior and subsequent disciplinary action, there are two studies within the medical literature which warrant discussion. The first was a 2012 research letter published in *JAMA*,²⁵ where the authors surveyed the executive directors of all 68 medical and osteopathic boards in the United States, inquiring about

the frequency of unprofessional online conduct reported to these boards. The response rate was 71% (48/68), with 92% of respondents reporting that they had received complaints of unprofessional online behavior: 71% of respondents had disciplinary proceedings regarding these complaints, and 56% reported “serious disciplinary outcomes” including license restriction, suspension, or revocation.²⁵ This study was conducted 5 years ago; so, it is quite possible that the numbers have since increased.

Another relevant study came from our group in 2016.¹⁰ We performed a survey of general surgery PDs with a response rate of 42.5% (110/259). In our study, 18% of PDs visited the social media profiles of medical students applying for residency and 13% used Google to search residency applicants. Ten percent reported that they lowered the rank or completely removed students from a rank-order list due to negative online behavior. Regarding surgical residents, 45% of PDs visited their social media profiles, and 10% reported formal disciplinary action against a resident for online behavior.

What Can Be Done to Prevent This?

One of the biggest problems with surgeon use of social media is a lack of guidance. Less than half of surgical residents receive formal instruction on the proper use of social media,¹⁰ and the number is likely even lower for practicing surgeons. Many online indiscretions are due to a poor understanding of the dangers and pitfalls of social media. In the next sections, we have outlined our recommendations for maintaining a professional and productive online persona (→ Table 2).

Understand Social Media

Not all physicians are going to be enthusiastic about social media, and involvement in these platforms is certainly optional. However, the public will continue to gather information about doctors and diseases from online sources, and other medical professionals will also continue to use the Internet to communicate with colleagues and patients; thus, an understanding of these resources is mandatory for the modern practicing surgery.

The surgeon must review the privacy settings of different social media platforms, with the single most important teaching point being that none of these platforms allow reliable, Health Insurance Portability and Accountability Act (HIPAA)-compliant sharing of patient information. The surgeon should also study his or her institution's policies on social media use to avoid an unintentional rule violation. If tutorials or webcasts are available, the surgeon should review them to better understand social media. Additionally, the surgeon should not hesitate to employ the help of a friend or mentor with more online experience.

Know Your Audience

As mentioned above, the surgeon must consider the target audience for content-shared online, and cater his or her profile to match the intended recipients. The surgeon should

not use one account for both personal and professional goals, as this will almost certainly result in an overlap between the surgeon's personal and professional lives. Social media authors Mostaghimi and Crotty have previously recommended a “dual-citizenship” approach to online social media that helps maintain professionalism by separating professional and private accounts on social media.²⁶

Among the currently popular platforms, Facebook is more appropriate for personal use, as it allows for more privacy (i. e., “Friends only”). We recommend against accepting friend invitations from patients. There are private Facebook groups which can be used for case-sharing and e-mentorship, but the surgeon should remember that all this information is discoverable, and privacy cannot be guaranteed. There do exist HIPPA-compliant forums (such as the American College of Surgeons Communities or the American Society of Colon and Rectal Surgeons listserv), where these patient details can be discussed without fear of discovery, and this is a preferred way of discussing such information.

Twitter is designed to share all content with the public; thus, personal use is less appropriate. However, careful professional use can be beneficial, with the thought that if the surgeon is not comfortable with his or her patients seeing a comment, then it is not appropriate for Twitter.

Police Your Profile

The surgeon must take time to manage his or her online persona. This includes using search engines such as Google to see what comes up when the surgeon's name is searched. It should be noted that neglected social media profiles are dangerous, as a surgeon can be unknowingly tagged in pictures or the status updates of other users, and thus unintentionally pulled into unprofessional situations. Similarly, old forgotten posts may still be viewable, highlighting the danger of past indiscretions.

In the process of policing his or her profile, the surgeon will likely encounter content on social media or doctor-rating Web sites that is negative or inflammatory. It is important not to react strongly to these situations, as engaging with “trolls” helps validate their opinion, and it gives them the desired negative reaction, which can “fuel the fire.” The surgeon should remember that the attention span of “trolls” is relatively short, and if they are ignored, they will become bored and move on to the next victim, particularly if there is no active engagement to stir the pot and keep the attention going.

Measure Twice, Post Once

As previously mentioned, digital footprints are difficult to erase. Therefore, the surgeon must be cautious about what he or she decides to share on social media, especially when discussing topics that are emotionally charged. Essentially, there are no “mulligans” in social media; so, the surgeon must treat each post as permanent. Additionally, the surgeon should never assume that a post is truly private, as pseudonyms and enhanced privacy settings are unreliable. Rather than trying to hide posts that can be perceived as unprofessional, it is better to simply not demonstrate unprofessional behavior within social media.

Never Stop Learning

As highlighted in Section “The Dangers of Social Media,” social media evolves quickly, and it is quite possible that the advice and statistics shared in this article will be obsolete in a couple years. Because social media is known to be a powerful instrument with palpable consequences to the practicing surgeon, it is important to be a lifelong student. Even if the surgeon is not a social media enthusiast, he or she must understand it to effectively communicate with the next generation of physicians and patients.

Conclusion

Unprofessional online behavior is common among surgeons, especially within social media sites such as Facebook and Twitter. This behavior is often due to a lack of understanding of these new platforms and their ability to provide the public with enhanced access to the surgeon’s personal life. Misadventures with comments intended for a small, private audience can be discovered and have adverse consequences, which can be severe. The surgeon must work hard to understand the downfalls of inappropriate social media use to prevent such negative effects. When used safely and responsibly, social media harbors great opportunities for the new surgeon, including networking and enhanced professional growth.

Disclosures

The authors have nothing to disclose.

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