# Social Media for Oncologists

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Social media are tools for lifelong learning, professional development, patient interaction, and reputation management

#### Abstract

Social media are tools that enable communication and sharing in an online space, and are increasingly being used by physicians for professional development as well as for patient engagement. The method of learning for both physicians and patients is no longer by a unidirectional model, but a networked one, with information available from multiple sources. In addition, the volume of information even regarding a focused medical condition has increased tremendously. Social media participation gives the physician unlimited access to information and collaboration, as well as the ability to filter that information based on interest. In this review, the various forms of social media of potential interest to the physician will be described, as well as examples of how to use these resources for professional development and patient interaction.

**Key words:** social media, physician education, Twitter, patient engagement

# Learning and Professional Development

Although many physicians still view social media as a curiosity, the reality is that an increasing number are turning to the Internet to gain information, interact, and collaborate. The traditional model of learning for physicians involves attending meetings and seminars, reading textbooks and journals, and participating in discussion groups such as tumor boards and journal clubs. Physicians are used to working with a small group of colleagues, and patient interactions also tend to be one-on-one. Concerns regarding time commitments and patient privacy violations, as well as a general lack of insight into the value of an online presence, are factors that limit physician participation in social media.

"Social media" (Figure 1) does not simply refer to a collection of applications and platforms, it refers to the way we communicate today. Social media are digital platforms used for engagement and content delivery, and they play an increasing role in

how both physicians and patients gather information. Although the traditional methods of learning such as attending lectures and reading journals are still important, it is simply not possible to keep up with every new development in this manner. The amount of information even within a narrow specialty is increasing at a rapid pace.<sup>2</sup> Through the use of social media, the user tailors the content by setting preferences for sources. Although many use social media to interact with others, it can certainly be used to simply gather information of interest.

Of the various social media platforms, Twitter has become very popular among physicians by providing opportunities to share information and to collaborate, and has been described as a "global faculty lounge." By deciding whom to listen to (or "follow"), physicians can receive information from a wide variety of sources of particular interest and then decide whether to simply absorb the information or to engage. There are robust discussion forums and journal clubs for physicians on Twitter, Facebook, various blogs, and other platforms. "Meeting tweeting"-sharing medical meeting information via Twitter-is also increasing in popularity. Those attending a conference disseminate the information, but also interact with colleagues who may or may not be physically present. This adds another dimension to the traditional unidirectional education model and can result in a more enriching conference experience.<sup>3</sup> Online journal clubs, such as the International General Surgery Journal Club,4 are increasing in popularity, and allow physicians to discuss a current article with a large, often international group of peers.

The Annals of Surgical Oncology is one of many journals currently offering continuing medical education (CME) and maintenance of certification (MOC) credits for reading online articles and correctly answering questions regarding the content. Other forums for online CME and MOC credit include medical society-based initiatives such as the American Society of Breast Surgeons Selected Readings and Breast Education Self-Assessment Programs (BESAP), and the Society of Surgical Oncology Self-Assessment Program (SOSAP).<sup>5</sup>

# Publications and Research

The terms Twitter, Facebook, and social media are increasingly

found in PubMed citations, noting the growing influence of social media in the scientific literature.<sup>6</sup> Several studies have evaluated the social media impact of published articles. It has been shown that tweets mentioning an article can be predictive of eventual citations within 3 days of publication, and that the "twimpact" factor may be a useful metric to identify findings that resonate with the public.<sup>7,8</sup> Journals are paying attention; the *Journal of the American College of Surgeons* now tracks social media metrics on selected articles and publicizes the number of citations on each platform on its website.<sup>9</sup>

Research efforts may also be assisted by social media participation. Social media can help with trial recruitment and study design by providing a global audience with whom to collaborate and crowd source. In addition, clinical trial eligibility is becoming more focused, increasingly based on specific cancer subtypes and mutation patterns. Individual providers may not have access to or knowledge of the trials relevant to their patient. With patients becoming more proactive and empowered regarding their health, many are now likely to seek out a trial on their own, especially in cases of rare or uncommon diseases. A growing number of websites are specifically geared toward patients, allowing them to enter basic information about their condition and providing information about available trials. It is helpful for physician to have a working knowledge of these sites. <sup>10,11</sup>

# Patient Education

Social media can be helpful to physicians in the area of patient education. Patients, like physicians, now receive information in a networked model, and the amount of information is overwhelming. In addition, an increasing number of patients are taking an active role in their medical care and are embracing shared decision making. <sup>12,13</sup> Patients and caregivers have become very sophisticated about their care. One of the primary roles of physicians is to educate, and that has to go beyond the individual patient in the exam room; physicians need to reach patients where they are getting their information. Today, 87% of US adults use the Internet, and 72% of Internet users have sought out health information from online sources. <sup>14</sup>

When patients go online for medical information, they encounter a tremendous amount of content, much of it not peer reviewed or even posted by a physician. When patients are asked whom they most trust for medical information, the overwhelming majority cite a professional source such as a physician or nurse. However, they turn to the Internet due to unanswered questions and the need for additional support and guidance. A growing number of disease-specific online communities are available, such as Facebook groups, tweet chats, and discussion boards. Patients who participate are looking to one another not only for support, but also for general medical advice and guidance.

The conversations are going to happen with or without phy-



sicians. A strong physician presence in online patient communities can help fill educational gaps, as well as provide real-time guidance and information. Physicians are the respected sources, but they have to engage. Some examples of successful physician involvement in online patient communities include the Breast Cancer Social Media (#BCSM) Twitter support community and website started by 2 breast cancer survivors and co-moderated by the author, 16 and GRACE: Global Resource for Advancing Cancer Education started by medical oncologist H. Jack West, MD.<sup>17</sup> Cancer.net, <sup>18</sup> the patient education website sponsored by the American Society of Clinical Oncology and the Conquer Cancer Foundation, provides patient education materials written by oncologists. These examples and others provide a way for physicians to share credible evidence-based information with a large number of patients. Physician involvement in these patient communities is increasing. Figure 2 demonstrates the growth of physician involvement in the #BCSM Twitter support community since 2012.

The concept of the "information prescription" has been described as when during the course of a traditional patient consultation, the physician provides a "prescription" for specific online content tailored to the patient's condition. (H. Jack West, MD. Personal communication. April 24, 2015.) This directed approach keeps the amount of information manageable, and also allows the patient to absorb it on his or her own time, in a more controlled fashion. Social media can help the physician create the content that the patient needs, whether it be through blog posts, patient-physician online communities, video tutorials, or website content (eg, #BCSM, GRACE, Cancer.net, as noted previously). Creating and recommending specific online content can result in a time savings for the physician, as this content may be used for multiple patients. In addition, playing an active role in directing patients to educational resources is a part of the shared decision-making process, which has been tied to patient satisfaction.13

FIGURE 2. Increasing Physician Involvement in #BCSM - Breast Cancer Social Media Tweet Chat Physician engagement in #BCSM 11000 600 562 9215 9000 500 7683 7000 400 411 tweets 5000 300 authors 3000 200 1679 Participating physicians 2012-2014: > 253% Physician tweets 2012-2014: > 449% 1000 100 2012 2013 2014 -1000 Source: MDigitalLife Database of Global Physicians, Jan 1, 2012 - Dec 31, 2014.

#### Reputation Control

Courtesy Greg Matthews MDigitalLife.

An additional benefit to having an active social media presence is that it allows physicians to control their online reputations. We all have a digital footprint, and much of it is uncontrolled, such as postings on health ratings sites. If physicians do not create their own online content, they are missing out on opportunities to control their online message and reputation. Taking an active role in social media by developing a personal website, writing guest blog posts, interacting in patient or physician online communities, and participation in other forums allows physicians to control their online message and reputation.<sup>19</sup>

# **Cautions**

It should go without saying that it is never acceptable to post information that may lead to patient identification. Even on "private" sites, online content is searchable, and technically can never be deleted. There is no true separation of a physician's personal and professional presence. We are always representing our profession, in every aspect of our lives, and the online world is no different. In addition, physicians must realize that many may not share their views on controversial issues or even evi-

dence-based medical approaches to care. Online platforms rarely allow for detailed or nuanced conversations, so it is generally recommended that physicians stick to topics considered acceptable for public dialogue.

There are some people online who seem to have the sole purpose of starting arguments. It is best not to engage with these individuals, as it is very difficult to come out ahead.<sup>19</sup> Physicians should also be aware that they are bound by state medical board regulations as well as by consumer protection laws in terms of online content. There could be legal ramifications to posting false or misleading information.<sup>20</sup> The Mayo Clinic Center for Social Media has resources such as the online *Social Media Health Network* that are particularly helpful in determining what is appropriate for a physician to post.<sup>21</sup> Finally, a caution about time commitment: physicians need not feel that they have to be online at all times. Physicians can post when they want to, when they have something to say. Quality is more important than quantity.<sup>19</sup>

# Conclusions

Social media is here to stay. Many physicians choose not to be involved due to concerns regarding time commitment or simply

not recognizing the value. Social media should be thought of as another tool for education and lifelong learning. We all make time to read journals and attend conferences. Some of that can be accomplished in a more streamlined fashion using social media. Benefits also include access to a wide network of resources, other physicians, and thought leaders. In addition, a social media presence that includes involvement in patient communities can set a physician apart as someone who is interested and active in the patient learning experience. After plunging into the online space, many physicians find that the social media experience is a positive one, and one that becomes an integral part of their practice.

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