

Chapter 5

Social Media Use in the Field of Orthopedic Surgery



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Introduction

Over the past few decades, the Internet has transformed the landscape of healthcare, particularly with the advent of social media and social networking. In 2017 there were over 1 billion Facebook users and 500 million Twitter users, with 80% of Americans utilizing some form of social media. (<https://www.statista.com/statistics/273476/percentage-of-us-population-with-a-social-network-profile/>) [1]. There are an estimated 6.5 million health-related search queries per day, and patients are using the Internet as a primary resource when managing their health [2]. Over 70% of Internet users state that they have accessed health information online [3]. The integration of social media into everyday life has made platforms such as Facebook, Twitter, YouTube, and Instagram increasingly important tools for patient-physician interaction. Demographic studies have shown that while there is a significant difference in age and gender, with an increased number of young and female users, there is a fairly equal distribution across education, income, race/ethnicity, and rural and urban locations of social media participants [4]. This highlights social media's potential for outreach to a multitude of patient populations.

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Recent literature has evaluated the use of social media among patients and providers [5–7]. A 2013 systematic review identified seven key uses of social media for health communication:

1. Provide health information on a range of conditions
2. Provide answers to medical questions
3. Facilitate dialogue patient-to-patient and patient-to-health professional
4. Collect data on patient experiences and opinions
5. Health intervention, health promotion, and health education
6. Reduce illness stigma
7. Provide online consultations [8]

This study, and others, demonstrates the increased use of social media not only as a means for researching medical maladies and conditions but also for physician selection. Websites such as HealthGrades.com, rateMD.com, and vitals.com make searching and comparing physician reviews quick and easy for patients. With an increasingly competitive marketplace for orthopedic surgeons, patient recruitment has become a primary barrier to practice advancement. The purpose of this chapter is to analyze how both patients and physicians interact with social media, and to outline future steps providers can take to integrate social media into their practices.

Patients on Social Media

The Patient Experience on Social Media

Patients primarily use social media to increase knowledge regarding medical conditions or ailments, exchange advice with fellow patients or providers and for social support [9]. A study conducted in 2016 observed how patients utilized Instagram in their postoperative period following ACL surgery. Using the hashtag #aclsurgery, the investigators characterized the ways in which patients used social media to outline their experiences with surgery. It was found that the majority of posts were personal recovery stories, with over 90% of posts including postoperative photographs [10]. Other significant mentions included messages regarding progress with postoperative rehabilitation and return to sport. In just 1 year there were almost 1000 Instagram posts related to scoliosis in the adolescent population. These individuals used social media as a platform for sharing progress stories and photos, while providing support and motivation for other patients with similar conditions [11]. Patients have also shared their experiences online following total joint arthroplasty. In a query of Instagram hashtags, it was found that total knee patients were likely to share stories on the rehabilitation process and wound healing, while total hip patients posted about their return to activities of daily living [12]. Multiple studies have reiterated the findings in the previously detailed investigations, showing that most patient interactions on social media highlight progress in wound healing,

rehabilitation, and activities of daily living. This provides unique insight into patients' priorities during treatment and allows orthopedic surgeons to better understand postoperative patient expectations.

Patients are also likely to utilize social media to find support from others facing similar obstacles. Individuals receiving diagnoses that no one in their immediate offline network has experienced can be isolating. Websites such as patientslikeme.com provide a platform for information and story sharing between people with similar health problems. These have the benefit of providing support for patients undergoing similar trials and tribulations but offer the potential downfall of receiving advice from unqualified sources [13].

Physician Review Websites

A study in 2014 found that 47% of patients have searched for health providers online and 37% have consulted a physician rating website before seeking care [14]. These numbers will only increase as a younger generation of patients begins using the Internet to help choose between the many available providers. Websites such as Healthgrades.com, RateMDs.com, Vitals.com, and Yelp.com provide platforms for patients to grade physicians and leave comments regarding their care experiences and perceptions. The measures used for grading vary between websites, but overall they tend to encompass the entirety of the patient experience. A review of over 2000 patient ratings of orthopedic surgeons showed that high scores in five variables were statistically significant for higher ratings including ease of scheduling, time spent with the patient, wait time, surgeon proficiency, and bedside manner [15]. However, many websites ask about interactions with office staff and the cleanliness or appearance of the clinic in addition to perceptions of the physician and the quality of care delivered. Frost et al. found that over 90% of orthopedic surgeons have at least one review online, but many only have a handful of reviews [14]. Those with a small sample size can suffer with just one negative review. Thus, it is important to be cognizant of online grades and address any complaints that have been brought up on the review sites.

YouTube

YouTube is the second most utilized search engine behind Google. There are millions of videos posted yearly on the website, including an abundance of healthcare-related content. Simply searching "total knee replacement" on YouTube yields over 200,000 results. Online videos can be a useful tool for reaching patients and provide an opportunity to further educate patients on their conditions. A recent study demonstrated the far reach of YouTube videos, with over 65,000 views in 1 year on their informational video on vaccinations [16]. The Mayo clinic provided a set of

YouTube videos to patients prior to hip and knee replacement. The videos were created as a “virtual hospital experience” in order to give patients a preview of what to expect during their stay. They found that the study arm randomized to watch videos beforehand had lower anxiety scores and felt more comfortable with their upcoming surgery [17]. Many patients watch videos of their surgery beforehand, which can lead to both reassurance and increased anxiety.

Physicians on Social Media

The Physician Experience

With the overwhelming majority of patients using social media for both personal and health-related purposes, an Internet presence by the physician has become increasingly important. A recent survey showed that while 90% of doctors use social media for personal use, only 65% use these platforms for professional reasons [18]. Physicians are primarily using social media in order to better communicate with colleagues and for marketing purposes, rather than patient engagement [9]. Studies investigating the habits of physicians interacting on social media show the majority of its use is to network with other healthcare professionals, share research, discuss challenging cases, and engage in health advocacy [19]. An underwhelming minority are actually using social media to engage with patients [20]. While surgeons have a strong presence on LinkedIn, which can be used to collaborate with colleagues and display professional accolades, there is a lower presence on platforms such as Instagram and Twitter [11]. A survey of 321 orthopedic surgeons, from a variety of practice settings, showed that surgeons in the private sector, rather than academic, were significantly more likely to engage patients online [21]. This represents a disconnect between patients and providers but also represents an important opportunity for practice development.

Professional Networking and Education

There are a multitude of websites and forums for orthopedic surgeons to network, share ideas, and discuss cases. With continual advancement in online live video streaming, a number of websites have begun broadcasting everything from lectures to live OR feeds. Orthogate.com, orlive.com, vumedi.com are examples of commonly used websites for physician education. The incredible advances of live video allow surgeons to communicate face to face over any distance and demonstrate techniques to doctors across the globe. In addition to lectures and other educational materials, these websites host open forums that encourage discussion between providers on topics ranging from difficult cases to practice management.

Another social media network involving many orthopedic surgeons is researchgate.com. This website allows members to create a profile linked to their academic research and publications. By viewing a profile one is able to see the projects being worked on by that individual and request access to previous publications. Additionally, the website provides areas to allow discussion of scientific articles and current research topics. With the vast amount of research continuously conducted throughout the world, this can be an invaluable resource to connect with investigators everywhere.

Practice Promotion

As mentioned throughout this chapter, your patients are more likely than not to be interacting on social media on a daily basis. Millions of Americans use social media for a number of reasons, but only 5% have interacted with a health professional online [22]. This represents a huge number of individuals that can be reached via social media. While physicians are using social media to connect with one another, there is an underwhelming amount of patient outreach on these platforms. A recent study showed that 57% of consumers state a hospital's social media presence influenced their choice on where to go for services and over 80% stated engaging in social media gave the perception that the hospital was technologically advanced [18]. Dr. Howard Luks, in a 2012 AAOS publication, stated that his strong online presence has contributed to gaining up to ten additional new patient inquiries a day [23]. Particularly as younger generations begin requiring orthopedic care, social media will become an increasingly important platform for patient outreach and communication.

Blogs

Since the early 1990s, the Internet was reformatted to Web 2.0, a platform that allowed users to generate their own content to post online for consumption. This opened the door for blogging, a website in which the user posts content that is freely available to read online. According to a report by the Pew Internet and American Life Project (Pew), 8% (12 million) of 147 million adult users of the Internet in the United States keep a blog, while 39% (57 million) read one. <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/> [24]. Over the past decade, there have been a number of peer-reviewed studies demonstrating the effectiveness of blogs in disseminating health-related information, engaging patients and for professional development [25–27]. A survey conducted on medical bloggers found that successful writers with large followings tended to be highly educated writers and provided sources along with practical knowledge to their readers [28]. Healthcare institutions such as the Mayo clinic have utilized blogs to foster

discussion among patients and providers. Online blogs can be used to advertise facilities, allow patients to share positive experiences, and feature prominent physicians. Individual physicians have used blogs to discuss current problems in health-care, address frequently asked questions, and outline treatment protocols for patients. Additionally, blogs can be used to discuss scientific research and to help recruit patients to participate in clinical studies [29].

Blogs also provide patients a platform to discuss their ailments and share their experiences. There are numerous blogs discussing living with chronic conditions such as diabetes or coping with a cancer diagnosis and treatment. These can provide patients with a safe place to discuss health-related issues with other patients and draw from their experiences.

Wikipedias

Wikis are collaborative websites that allow users to add, edit, and delete content freely. The most popular wiki, Wikipedia, is a free online encyclopedia that encompasses thousands of topics. Medicine is a commonly researched topic on Wikipedia, with the top 200 medical articles receiving over 100,000 monthly views [30]. There are also individual wikis dedicated to subtopics including one for Orthopedic Surgery. These are commonly used resources by both patients and providers as they provide quick and easily accessible information. Many are wary of these sources due to the ability of public users to edit and change information, however, these websites are typically well policed for false information. A study comparing Wikipedia drug pages to their corresponding Medscape Drug Reference pages found that it included roughly 76% of the same information with most differences due to omission rather than false information [31]. While these websites can provide an initial source of information, it is important to understand their limitations and educate patients on this reality.

Physician Websites

Physician websites serve as a platform for patients to access information about the physician and the practice. A professional website is often the first impression patients have of you. Maintaining an up-to-date and well-organized website will leave the impression that your practice is the same.

Professional website domain names should be simple and easy to remember. Many physician website domain names are simply the physician's first and last names followed their professional degrees (i.e., JohnSmithMD.com). The website should be user-friendly and easy to navigate. The homepage should offer links for patients to access information about the physician, the practice, educational resources, and contact information. Avoid using overly technical terminology and

medical jargon. The website can serve to educate patients about their conditions as well as prepare them for their clinic visit. Websites can offer methods for patients to make appointments online. They can streamline the new patient experience by providing forms online so patients can fill them out prior to their clinic visit. Many surgeons also have their preoperative and postoperative protocols available on their website for easy accessibility for patients and physical therapists.

The website can serve as a method of consolidating your online persona. Links to profession Instagram, Facebook, Twitter, and other social media outlets should be easily accessible on the homepage. Links to your professional website can be placed on your social media accounts to increase traffic to your website. Additionally, the website should be mobile friendly to allow patients to seamlessly access the content on their mobile devices.

One hurdle that many physicians encounter is how to actually get a web page up and running. There are many “DIY” solutions using platforms such as WordPress, but most physicians find it easiest to contract with a company or web design specialist to build the page for them. Regardless of how the page is built, the physician should try to perform SEO, or search engine optimization. This is a strategy that incorporates keywords, updates, and novel content into the website so that the page can be found more easily during web searches, especially within a particular geography and topic (e.g. “sports medicine + Detroit metro”). Therefore, having a web page is one thing, but keeping it actively updated and current is an additional investment that will help attract patients (and new patients) to your page.

Misinformation and Social Media

While the advancement of the Internet and social media has provided an incredible wealth of information for both patient and providers, this has unfortunately opened the door for the spread of misinformation. There are a plethora of studies demonstrating the amount of low-quality information available on the Internet [32, 33]. Eighty-five percent of physicians have reported experiencing a patient bringing information from the Internet to a visit [6]. Doctors are often using clinic time to answer questions based Internet articles with little to no scientific merit, including defending diagnoses that may run contrary to what patients have read online [34]. A study searching social media for mentions of cellular therapy injections for the treatment of musculoskeletal conditions found a wide range of advertisements and statements from drug companies on this therapy. An overwhelming majority of the statements were positive and did not highlight the risks, benefits, and limitations of a largely unproven therapy [35]. Physicians frequently receive questions from patients regarding therapies or treatment modalities seen advertised online. It is important to be aware of these messages and educate patients using evidence-based information.

Important Considerations Before Using Social Media

A review in 2014 outlined principles for physicians participating in social media [29]. The first and most important principle requires maintenance of professionalism. Institutions typically issue guidelines regarding social media use; it is important to be aware and follow these mandates. A social media presence must begin with a set of policies that respect legal and regulatory limits consistent with your individual organization. Setting out guidelines is an important step in ensuring posts are consistent with organizational policies, without requiring constant monitoring, and approval for posting online. Confidentiality remains vital during social media interaction and HIPPA guidelines must be followed online. It is imperative to get expressed permission from patients before any online interaction. It is also important to recognize that while messages over social media may be private, they are often not secure exchanges of information. If there is any doubt as to the appropriateness of a post, it should not be shared.

Getting Started on Social Media

An article published on AAOS Now outlined a few tips for getting started by Dr. Howard Luks, an orthopedic surgeon, who has successfully developed an online presence. He starts by defining an objective. Social media encompasses many facets from blogs and tweets to videos and Facebook pages, and it is important to define your goal as an online presence. Additionally, it is important to define your persona. Be consistent with your message and remain genuine while participating in social media. It is important to engage the audience regularly in order to keep content fresh and encourage participation. Be realistic about reaching your goals. Creating a social media account will not cause an influx of patients overnight and developing a following takes time and patience. It is important for any physician to include a disclaimer including your right to remove content and also that engagement over social media channels does not represent a true doctor-patient relationship. Additionally, by setting up a simple Google alert, it is easy to monitor what patients are saying about you and your social media presence in order to continuously improve and adapt. Finally, engaging with other healthcare professionals who have successfully incorporated social media into their practice is an invaluable resource when getting started [36].

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