

Emerging trends in social media and plastic surgery

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Abstract: Social media has increasingly changed the landscape of medicine and surgery and is rapidly expanding its influence in most peoples' lives. The average person spends nearly 2 hours per day using social media, consuming information about everything from family updates to entertainment news to presidential elections. The concentration of consumers on social media platforms has resulted in direct medicine and medical products marketing to consumers. Similarly, social media is increasingly becoming a platform for interaction between physicians and potential patients. Some physicians have taken this opportunity to better educate patients, while allowing patients to learn more about their surgeons online. These tools can increase internet traffic online to bonafide internet sites, as well as bolster marketing for many hospitals, hospital systems, and individual doctors. It can also serve to increase knowledge about procedures and conditions through direct outreach to patients. Social media is a powerful tool which needs to be utilized wisely to avoid pitfalls.

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Social media

When trying to tackle the importance of social media in medicine and surgery, the first question should be—what is social media? Social media is widely simply construed as 'Facebook' or 'Instagram'; people commonly refer to the most heavily used platforms and apps within social media to refer to the technologic platform. In fact, social media encompasses much more. Social media exists online in several forms, and thus recent efforts have been made to try and better describe social media in the academic sector. One such report by Obar *et al.* described social media as having several key facets (1). Firstly, social media services are (currently) Web 2.0 Internet-based applications. User-generated content is the main substance of social media. Individuals and groups create user-specific profiles for a site or app designed and maintained by a social media service. Social media services facilitate the development of social

networks online by connecting a profile with those of other individuals and/or groups. These four attributes can be widely applied to many services provided online, and as such, many Americans spend a significant amount of time per day using social media and social media tools. Neilson ratings from 2012 showed Americans spending 120 billion minutes on social media websites, up from 90 billion 1 year prior. Given Americans spend such an inordinate amount of time using these types of tools, it is only natural that many companies and services have attempted to adapt their messages and their advertisement to harness the networks and connectivity provided by social media to increase their business. With time, Social media may become one of the main avenues for direct to consumer marketing.

Surgery represents a special subgroup in medicine, as a service based practice; clients often come for consultation and seek out their surgeons based on referrals and their own searches online. Many have previously pointed out this

natural connection (2,3) and the importance of developing conduits for patients to direct them to the correct resources. In order to understand the power of social media, first we must focus on the benefits of social media use for practices.

Patient use

Patients use social media to find surgeons and to communicate about procedures and outcomes—they tell each other if procedures were really ‘worth it’ (4). This interaction allows patients to better understand the legitimacy of the myriad of new technologies and treatments within aesthetic surgery which all promise excellent results, but have not necessarily been well studied for patient outcomes or satisfaction. Patients routinely use social media to discuss their procedures, the surgical team, and their overall experience. Every practicing surgeon has experienced the effects of yelp and other review based websites, and many have experienced poor reviews. Beyond these influences, patients use social media as a tool to interact with their surgeons, and there is some evidence that it may be increasing the amount of patients seeking cosmetic procedures (5). In this regard, social media can be used as a platform for marketing.

Surgeon use

In fact, one of the most powerful marketing tools any surgeon may use in their practice is social media (3,6-8). A surgeon’s presence online can dramatically increase their perception as an expert, despite their actual fellowship or residency training or their years in practice (9,10). Presence on websites like RealSelf or interactions on review websites like Yelp can provide patients with a snapshot of the surgeon’s style and aesthetic, the nature of their practice, and how they approach patients and problems (11,12). Through generating online content, surgeons can increase the perception of their expertise in the online community (10,13). Within their network, physicians with a strong online presence can develop their influence and become more visible (3,14). This is achieved through algorithms within many of the web based networks that increase traffic based on connectivity and interactivity, and the number of interactions ‘experts’ have with other ‘experts’. With this perceived expertise, patients gravitate online to those with the most influence and pull, and thus patients may more readily convert to a surgical consultation or procedure after researching a surgeon online and finding a sufficient or extraordinary presence.

This is distinct from the physician’s website that merely lists qualifications and before and after photos, because websites are designed as flat informational tools, whereas social media is evidence of interaction, and patients may feel like these interactions make a surgeon more approachable and real.

Given surgeons can achieve some sort of expertise through online intersection, many practices use social media either in concert with public relations or marketing firms in order to stimulate their practice and to provide an online presence for their practice. While financial returns, at this point, are poorly understood, many metrics and analytical tools reporting the number of distinct views or impressions of a post or a particular website can show how many interactions become leads and ultimately are converted into surgical patients. No prospective study has compared the use of traditional marketing to social media based marketing, and study design would be particularly challenging given the nature of these tools and practices. However, the metrics are increasingly improving and marketing is rapidly becoming more powerfully tailored to the individual user, so in the future there may be statistically valid tests based on data from social media sites to demonstrate the power of marketing through social media.

Collaborative use

Social media is a special place online where physicians can contribute to the dialogue about medicine. In several specialties it can be a place to educate and empower patients. Recently on Twitter there was a campaign to retake the hashtag link for plastic surgery by several prominent plastic surgeons that tweet often. In this effort, many board certified plastic surgeons were encouraged to use this hashtag in their posts to retake the dialogue, away from discussions based largely on aesthetic procedures and non-plastic surgeons, and in some cases, people who weren’t even within the medical sphere. The success of the campaign lay in the coordinated efforts of the surgeons to increase the visibility of the specialty, improve the perception of plastic surgery online, and demonstrate the utility of and spectrum of plastic surgery, including breast cancer reconstruction.

Other uses for social media include the power of developing relationships and networks within a specialty. Plastic surgery is an extremely small surgical specialty with incredibly compartmentalized subspecialists, there are plastic surgeons specializing in craniofacial surgery, microsurgery, hand surgery, burn surgery, breast surgery,

aesthetic surgery, wound care and more. Outlets like Twitter allow surgeons to connect and communicate, as well as echo thoughts and ideas online (15-17). While many users are online for marketing, others use social media to contribute and communicate with a broader community (18-20). Social media allows for expression, but also education and interaction, with groups of people that were previously impossible to reach. This outlet can be used to communicate recent successes in publications, surgical techniques, or academic accolades, it can also be used to communicate angst or fear or complicated clinical problems. Social media can be used to coordinate volunteer efforts and to organize movements within the specialty (21,22), as has been recently evident in the development of an international journal club developed by PRS GO on twitter every week. Importantly, it can connect specific small networks of people that are spread over a large geographic distribution, and this can lead to greater collaboration. One example is the recent formation of a Facebook group for reconstructive microsurgeons, which has led to smaller side discussions on other related topics including lymphedema. Lymphedema represents a perfect example of a problem which is widespread, with very few practitioners equipped to surgically treat the problem. Social media may provide the platform for interaction and discussion needed to improve outcomes and training in this discipline.

One of the most interesting recent uses for social media amongst surgeons is as a database for research on patient impressions and satisfaction. Recently, Khansa *et al.* used social media in order to examine satisfaction with rhinoplasty (23), marking an interesting approach to research, collecting patient reported outcomes available in the public domain.

Potential pitfalls

Social media is a powerful tool, however impressions made online can be indelible, as the imprint can last on archived pages even long after posts or reactions have been edited or removed. As such many have focused on it as a potentially hazardous tool particularly in the practice of medicine. Several have focused on real cases involving medical students posting inappropriate materials online and the fallout, including expulsion (24,25). Medical boards and supervisory committees have examined surgeons and have used social media to identify professional breaches and to aid in sanctioning physicians (26). Surgeons have to

be careful to protect patient privacy, especially in plastic surgery, where before and after photos are critical marketing tools, but can be a source for litigation if inappropriately obtained or posted without patient consent (27). With modern apps, online posts are far too easy to generate, and even a missed keystroke could lead to devastating breach of confidential materials (28).

All plastic surgeons should use social media with care, it is a powerful tool, with potential for great marketing, improving social reputation and expertise, and for networking, however, it is also potentially hazardous if misused as a sounding board, or if patient materials are released.

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Footnote

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