

Social Media in Primary Care

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Physicians and their practices should carefully consider ways to engage in social media, as individual practices and receptivity from providers (and patients) will likely differ significantly.



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Abstract

Social media has become a standard part of the day for the majority of people in the United States, and reciprocally has become an effective platform and tool for patient engagement within health care. This review provides context for its place in patient education, communication, and treatment, combined with a review of general operational and ethical principles for social media platforms within a primary care practice.

Introduction

The use of social media in primary care has continued to grow considerably over the past decade. As expectations have changed and the endemic nature of social media has evolved, medical practices have become more aware and adept of ways to engage patients with this now established technology. Social media, defined as “electronic communication, especially applications and websites, through which users create and share information, ideas, and personal messages in an online community”, is increasing exponentially.¹ Reported social media use by American adults has gone from 5% in 2005 to 69% in 2018, and the impact of social media on both adults and youth is both mixed and incompletely understood.²

There is growing awareness of the potential negative impact of social media and other digital technologies

on the well-being of pediatric patients. Access to smart phones, tablets, video games and other digital media is the norm, rather than the exception, in most youth circles. Social anxiety, cyberbullying, and abnormal social and cognitive development are some of the neurodevelopmental concerns arising with this increased use of digital technologies. Much of the pediatric literature on digital media has appropriately shifted its focus towards these concerns.³

As our understanding of its impact on our youth continues to grow, we must recognize the obvious: that it is not likely to disappear. Acknowledging this, the existing and potential benefits are paramount to understand as well. Rapid information sharing and indirect socialization are opportunities for novel methods in medical care, including primary care. Blogs, microblogs, networking sites, wikis, media sharing sites, and other forms of social media are growing in use in the health care system. Additionally, other digital media fora such as text messaging are often utilized and shown in many ways to be effective.

Social media has provided access to health information that may otherwise not be immediately available to some groups—minorities, lower socioeconomic groups, etc. With this, there are often concerns on the reliability of information and overall quality of what is being received at the end-user (patient) level. It is also unclear whether there is any actual clinical benefit in talking with others



Figure 1. A wide variety of opportunities to engage patients, families, professionals and a large medical community co-exist.

(patient to patient) online about one's health.⁴ There are inherently a wide variety of risks, many of which are shared between patients and providers. These can include privacy concerns, confidentiality, risk of communicating potentially harmful or inaccurate advice via a social media platform, or the risk of one's view being perceived as a deterrent by other patients as an undesirable skill for healthcare providers to have.

In this article, we review important areas of primary care in which social and other digital media have impacted practice management and patient outcomes. First, social media is an educational tool for patient families as well as professionals. Second, it is an opportunity for new forms of communication between patient and provider. Finally, this ability to interact rapidly provides opportunity for novel techniques in health intervention. We also consider and discuss the operational considerations for use of social and other digital media within a practice. Effective and judicious utilization of these opportunities begs that we consider the many ethical questions that arise in this time of change.

Novel Ways to Educate

One of the most effective uses for social media in health care to date has been to share information in a rapid and efficient manner. This has taken the form of educational information as well as support, and can be designed for patients or for professional propagation. One clear hurdle in the shift towards patient-centered care has been improved patient understanding of medical conditions and treatment. Digital media allows for immediate access to the public, with opportunity to provide generalized medical information. Blogs and media sharing sites like YouTube are increasingly used as a method by health care organizations to share information regarding medical conditions. Many physician practices and nearly all hospital networks use sites like Facebook and Twitter to communicate pertinent generalized health information with their patients.

Wikis offer similar types of information, and it is beneficial for physicians to be mindful of this method of information sharing. While sites such as Wikipedia may traditionally be dismissed due to concerns about accuracy, they are highly trafficked sites by the public. In 2011

the top 200 medical articles on Wikipedia received over 100,000 monthly page views, and it is reasonable to surmise this number has only increased in recent years.⁵ While concerns about accuracy are rational, Clausen et al. found Wikipedia to have very few factual errors, specifically in review of pharmacologic information, and most errors were ones of omission.⁶ Microblogs like Twitter are also growing sites for medical information, with thousands of doctors verified to be tweeting, at least on a daily basis.⁷ Through its ability to connect millions of people with public tweets, Twitter also has the potential to redefine public health efforts, including dissemination of public health updates, sharing information on disease and treatment, or even potentially assisting with coordination of large scale relief efforts.⁸

Social and other digital media can also be used for intraprofessional education and collaboration as well. Figure 1. By reducing barriers to collaboration, more frequent constructive interaction with peers can improve medical understanding and treatment options. This can be an opportunity for researchers to connect with each other, but also can be an opportunity for research to be more rapidly accessible for practicing physicians in the community. Active social media outlets can also provide a useful alternative source of learning for the difficult-to-reach conference that has to be missed. Following the American Academy of Pediatrics (AAP) and Academic Pediatric Association (APA) social media feeds allows one to stay on top of some of the more significant developments both regionally and nationally.

Communication

Given that greater than 95% of adults and adolescents own a cell phone in the United States, it stands to reason that text messaging would serve as a useful reminder for patients of impending appointments.² Multiple large prospective studies have demonstrated improved show rates with text messaging reminders over extended periods.⁹ If not already being used, it is a reasonable and affordable plan for primary care offices to utilize similar methods to reduce no show rates.

Other forms of medical compliance have been studied as well, including vaccine administration for parents of young children. Families receiving text messaging reminders for MMR administration prior to their child's first birthday are more likely to be up to date with immunizations than those not receiving reminders.^{10,11} This extends beyond adults with small children, however, as text message reminders have been effective in improving vaccination in the general adolescent population. Positive results include adolescents with chronic medical conditions, a population that has been typically under-immunized and difficult to reach for primary care physicians.¹²

It appears patients do not use social media to circumvent health care providers, but to gain additional information with which to complement their understanding, when often the time and access to such information is lacking.¹³ A key point is that providers offer recommendations based on their knowledge and training, however typically not on their first-hand experience with a condition, something that is readily available to patients online and via interactions with others.⁴

Treatment

It follows naturally that novel methods of communication and information sharing may provide innovative treatment modalities in medicine. Results of social media and text messaging as a primary or adjunctive method for improved health interventions are mixed. While not social media, per se, text messaging has been utilized in studies more broadly than any other digital media modality and has been frequently studied as an adjunctive method for chronic disease management or disease prevention. It has been linked to improved quality of life scores for individuals with celiac disease, improved glycemic control for patient with moderately controlled diabetes mellitus, and obesity prevention.^{14,15} Meanwhile, results are more mixed in individuals with poorly controlled diabetes and eating disorders.^{14,16} In our own institution, Broom and colleagues studied whether text messages can be effective as an educational tool to reduce the prevalence of nonurgent emergency department (ED) visits among an urban population with elevated levels of low health literacy. They learned that sending educational text messages to caregivers is an effective way to reduce the number of visits to the ED. Given the relative ease and the minimal expense of sending text messages, these findings have direct implications on the cost of health care, in addition to demonstrating improved continuity and quality of care for patients.¹⁷ Overall, text messaging interventions appear to be effective in promoting changes in health-related behaviors, with further research

warranted to better understand limitations.

Social media as a treatment modality is less well understood. Novel approaches are being considered, however, fewer original research studies using social media as treatment are reported. One promising area is provision of vaccine information and social media outlet opportunities for vaccine-hesitant families. Glanz et al. demonstrated improved vaccine rates for patient families who received additional online vaccine information with social media outlet opportunities as compared with usual care.¹⁸ This study suggests Web-based vaccine information with social media applications during pregnancy may have a positive influence on parental vaccine behaviors.

Within the realm of treatment research, social media has an interesting added benefit. With establishment of the Patient Centered Outcomes Research Institute, researchers interested in honing their focus on topics that are most important to populations have the opportunity to "crowdsource" using social media outlets.¹⁹ This enables researchers to establish research priorities that are most valuable to affected individuals, leveraging these capabilities to a wider and more receptive network of patients.

Smailhodzic and colleagues reviewed social media in healthcare in 2016, finding patient benefits to be localized in the following areas: improved self-management and control, enhanced psychological well-being, enhanced subjective well-being, and improved relationship between healthcare professional and patient.¹³ Utilization has been focused towards social and emotional support of chronic conditions, with limited data on treatment outcomes. Further research will help clarify the most effective use for social media as a treatment modality.

Approach and Engagement

Historically there has been a reticence for providers to embrace the use of social media as a professional objective for their practice. Reasons have included lack of perceived value in maintaining a professional presence on social media, lack of clarity whether or not families were interested and subsequently how they would utilize it, and perhaps most notably, concerns about underlying risk to the individual practice. Risks within this context are many and include violations of HIPAA, managing a new arena of online professional interactions with patient families, impact with how the online presence and interaction is framed (and more importantly, perceived) to followers and the boundaries that a practice chooses to place on this service.

As some authors have described, patients tend to utilize social media for health-related concerns as an area

of support. This area of support is one in which a physician practice may have challenges in providing equivalent perceived presence, given the limitations of direct interactions with patients via social media. Interestingly, a family's social media use may have significant impact on the patient-provider relationship. This has been shown to increase dialogue and allow for a more open discussion. It also serves as a mechanism for patient empowerment and increased confidence when approaching challenging discussions with their physician.¹³ Unfortunately, sometimes patient-physician social media interactions result in a negative experience by one or both partners. Patients and families may feel that their personal research from online communities is not valued, or that their concerns are not being heard.^{20,21} Providers may feel that their training and experience, independent of what has been portrayed and discussed on social media, is not being given due credit and validation. Balancing these opposite perceptions and viewpoints can be a challenge when working to build a communication partnership with a family.

The inherent nature of social media as a partially unregulated, informal mechanism creates a theme of inconsistent quality of information and frequent lack of structure/roles for communication between medical providers and patients. These types of interactions will arise with patients independent of whether a provider maintains an online presence, as families will bring them thoughts or material found online directly into the office for a discussion. Perhaps the most successful method for anticipating such interactions is for providers to, in advance, discuss their appreciation of patients being invested in their own health—and that the practice will aim to work with families in helping to guide them via a very challenging online environment.

Notably, online support that families receive will differ considerably depending on the clinical issue, medical history and impact across other patients. For example, an open social media request for personal choice of the best primary care physician differs greatly from seeking medical management insights from a closed group of social media contacts that are linked together by all having a child with a rare pediatric disease. Providers do need to maintain an awareness regarding their responses to patient inquiries about information acquired via social media circles. While providers may choose to not be involved with or engage in social media, they likely will still, in some way, become a topic on social media. The question will be how to manage these interactions, perceptions and opinions via the wider online community.^{22,23}

Operational Considerations

For those practices interested in engaging with patients and families via social media, there are several critical recommendations to best mitigate risk from these interactions.²⁴ The first is to use encrypted software within a closed system. As HIPAA violations should be of the highest level of concern, having a secure, reliable system is paramount. Next, setting up clear expectations on the type of interactions the individual provider or practice will have with patients is important. This includes the expected period for a provider to respond to any interaction by the patient, specifically indicating that the service is not one for emergency questions or cases. Upon families enrolling in the practice, or if laying out a new policy for the practice, obtaining signatures from families indicating an understanding of the policy prior to them enrolling into such interactions is strongly recommended. Although some previous studies have discussed value of interactions via professional Facebook or Twitter accounts, defining the differences between interactions as a professional voice [to all] online versus one that is able to provide specific medical insight to an individual is very different.²⁵ As a result, practices may consider not being involved on third-party accounts such as Facebook, Twitter, Instagram, etc., regardless if there appears to be external pressure from patients regarding future interactions and access via those accounts. Educating patients and families about the specific practice social media policy, and what the practice is actively doing to protect all patient data can be of great benefit as well.²⁴

It is also important to recognize that electronic patient interactions often may be taken out of context. So much of successful medical communication relies on reading non-verbal cues, understanding culture, and what may also be occurring within the room during an interaction. Although often convenient for patients and providers, social media may have a negative impact on communication as well—particularly if there are concerns related to medical literacy, challenging medical diagnoses or decision-making that is involved, or stress related to timing of communications.

Ethical Considerations

Despite having a clear practice social media policy in place, providers and nurses may both be approached via social media for a practice-to-patient interaction that is outside of the previously defined scope of care. Practices need to remain transparent and clear with their entire staff regarding these interactions. Although risk impacts providers directly, any nursing or staff member associated with a practice may have a similar HIPAA violation based

on their online interaction with a patient or family member that results in increased risk to the practice overall. It is important to underscore the foundational concept that is HIPAA within the world of social media, as it holds the largest element of risk to any provider or practice with regards to their online presence.

Building on the interactions discussed above, many providers have concerns related to their ethical involvement on social media, particularly within primary care. Given the near endemic nature of social media as a daily tool throughout society, not engaging in some way appears to be off-target for many physicians. The primary issue that arises within the context of social media is that of online professionalism. Many authors have previously discussed this in significant detail. Perhaps the best framework regarding the recommended approach to professionalism-considerations in social media was intimated by Chretien and Kind.²⁴ In general, they recommend physicians follow the standard ethical principles of the American Medical Association in consideration of their online interactions. An important point is that, as physicians are held to a high professional standard in the public eye, perception from something that is observed online often holds a similar impact to that of a witnessed office interaction. As a result, physicians need to be mindful regarding behaviors that may be perceived by patients, colleagues or others as not consistent with the morals and values of the health care profession. By no means does this indicate physicians should avoid an online presence, however it should serve as a point of pause for healthcare providers to consider their approach to both their personal and professional online persona.²⁵

Conclusions

Social media has become a heterogeneous, endemic part of the world in which we live and practice medicine. A wide variety of opportunities to engage patients, families, professionals and a large medical community co-exist. Physicians and their practices should carefully consider ways to engage in social media, as individual practices and receptivity from providers (and patients) will likely differ significantly. Developing an understanding of the available capabilities, balanced with an appreciation for the risks and pitfalls is important in embracing what has nearly become a standard tool for pediatric medical practice.

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Disclosures

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