

Social media for radiation oncologists: A practical primer

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Introduction

Fifteen years ago, the National Cancer Institute stated in its 2001 budget proposal that the Internet was a "revolution unparalleled since Gutenberg introduced movable type to the western world in the 15th century".¹ Since then, online technologies have reshaped the way physicians practice medicine.² Ninety percent of U.S. adults use the Internet, and more than 72% use it to look up health information.³ Social media is the sum of the online communication channels that are dedicated to community-based input, interaction, content sharing, or collaboration. They include personal websites, forums, microblogging (eg, Tumblr or Twitter), and social networks (eg, Facebook, Instagram).

Thirty-five percent of patients have gone online to determine a medical condition they or someone else might have and 18% specifically went online to connect with other patients who had similar health concerns.³ Health-care professionals also use the Internet, and more recently social media, for many purposes, including creating an

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The ways in which health professionals use social media in daily practice remains underexamined.⁸ Increasingly, doctors must balance ethical and legal requirements to protect patients and their confidentiality with a trend toward more transparency and public sharing online. New research will help define evidence-based ways to integrate our obligations to the public with our interests and responsibilities as public health advocates in cancer care. It is also our responsibility as health professionals to minimize the spread of fake cancer stories as this has become more prevalent in recent years.

Our aim in this article is to provide practical guidance to use these communication technologies ethically and effectively.

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online presence, connecting with others, sharing information with patients, keeping up to date on specific subjects, virtually attending or discussing conferences (Fig 1),^{2,4,5} or listening to podcasts.⁶ For example, during the 2016 Annual Meeting of the American Society for Radiation Oncology, more than 4400 tweets were exchanged and generated 13 million views over the Internet, which was an increase of 270% from the Society's previous Annual Meeting (Fig 2; 1881 tweets and 7.5 million impressions).⁷

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Best practices in social media for the radiation oncologist

Several general rules should be followed when using social media as a healthcare provider. Digital health communications should generally follow the 4 Rs (Fig 3). Scientific societies have already published several guidelines^{9,10} but oncologists should also follow specific rules. These simple guidelines will allow the physician to have an online presence that complies with medical and/ or scientific ethics.

Create an online professional identity and adopt behavior similar to offline behavior with medical ethics and professionalism

Your profile should use your real name and picture and clearly state your position and institution. Anonymous accounts should not be used to report or discuss medical opinions or expertise. Be honest, courteous, and professional. Do not engage in provocative content. If pushed, simply decline further discussion or ignore the provocation. Think carefully before posting. Patients may search for their doctor, therapist, or nurse online. Your profile and accounts should reflect who you really are.

Do not use social media to advertise or self-promote. If you are sharing information about open clinical trials at your hospital, make sure you know your hospital's or institutional review board's policy on how to publicly encourage trial participation. You should only report faithful information and not make unverified claims.

Strictly separate your personal and professional profiles

Some people may want to keep their private lives offline. Regardless, keeping something private may also reflect upon you professionally. A solution for physicians could consist of creating 2 different profiles and not sharing personal content on the professional page. Physicians should also carefully consider the right privacy settings for their personal accounts to avoid receiving requests from patients on their personal page.

Respect the doctor—patient relationship and patient confidentiality

Most social networks are open and public environments. Willingly or unwillingly identifying patients through name, case description, or pictures is punishable by penalties and sanctions in accordance with the laws of the country. Patient information should only be communicated in a secure and protected manner that is compliant with the Health Insurance Portability and Accountability



Figure 1 Number of tweets sent per day during annual meetings (ACoS: American College of Surgeons; ASCO: American Society of Clinical Oncology; ASTRO: American Society of Radiation Oncology; AUA: American Urological Association; RSNA: Radiological Society of North America).

Act of 1996 (most social networks are not). Direct personal contact with a patient is not encouraged on social media and should be transferred to normal communication channels. Specifically, Facebook friend requests from patients should not be accepted.^{11,12}

Respect your institution's social media policy

A disclaimer can be included in your profile description to explicitly mention that the views expressed on your account do not represent those of your institution.

Adapt to existing communities to integrate and enrich them

The strongest communities are those with greater numbers of users. Although being part of a community will help you to observe appropriate interactions and identify good and unacceptable behavior, it should not prevent you from expressing your own views in a respectful and polite manner. On Twitter, using the #radonc and disease-specific hashtags¹³ may make your participation visible to a cancer-oriented audience. The discussion will be easier to follow, and anyone willing to participate will be able to do so in a relevant way.

Adapt to the etiquette of the network and use appropriate terms

Each platform has specific good practices that you should adapt to. Try to become familiar with them before using a new platform. Once you join, watch others first to learn "netiquette" before posting or creating a lot of your own content.



Figure 2 Number of tweets sent per day during ASTRO 2014 to 2016 using the dedicated conference hashtag. Source: https://symplur.com.

Why do we need to use social media as radiation oncologists?

Our colleagues and patients often base their decisions on information they find online. A significant presence of oncology on the Internet and social media means more chances for anyone to find relevant information with regard to our complex specialty. Consenting to any treatment can only be based on faithful and clear information. If the vast majority of patients now look for information online, the quality of this information may vary greatly from one website to another. Conflicts of interest and biased information, through a false sense of knowledge, should not expose patients to inadequate treatments.

Social media is prone to spreading misinformation about science and health.¹⁴ If radiation oncologists do not fill the void of information about radiation oncology on the Internet, then patients, industry, or other specialties will do it for us. Indeed, the value of social media has been well understood by others. The 2016 Annual Meeting of the American Society of Clinical Oncology generated more than 69,000 tweets with over 314 million views.¹⁵ This considerable amount of attention deeply influences general media, political sentiment, and, most importantly, policy making.

Oncologists should consider reputation management that is relevant on an individual basis. For those



Figure 3 The 4Rs of Digital Health communications.

concerned about negative patient reviews or press online, the best protection is a proactive, professional online presence that fills search engine queries to compete with any negative information.

Although it is important to have guidelines with regard to social media, it is just as important that oncologists have a basic understanding of each social media platform, its intended audience, and its desired intent.

Perspective: A role for social media in cancer care?

As oncologists and researchers, we can no longer ignore the power of 21st century technological tools. Instead, we need to create a culture that explicitly engages us on social media to share the value of our profession. There is a need to better understand how patients use social media for cancer care in order to design specific online interventions and promote awareness of the best treatment options and clinical trial participation.

Data on whether these innovations are improving patient engagement or outcomes (eg, quality of life) do not exist. There is almost no literature that evaluates the content and quality of social media in cancer care.¹⁶ An analysis of Twitter data could be performed easily because almost all messages are directly accessible through third-party sites, but an analysis of the same kind using data extracted from Facebook is still impossible for researchers without the corporation's participation because these data are probably much more personal and detailed.

Patient-reported outcomes on social media represent a true opportunity to better understand how patients live through our treatments. However, no standardized metrics or validated research methodology currently exist to explore social network status or tweets beyond simple quantitative data. It is imperative in the coming years that more research is completed in these areas to better understand the impact of social media on different populations in healthcare.

Conclusion

Social media is changing the way we communicate with colleagues and patients. Oncologists should learn to use these tools effectively. Simple rules should be followed to respect medical and scientific ethics online, as we do in real life. We also have a tremendous opportunity to better learn how patients experience our treatments, which may in turn help us improve them. Because patients use these media to look for the best treatment options, we owe it to them to share faithful and unbiased information online.

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