Online Professionalism—2018 Update of European Association of Urology (@Uroweb) Recommendations on the Appropriate Use of Social Media

Hendrik Borgmann^{a,*}, Matthew Cooperberg^b, Declan Murphy^{c,d}, Stacy Loeb^{e,f}, James N'Dow^g, Maria Jose Ribal^h, Henry Woo^{i,j}, Morgan Rouprêt^k, Andrew Winterbottom^l, Carl Wijburg^m, Manfred Wirthⁿ, James Catto^o, Alexander Kutikov^p

^a Department of Urology, University Medicine Johannes Gutenberg-University Mainz, Mainz, Germany; ^b Department of Urology, University of California, San Francisco, San Francisco, CA, USA; ^c Division of Cancer Surgery, Peter MacCallum Cancer Centre, Melbourne, Australia; ^d The Sir Peter MacCallum Department of Oncology, University of Melbourne, Melbourne, Australia; ^e Department of Urology and Population Health, New York University, New York, NY, USA; ^f Manhattan Veterans Affairs Medical Center, New York, NY, USA; ^g Academic Urology Unit, University of Aberdeen, Aberdeen, Scotland, UK; ^h Department of Urology, Hospital Clinic, University of Barcelona, Spain; ⁱ Sydney Adventist Hospital Clinical School, University of Sydney, NSW, Australia; ^j Department of Uro-Oncology, Chris O'Brien Lifecare, NSW, Australia; ^k Academic Department of Urology, La Pitié-Salpêtrière Hospital, Assistance-Publique Hôpitaux de Paris, Paris, France; ^l Fight Bladder Cancer, Oxfordshire, UK; ^m Department of Urology, Robotic Surgery, Rijnstate Hospital, Arnhem, The Netherlands; ⁿ Department of Urology, University Hospital Carl Gustav Carus, Technische Universität Dresden, Dresden, Germany; ^o Academic Urology Unit, University of Sheffield, Sheffield, UK; ^p Division of Urologic Oncology, Fox Chase Cancer Center, Temple University Health System, Philadelphia, PA, USA

Abstract

Context: Social media (SoMe) has transformed communication among health care professionals by enabling rapid and global information exchange. Yet, the novelty of SoMe and concerns about potential risks continue to be barriers to adoption.

Objective: To encourage appropriate professional use of SoMe by physicians in concordance with best practices and to update practical guidelines for effective and professional use of these communication technologies.

Evidence acquisition: The European Association of Urology (EAU; @Uroweb) brought together a committee of SoMe stakeholders in the urology field. PubMed and the grey literature were searched to identify SoMe position papers by other medical societies and organizations.

Evidence synthesis: Updated practical guidelines for effective and professional use of SoMe communication technologies. A core of 10 practical recommendations for the responsible, ethical, and constructive use of SoMe communication technologies was articulated. The guidelines are limited by their inherent subjective nature and lack of robust evidence supporting their utility.

Conclusions: SoMe is reshaping the way the urological care providers communicate; however, appropriate engagement requires courtesy, professionalism, and honesty. Adherence to guidelines will help users harness the benefits of SoMe in a safe and effective manner.

Patient summary: Social media has transformed communication among health care professionals. This narrative review article provides an update of practical guidelines for effective and professional use of these communication technologies.

Keywords:

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* Corresponding author. Department of Urology, University Medicine Johannes Gutenberg-University Mainz, 55131 Mainz, Germany. Tel. +49-176-61502875; Fax: +49-6131-17-2305.
E-mail address: hendrik.borgmann@unimedizin-mainz.de (H. Borgmann).

1. Introduction

Social media (SoMe) is defined as digital technologies that facilitate the conception and sharing of information, ideas, career interests, and other forms of expression via virtual communities and networks [1]. The offering of SoMe platforms is continuously expanding and evolving. The field of urology has been at the forefront of the SoMe revolution and has embraced its tremendous potential [2]. Yet, significant barriers to adoption and full utilization of SoMe exist, largely stemming from real and perceived risks of SoMe use [3]. The unstructured and unscripted nature of SoMe may prevent some members of the urologic community from fully recognizing and harnessing its benefits. To mitigate the risks of unprofessional conduct using SoMe and to encourage appropriate use, the European Association of Urology (EAU; @Uroweb) convened a committee of stakeholders to update and expand on previously published practical guidelines for the use of publically available communication technologies in an effective and ethical manner [4,5].

2. Evidence acquisition

A PubMed search was performed for the keywords “social media” AND “recommendations” OR “guidelines” OR “best practice” to identify SoMe position papers by other medical societies and organizations. Additionally, a search of the grey literature on the Google search engine was performed to identify additional statements by societies. Our search yielded 1439 results. Using a step-wise approach, titles, abstracts, and full texts of all manuscripts were screened by two authors (H.B. and A.K.) for inclusion in this review. Based on the 12 studies included, 10 core practical recommendations for the responsible, ethical, and constructive use of SoMe communication technologies were drafted, vetted by co-authors, and revised until a consensus was reached.

3. Evidence synthesis

3.1. Current SoMe landscape

The number of global SoMe users has steadily grown from 1 billion in 2010 to some 2.77 billion users in 2018. Indeed, the current annual growth rate for SoMe users is approximately 13% per year [6]. The main SoMe platforms utilized by physicians in 2018 are summarized in Table 1; however, the Twitter platform has been the lynchpin of professional information exchange amongst urologists.

Twitter is a social networking and microblogging online service that allows users to post messages called tweets with a limited set of characters (previously 140, but recently expanded to 280). Twitter has 328 million users worldwide, and user rates among urologists are as high as 48% [7]. The urological community has experienced a dramatic rise in Twitter use, employed for rapid informal information exchange, remote and augmented conference experience

during urological meetings, and for conducting asynchronous virtual journal clubs [8–11]. Moreover, academic journals are increasingly harnessing Twitter to engage the medical community. A significant association between Twitter presence and journal impact factor has been reported [12,13].

3.2. Deliverables of SoMe—how physicians benefit

There are a number of compelling reasons for busy practicing physicians to familiarize themselves with professional use of SoMe. Urologists who were early adopters of SoMe report various benefits of SoMe including professional networking, information exchange, career development, and advocacy [20]. Practical applications for SoMe in urology on both Twitter and other platforms include the following:

3.2.1. Information filtering and curated consumption

SoMe allows rapid real-time interactions between stakeholders in the health care sector [37]. As such, one's personal SoMe stream can be tailored to receive personalized content from news outlets, medical journals, professional societies, and key opinion leaders. Academic journals are increasingly harnessing SoMe to engage the medical community [5,36]. A significant association between Twitter presence and journal impact factor has been reported [12,13,38]. The EAU Guidelines Office Dissemination Committee has used SoMe to publicize clinical guidelines by posting specifically designed posts, and guideline adherence has been evaluated in real-time by using SoMe-based polls [21]. Furthermore, by following key opinion leaders who have an active SoMe presence, users can enjoy an up-to-date, curated, and contextualized content stream. Furthermore, Twitter has been used to crowdsource and apply management strategies for complex urologic patients [11] and to hold multiple regular journal clubs on urology and various subspecialties, including pediatric urology, prostate cancer, and sexual medicine [19]. Besides these SoMe platforms, blogs are a relevant source of information on timely topics. Platforms such as Wordpress and Blogger have a very large audience and are also used as a mechanism for information exchange for a number of urologists [39].

3.2.2. Augmented and remote conference experience

The urological community has enthusiastically adopted the use of Twitter during conferences, allowing for an “augmented” experience for those in attendance and remote participation for those unable to be physically present at a particular meeting [8,40]. Through the use of meeting hashtags, SoMe content is earmarked so that users can easily identify and follow content streams related to a particular event. In this way, individuals who are following the meeting remotely (even from other continents) can engage and exchange ideas with those who are physically present at the meeting itself. Meanwhile, those who attend the meeting can be “virtually present” at more than one location by following appropriate SoMe streams. This mechanism catalyzes a rich exchange of ideas, insights,

Table 1 – Popular social media platforms and their characteristics

Platform	Year of platform launch	Platform differentiator	Privacy features	Number of users	Use in medicine	Documented use in urology
Twitter	2006	A social networking and microblogging online service that allows users to send and receive text-based messages or posts of up to 280 characters called tweets	Largely entirely public (private settings are also available)	330 million	Online journal clubs [9] Patient online support [14] Discussions about clinical care [11] Specific disease information exchange [15] Research [16] Policy discussions [17]	Augmented conference experience [8] Information dissemination by journals [18] Urological online journal clubs [19] Potentiating professional goals [20] Disseminating and evaluating clinical guidelines [21] Twitter impact factor [12] Research [20] Clinical crowdsourcing [11]
Facebook	2004	Popular social networking website that allows registered users to create profiles, upload photos and videos, send messages and keep in touch with friends, family, and colleagues	Granular toggling of privacy features is possible	2.2 billion	Physicians Group Networks [22] Recruitment for clinical trials [23]	Dissemination of information for patient awareness campaigns [24] Exposure of potentially unprofessional personal behavior to the public [25]
YouTube	2005	Video-sharing website that allows users to upload, view, and interact with videos, and to follow other users' content	Largely public; however, private interphase is available.	1.5 billion	Patient and physician education Promotional content dissemination	Public education [26] Quantification of public interest in diseases and treatments in the urology space [27]
LinkedIn	2003	Business- and employment-oriented service mainly focused on professional networking	Public	530 million	Continuing professional development [28]	Most highly used platform for professional networking [29,30]
Instagram	2010	Service that allows users to share photos and videos	Both private and public accounts are possible	800 million	Plastic surgery education and marketing [31]	Up to 5 million impressions for "prostate cancer" in a 1-mo time period [26]
Snapchat	2011	Image messaging and multimedia mobile application	Largely private	187 million	Has been used in emergency setting to identify, provide context, and affect treatment for a toxic ingestion [32]	None documented in the literature
WhatsApp	2009	Cross-platform instant messaging and Voice over IP service	Private	1.3 billion	Simple, cheap, and effective means of communication within the clinical health sector [33]	Evaluation of degree of hematuria [34]
WeChat	2011	Instant messaging, payment services, games	Private	>1 billion monthly users	The most popular social media platform in China	Widely used among physicians for continuing medical education including conference streaming [35]
Google+	2011	Social media network launched by Google that recently has seen declining user engagement	Public	111 million	None documented in the literature	Used by journals to disseminate content [36]
Doximity	2011	Online social networking service for US clinicians, nurse practitioners, physician assistants, and pharmacists	Only available to US health care professionals	1 million	Eg, Residency navigator: a tool to help medical students find residency programs that fit their professional needs based on user-submitted evaluations	None documented in the literature
Sermo	2005	Private social media network limited to physicians	Private	800 000	Crowdsourcing patient case discussions	None documented in the literature

and expertise around the particular meeting's content even after the meeting is adjourned.

3.2.3. *Academic research*

The value of SoMe in advancing surgical research largely stems from lowering barriers for connecting investigators with common interests, enabling patient recruitment for clinical trials or engagement with patient-reported outcome research [41], and even providing a source of primary data for research [17]. Indeed, SoMe manuscripts in urology have been heavily cited (a mean of 16.3 times in the 2-yr time period after publication), with most citations occurring in journals outside of the urology space [42].

3.2.4. *Educational tool*

Organizations, societies, and journals have adopted SoMe as complementary means to enhance education of urologic providers and patients. A recent survey of young urologists in Europe demonstrated that SoMe plays a significant role in knowledge acquisition [30]. Notably, YouTube ranked as a primary source for educational videos on surgical procedures for this cohort of young European urologists. It is important to emphasize that much of this content is not peer-reviewed and may contain biases. Thus, such content should be considered with some caution. Furthermore, many journals and societies have created patient-facing accounts to potentiate information regarding urologic health. There have been numerous public-facing tweet chats to raise awareness and provide information about urologic diseases.

3.2.5. *Profession campaigns*

A recent #ILookLikeASurgeon online campaign promoting diversity and gender equality in surgery has engaged over 35 000 Twitter users in over 150 000 tweets, resulting in nearly a billion impressions [43]. The campaign was embraced by urology, adopting the hashtag #ILookLikeAUrologist. Initiated in 2015, urologists from around the world have joined this campaign to celebrate diversity and gender equality. Until now, #ILookLikeAUrologist accounts for 2561 tweets by 942 users, leading to more than 5 million impressions (data provided by symplur.com)

3.2.6. *Structured communication*

The Urology Tag Ontology, a hashtag list comprising 45 hashtags in nine urologic subspecialties, has been introduced for standardizing content descriptor use in the urologic SoMe community and to facilitate communication and collaboration between health care provider and patient stakeholders [44]. This effort has afforded high-fidelity assessment and indexing of activity, user details, and content type of urology-related Twitter traffic [45].

3.3. *EAU's (@Uroweb) recommendations on the appropriate use of SoMe*

The EAU brought together a group of SoMe users and stakeholders to update a set of guidelines for optimal professional SoMe use that was originally compiled and

published in 2014 [4]. Guidelines for appropriate use of SoMe are necessary since unprofessional SoMe conduct has significant risks. A recent analysis of US urology residency graduates' Facebook accounts revealed that a substantial proportion contained self-authored unprofessional content [25]. The open nature of SoMe lends itself to the perils of violating patient privacy and undermining other professional conduct norms. Based on information gathered through our previously described literature review, stakeholder input, and the previously published @Uroweb 2014 guidelines on the appropriate use of SoMe [4], the guidelines were updated. A core of 10 practical recommendations (Fig. 1) for the responsible, ethical, and constructive use of SoMe communication technologies was articulated.

3.3.1. *Never undermine your patients' privacy and confidentiality*

Information posted to SoMe platforms is generally entirely public and permanent. The same expectations of patient confidentiality and Health Insurance Portability and Accountability Act (HIPAA) compliance that exist offline apply to online behavior. Violation of patient privacy is perhaps the biggest potential pitfall of professional SoMe. Users must avoid direct patient identification and must refrain from showing images or sharing patient care details that could lead to an individual's identification. Sharing of videos must also be done with great care. Thorough review of each video must verify that no frame undermines patient privacy.

3.3.2. *Understand how other users behave online before interacting on social networks*

When starting to use SoMe, it is beneficial to begin as a "passive user" or follower for a period of time in order to observe and understand SoMe interactions and to develop an appreciation of each platform's etiquette.

3.3.3. *Establish a professional digital identity that is in line with your professional practice and goals*

When setting up a professional SoMe account, state clearly who you are, what your profession is, and in what role you plan to interact with SoMe. It is advisable to use your real name and a professional photo. Many users list their employer, but indicate that the account represents the user's own opinions. Periodic self-audits of your online presence are prudent as one's professional digital footprint is a constant reflection of one's professional health [46].

3.3.4. *Avoid providing medical advice and maintain limits between yourself and patients*

Do not engage in exchanges that may be misinterpreted as patient-physician relationships. Avoid providing specific medical advice. Patients and caregivers will understandably seek out physicians on SoMe platforms for their input; albeit current SoMe etiquette has made such interactions infrequent. If contacted by a patient or family member, it is best to refer the patient to legitimate sources of information that are already available online. Recommending that a patient make a formal appointment with a specialist or a general practitioner to discuss a particular case is often

Fig. 1 – Ten practical recommendations for ethical, professional, and effective social media use.
EAU = European Association of Urology.

most appropriate. Befriending patients on one's personal SoMe accounts is not recommended.

3.3.5. Assume that anything and everything you post is permanent
Be aware that all content posted online, even that which has been “deleted”, will likely remain publically available in perpetuity. Any content posted to a SoMe site holds potential to be disseminated far beyond the originally intended audience. Quotes, photos, and commentary can be taken out of context and reposted elsewhere, despite privacy settings. The “golden rule” is a “pause-before-posting” practice. Never post on impulse or when your

judgment may be clouded. All SoMe posts are time-stamped; therefore, be sure not to post during critical clinical encounters (eg, when in the operating room), so that a SoMe post cannot be misinterpreted as a distraction. Any level of data contained on SoMe platforms, regardless of security settings, should be regarded as potentially accessible.

3.3.6. Use instant messaging services with care

Some institutions, especially those in the United States, only allow patient information exchange through specifically-licensed HIPAA compliant software. Ensure that you

know your institution's policy before sharing patient information with others through publically-available messaging software. Importantly, use great caution in exchanging protected health information or providing medical consultations over non-secure networks. The instant messenger service, WhatsApp, provides several useful functions for the health care sector such as educating students/residents/patients and facilitating communication about patient care among staff groups. Although communications including text messages, calls, and media are protected from interception by all parties except the sender and receiver by an end-to-end encryption protocol, patient information needs to be anonymized and use of a particular platform must be approved by the user's institution. Settings for group discussions that potentially contain patient-related data should be modified by toggling the setting for "save incoming media" to "no". This avoids unauthorized view of patient-related data in case your phone is in use by another person or is lost or stolen.

3.3.7. Exercise professionalism

Always consider your content in the context of appropriate professional opinions, views, and standards. Be honest and courteous. While it is acceptable to disagree with colleagues via SoMe, such messages should be respectful, collegial, and reflect positively on the profession. Avoid defamatory and personal comments that violate professional norms. Reach out to colleagues whose SoMe conduct may be unprofessional or inappropriate.

3.3.8. Beware of social media policies set by employers

Some institutions have created SoMe policies that may set limits on one's ability to post publically to SoMe platform. One should review any SoMe policies created by one's institution in order to stay in compliance with such policies. Some employers require that health care providers explicitly state that the views expressed on SoMe do not represent those of their institution by indicating in their profile that "views are my own".

3.3.9. Beware of how advertisement and self-promotion is perceived by others

Remember your professional obligations to offer sound opinions and to report factually correct data. Do not make claims that cannot be substantiated or verified, and do not advertise your services or results beyond medically verifiable data. Online discussions or posts which could be associated with financial conflicts of interest must be transparent.

3.3.10. Use disease-specific ontology hashtags for structured online communication

Urology is one of the first specialties to create the "Urology Tag Ontology," which is a listing of urology-related hashtags designed to standardize SoMe communication descriptor use [44]. The Urology Tag Ontology is being regularly updated (<https://www.symplur.com/healthcare-hashtags/ontology/urology/>) and has been endorsed by key SoMe

stakeholders. Use of these standardized hashtags is encouraged.

4. Conclusions

In summary, SoMe affords urologists novel tools for interacting with colleagues, crowdsourcing opinions, and staying updated with the latest discoveries and innovations. Indeed, SoMe is reshaping the way the urological care providers communicate. Barriers to professional SoMe are low, but appropriate engagement requires courtesy, professionalism, and honesty. Adherence to guidelines will help users harness the benefits of SoMe in a safe and effective manner.

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Study concept and design: Borgmann, Catto, Kutikov.

Acquisition of data: Borgmann, Kutikov.

Analysis and interpretation of data: Borgmann, Kutikov.

Drafting of the manuscript: Borgmann, Kutikov.

Critical revision of the manuscript for important intellectual content: Borgmann, Cooperberg, Murhpy, Loeb, N'Dow, Ribal, Woo, Roupriet, Winterbottom, Wijburg, Wirth, Catto, Kutikov.

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