Charles Darwin said “It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change.”

INTRODUCTION
There has been a global explosion in the access to and use of social media (SM) internet sites and instant messenger services. As a result, the ways people obtain, share, publish and discuss information have changed. The medical and dental professions have not been spared from this development, with many health care providers and patients using SM for communicating with colleagues and patients; gaining access to or disseminating health-related information and for social networking. In addition, there are many professional sites aimed solely at health care professionals or specifically dentists.

The possible benefits are numerous, with many dentists already using different sites for professional networking, to enhance their expertise and reputation by sharing information on patient treatment outcomes, to seek advice for difficult clinical situations, and to discuss new products that they have used or are wanting to test. SM also have potential for professional development such as educational discussion circles where members can acquire CPD points for participation, as well as for community engagement.

Other uses include education and promotion of healthy behaviour amongst the public as it is possible to reach diverse audiences and to foster engagement with them. However, every perceived benefit is accompanied by risks of professional damage if the options are used inappropriately. These threats broadly can be placed into three categories related to the dentist:

1. patient relationships,
2. interactions with colleagues and
3. medico-legal issues.

WHAT IS “SM”? 
The Oxford Dictionary defines SM as “websites and applications that enable users to create and share content or to participate in social networking”. This encompasses any form of electronic communication through which users can create online communities to share information, ideas, personal messages and other visual content. It can refer to a number of online applications that allow for the creation and exchange of user-generated information, social interaction and real-time collaboration. Different sites have varied uses, users and applications.

Some of the more popular sites include those for:

1. Collaborative projects (e.g. Wikipedia, Podcasts);
2. Short newsworthy updates (blogs), reports and opportunities (e.g. Twitter, Blogger);
3. Content communities (e.g. YouTube);
4. Social networking sites (e.g. Facebook);
5. Virtual gaming worlds (e.g. Second Life);
6. Discipline-specific discussion forums;
7. Personal professional promotion (e.g. LinkedIn).

Despite the diverse nature of each medium, all have a number of characteristics in common. These include:

1. Rapid communication with a large audience;
2. Anyone can post anything, but once posted it is almost impossible to remove;
3. All postings are open to others to view;
4. A widespread, but unknown audience;
5. Electronic data can be manipulated, altered and shared without the knowledge of the original author. Some sites allow practitioners to have personal communications with their own patients, or to offer general advice to an open population group. These options allow SM to be used to build up a rapport with patients before they present for their initial examination as well as between visits, or to disseminate public health information rapidly and widely, especially in times of crisis.

These features carry many ethical, legal and professional challenges.

**BENEFITS AND USES FOR SM IN MEDICINE AND DENTISTRY**

Increased use of SM by health professionals is considered acceptable if it serves “good” rather than “evil” purposes. This includes adhering to the principles of beneficence, non-maleficence and confidentiality, and promotion of the profession in line with the rules and regulations of the HPCSA. The link between patients and practitioners can be mutually beneficial as it allows for the provision of much needed information to a wide range of patients regarding development of new technologies, medications and therapies, conveys education about patients’ rights in the health care settings, and enables the dissemination of public health care messages. At the same time patients can alert the profession about public health issues and concerns they may have experienced or witnessed.

SM has changed the way knowledge is spread, allowing anyone with Internet access the opportunity to access information as well as to participate in collaborative sharing of ideas.

Mann et al list three key features that make SM effective in knowledge translation, namely: personalization, presentation and participation. The personal tailoring of content allows users to share and access information that is of value to themselves. Presentation and participation refer to the many different ways in which the material can be displayed such as written text, illustrations, real-life photographs, video inserts, or interactive platforms. The collaborative nature of the communication can stimulate meaningful discussions and debates and could potentially generate a wealth of new ideas. “Groups are remarkably intelligent, and often smarter than the smartest people in them”.

In medicine, SM has the potential to be a valuable educational tool that will not only increase knowledge, but may also help close the gaps between theory and clinical practice. In addition it may prompt the development of innovative tools for teaching and learning that will be able to reach a far wider target audience than traditional lectures and clinical training. Certain virtual programmes can even provide a form of “hands-on” experience. Another way in which it can be used for educational purposes is by showing difficult cases, including those with errors and failures, and explaining the procedure and pitfalls in detail. This may prevent others from making the same mistakes and could stimulate productive debates that may lead to alternative solutions.

It allows for free communication between colleagues, which enables the transfer of knowledge and skills and facilitates discussions, queries and debates. These platforms also have potential for professional development by building and cultivating professional networks. Indeed, the options in the South African context are immense as it can form part of professional guidance to students, clinicians or staff in remote areas.

Some sites allow practitioners to have personal communications with their own patients, or to offer general advice to an open population group. These options allow SM to be used to build up a rapport with patients before they present for their initial examination as well as between visits, or to disseminate public health information rapidly and widely, especially in times of crisis.
online information and advice in place of personal visits to a recognized health care professional. This could have harmful and dangerous results. In addition, they may interpret information in a way other than was intended. Thus before posting on SM, the content should be scrutinized in terms of appropriateness as well as who may have access to that information. Note too that posting on some sites (e.g., Wikipedia) can be edited by others who may add disagreeable new data which becomes immediately visible to viewers. There are no clear guidelines on how this can and should be handled in order to protect the image and reputation of the original author.

A main concern in the health care sector is that of patient privacy, anonymity, confidentiality and consent. Posting inappropriate comments, identifiable patient photographs, or sensitive details about treatment can not only damage a practitioner’s reputation, but could also lead to unwanted media attention or disciplinary action. Skype consultations are becoming a popular means of communication. The obvious advantages are improved access to health care, speed, convenience and cost. However there are also a number of disadvantages. A full clinical assessment is not possible and certain crucial warning signs about a patient’s condition may be missed. This could leave the doctor vulnerable if it results in a mis-diagnosis or an adverse outcome. Arguments blaming equipment failure and Skype shortfalls cannot be used in defense of the errors, as practitioners remain personally responsible for their diagnoses regardless of what facilities were relied upon to aid them in the process. For this reason, the HPCSA does not advocate any initial consultation and diagnosis or the relaying of test results by any means other than a personal physical examination or consultation.

Another hazard is the possible crossing of personal and professional lines when clinicians and patients have access to each other’s personal profiles and postings. Clinicians who use SM sites should ensure they have secure privacy settings. However, even these are not foolproof or absolute. Electronic messages are not protected, and even a username does not guarantee anonymity. They all carry a “digital footprint” that can be tracked, manipulated, copied, shared or misdirected without the sender’s knowledge. Once information is digitized, the author relinquishes all control over it. It can live forever in the Internet, even if the posting is later deleted. A further risk is that of “perceived anonymity” which can lead to uninhibited content, where followers are able to follow other people’s followers. In addition, anyone can access a person’s profile and see who they themselves are following, and then draw conclusions about that persona based on this information.

PATIENT CONFIDENTIALITY

Health care practitioners should respect patient as persons, and acknowledge their intrinsic worth, dignity and sense of value. They must be cognisant that they are in a position of power over their patients due to their access to personal information and confidences revealed during communications with them. They should never abuse this privilege or erode the trust in the doctor-patient relationship by disclosing any patient information without the knowledge, understanding and consent of the patient. This respect for privacy, dignity and confidentiality also applies to all online activities.

The General Dental Council Guidelines prohibit dentists from posting any information or comments about patients on social networking sites unless it is to describe anonymized cases for the purpose of discussing best practice. SM can be useful for sharing information for the benefit of your patients, for providing educational advice, and to seek guidance in specific circumstances. In all instances, however, there must be no way the patient can be identified.

To repeat, it is not permissible to share any patient information without written consent. Patients also need to know exactly where and how the information will be used, and who will have access to it. Each clinician should adopt a specific consent and assent document for patients to sign if they wish to share information on SM.

In the case of a minor; parental or guardian consent is required. Note, that guarantees of anonymity alone may not be enough to safeguard a patient’s identity. The clinician must also be sure not to upload enough separate pieces of information that could allow someone else to piece together the data and identify the patient. This is particularly relevant in small communities, where a patient’s identity can be easily identified by a very small amount of shared information.

Practitioners may also need to draw up a policy for their employees with regards to their use of both professional and private SM sites. The guidelines should “reflect the same values that they are expected to follow offline, such as trust, honesty and respect for others.” They should also be cautioned regarding the following: to not post negative comments about the practice, the patients or other employees; not to use inflammatory or offensive speech; not to post content that may cast a negative image of the practice; to keep non-public financial and operational information confidential; never to share personal information about patients and to never discuss any of the practice’s legal issues.

LEGAL REGULATIONS PERTAINING TO SM USE BY HEALTH CARE PROFESSIONALS

There is currently no law in South Africa governing SM specifically. The Bill of Rights of the South African Constitution (1996) and the more recent Protection of Personal Information (POPI) Acts (2012) have attempted to address this in part. They have sections dedicated to equality, human dignity, freedom and personal dignity and privacy.

There are many unanswered legal questions with regards to SM usage.

There is an urgent need to develop national guidelines on professionalism in the use of SM. These structures can be used: as a guide to support practitioners when giving...
personal opinions; enable them to have an individual professional online presence; to foster collegiality and camaraderie within the profession; to provide opportunities to disseminate public health messages widely; and to protect both current and future professional SM users.12

SM should also not be used as means of spreading defamatory comments about products (or persons), nor as an avenue for advertising and promoting oneself or other medical amenities and procedures.13 This includes any form of touting which "draws attention to one’s offers, guarantees, or material benefits that do not fall into the category of professional services yet are linked to the rendering of those services and are designed to entice the public to that practice".4 A recent example seen on Facebook was an Internet competition offering "free dental bleaching" to the winner.

It is also not permissible to state academic achievements or to.insinuate superior knowledge on professional sites.4 There are no clear policies regarding advertising on the web, however it has always been the convention that those practicing “learned professions” such as medicine, dentistry and law should not advertise or market themselves and should uphold the value of their profession. Advertising has also been viewed as possibly misleading and likely to influence potential patients. As such there should also be some legal channels available for alerting authorities to unprofessional postings by colleagues, especially if they have refused advice to remove these. They need to be made aware that their online content may not only negatively influence their reputation amongst patients and colleagues, but can undermine the trust of the public in the entire profession.12

Professional websites are allowed but criteria for what may and may not appear on these needs to conform to country-specific specifications. Generally they should present the practitioner’s name and qualification, scope of practice, DP registration number, name and geographic address of the practice, contact details including telephone, email and emergency numbers, billing policies, details of the complaints procedure as well as to provide the patient with contact information for relevant authorities (e.g. the HPCSA or Dental ombudsman) should they be dissatisfied with the care provided.2

ETHICAL GUIDELINES / E-PROFESSIONALISM

If medical practitioners are making use of SM for any form of professional activities they need to be aware of how to indemnify themselves and protect their patients. The following guidelines may help clinicians in SM etiquette towards patients:

• Professional standards do not change when communicating through SM rather than by traditional face to face correspondence or traditional media.1
• Your appearance in SM communicates information about your personality, values and priorities and can impact on your reputation. Many SM users are connected to overlapping networks making it almost impossible to separate personal and professional posts. Thus the impression you create can be based on all aspects of your SM profile such as photographs, comments you post, like or share, your circle of friends, organizations you support, websites you visit and media that you follow.2
• Any post is immediately made public and cannot be retracted.1 It can also be copied and re-distributed without your knowledge or approval. It may be viewed by anyone including patients and colleagues.
• Be professional at all times.10 Remember that your online image and personal profile may reflect on your professional life.1
• All information posted must be credible and suitable for the target audience.4
• In all postings, restrict yourself to your level of expertise, training or subject of interest, and ensure the facts are scientifically correct and in accordance with the same standards of a peer-reviewed publication.4
• Take full responsibility for all information posted, and acknowledge colleagues or other cited sources.4
• If in doubt about the answer to an online query do not respond. Rather be honest and acknowledge your uncertainty, and if possible direct the patient to a more qualified source.4
• If you encounter inappropriate content by colleagues, approach them directly and discreetly and not in an open forum.4
• Comply with Internet and SM policies.1
• Don’t post anything which could damage public confidence in you as a professional, or that could bring yourself or the profession into disrepute.3,4 Remember that all postings are accessible. Dentists should not divulge personal information about themselves during consultations with patients on SM.15
• Maintain patient confidentiality and professional courtesy.1
• Keep appropriate boundaries and respect in all relationships with patients and other colleagues on SM.1,15
• Ensure that all actions are in the best interest and wellbeing of the patient.10
• Show respect for all patients at all times.10
• Ensure that the patients have given Informed Consent before using their details (this encompasses issues such as respect for human dignity, freedom and security).10
• Maintain patient privacy, confidentiality and anonymity. This will also foster their trust in you and the profession.10,15
• Allow for patient participation in their own health care.10
• Act with impartiality and justice.10
• Endeavour to promote access to health care for as many patients as possible.10
• Declare any potential conflicts of interest.10
• Limit access to personal SM accounts to family and friends and keep separate professional accounts for staff, patients and colleagues.10
• If a practice has a professional website, it should also have an SM policy covering issues such as privacy settings, patient confidentiality, establishment of boundaries, respect for colleagues and reputational behaviour guidelines.3
• Patients should also be given a copy of the practice’s online policy so that boundaries are not crossed.6 At the same time the clinicians must endeavour to keep the doctor-patient relationship professional at all times.14
• It is wise to politely refuse “friend requests” from patients, explaining why it should be inappropriate to accept. Text messages carry an even greater risk of leading to more informal dialogues, boundary crossing and interpersonal violations. It is the dentist’s responsibility to set the boundaries, and not leave this up to the patient to decide.15
• When patients ask specific questions about their health, provide concise factual information. For anything more complex, diagnostic or involving medication prescriptions, it is better to advise them to book a personal consultation. This also protects privacy.15
• Any advice given to a patient via SM, including discussions about finance, post-surgical follow-ups maintenance programmes must be part of the patient’s records. Accordingly, all e-mail, sms and internet correspondence must be clearly documented and maintained in the patient’s records.16 Not only will this safeguard the clinician, but it is a legal requirement.15
• Although sms and e-mail are more private forms of communication, practitioners still need to seek permission from their patients to use these channels. Patients should also be advised to alert the practice if they get a new number, especially if they give the old phone to a third person who may then erroneously receive their personal messages. As mentioned above, these messages and mails must also form part of their records, and must be kept secure.3 Avoid engaging in personal conversations or discussions about treatment with patients via sms or e-mail. (There are exceptions such as sending quotations, invoices, or statements).
• When using sms or e-mails to relay messages there should be an automated response indicating receipt, and the site should be checked regularly.3 Keep all patients records and correspondence together so that it can be readily available to another practitioner in an emergency.3
• In the event that electronic communications are used for treatment discussions and advice, the patient needs to be made aware that they may be billed for these sessions before any consultation takes place.4
• Do not respond publically to negative comments posted by patients about you on the Internet, especially if you feel emotional about it at the time. Not only is this destructive of your reputation, but it may also result in a breach of doctor-patient confidentiality. Rather make a public statement to the effect that you value the patient’s opinions and confidentiality and invite them to discuss the issue with you personally.5 Then take the matter offline and treat the comments as a formal complaint and handle them using the appropriate formal channels.3 This will allow you time to investigate the concerns, and provide an explanation or apology if necessary. It is hoped that this approach will also diffuse the situation positively and constructively.14
• At the same time, defamation laws also apply to online posts by patients. They are answerable for any comments shared, and if these are found to be factually incorrect or untruthful, the authors should be given the opportunity to make amends. They can be asked to delete the accusation and / or post a public retraction and apology. Failure to do this is justifiable grounds for the practitioner to sue.5
• Treat colleagues fairly and with respect on SM.1
• In professional group communications it may be easier for a dentist to express opinions that he/she may not be inclined to voice in a face-to-face communication. However, group comments can spread rapidly and easily go viral, as not all members of the group will maintain privacy settings. Mistakes and ill-advised statements can be misused, tweeted and sent to a far wider audience.7,16
• It is also tantamount to plagiarism to re-post material that was presented by another person at a congress or demonstration.16
• When taking part in public forums such as radio or television in a professional capacity, one should always get an indemnity agreement from the producers beforehand.3
• NB: SM is not the avenue to follow when one wants to raise concerns about a colleague or their practice. There are correct channels for whistleblowers. On SM, colleagues should be treated fairly and with respect no matter what the situation.1
• It is also not the forum for making gratuitous, unsubstantiated or unsustainable negative comments about individuals, groups or organizations. Similarly a professional should never post offensive language, personal attacks or racial comments.15

CONCLUSIONS

For health care practitioners, SM offers many ways to facilitate communication between colleagues, participate in professional developmental activities, promote expertise, products or services, and foster social interactions. It also has the potential to stimulate research and development by advancing collaborative projects between peers, and for serving as an excellent medium for presenting virtual hands-on teaching and training courses which can augment traditional didactic teaching.

For patients, it provides an immediate, cost effective channel for consultation with their doctors, while professional web pages can also educate and empower them with respect to issues around their own health.

When used cautiously and professionally, SM can be a powerful and effective tool to improve the quality of health care provision, resulting in better patient care and outcomes. However, thoughtless, unethical or illegal postings can have widespread ramifications for the practitioner as well as the profession.

To paraphrase Prof Mazwai, the President of SAMA “In light of the blurred boundaries in Internet usage, doctors must have clear vision before making statements or posting material on any SM website”.

References