eJACD

The Official Journal of the American College of Dentists

Social Media and Dentistry
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Communication Policy

It is the communication policy of the American College of Dentists to identify and place before the Fellows, the profession, and other parties of interest those issues that affect dentistry and oral health. The goal is to stimulate this community to remain informed, inquire actively, and participate in the formation of public policy and personal leadership to advance the purpose and objectives of the college. The college is not a political organization and does not intentionally promote specific views at the expense of others. The positions and opinions expressed in college publications do not necessarily represent those of the American College of Dentists or its Fellows.

Objectives of the American College of Dentists

THE AMERICAN COLLEGE OF DENTISTS, in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

A. To urge the extension and improvement of measures for the control and prevention of oral disorders;

B. To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all, and to urge broad preparation for such a career at all educational levels;

C. To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;

D. To encourage, stimulate, and promote research;

E. To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;

F. To encourage the free exchange of ideas and experiences in the interest of better service to the patient;

G. To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public;

H. To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;

I. To encourage individuals to further these objectives, and to recognize meritorious achievements and the potential for contributions to dental science, art, education, literature, human relations, or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.

This issue of the eJACD is devoted to the professional and ethical issues of social media use in dentistry. The landscape is broad and ever-changing and thus the articles included are intended to represent that by presenting both the positives and negatives as well as the potential range of settings in which social media might be used. The issue, however, begins with some history and framing of how communication has developed over time and even how the ACD has been developing policy and guidance on developments in communication. The articles will consider social media use from the perspective of the student, the new practitioner (both digital natives), educators, and more seasoned practitioners.

Ethics & Professionalism of Social Media in Dentistry: Promises and Pitfalls

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Social media is a means of communication that has become and will continue to be integrated into our personal and professional lives. Professionally, social media can facilitate communication with both peers and patients, can be used to promote one's research among colleagues, promote one's practice, increase knowledge, communicate easily with many during a time of crisis, among other things. In a 2015 article in the *Journal of Dental Education*, Spallek and colleagues discuss the risks and benefits of social media use in a dental school environment.[1] They identify some of the benefits as including: engaging students, empowering patients, improving marketing, and addressing professional isolation.[1] As with any new or emerging technology, risks come along with those benefits. Those might include blurring the line between professional and personal identity, taking time away from professional responsibilities and interfering with privacy and confidentiality. While the ADA's *Principles of Ethics & Code of Professional Conduct* were developed long before the advent of social media, a particular statement in the Preamble has particular resonance with regard to the ethical use of social media in dentistry and can serve as a guidepost as we continue to develop this form of communication: "Qualities of honesty, compassion, kindness, integrity, fairness and charity are part of the ethical education of a dentist and practice of dentistry and help define a true professional."[2]

The articles in this volume of the *eJACD* highlight these risks and benefits and identify ways to harness the benefits while minimizing the risk. The principles of ethics and the professionalism to which dentists adhere offer the necessary guidance and direction to manage the challenges presented by social media and to embrace the value that social media can bring to peer to peer and practitioner to patient relationships. As Greyson and colleagues acknowledge, "If we fail to engage this technology constructively, we will lose an important opportunity to expand the application of medical professionalism within contemporary society."[3]

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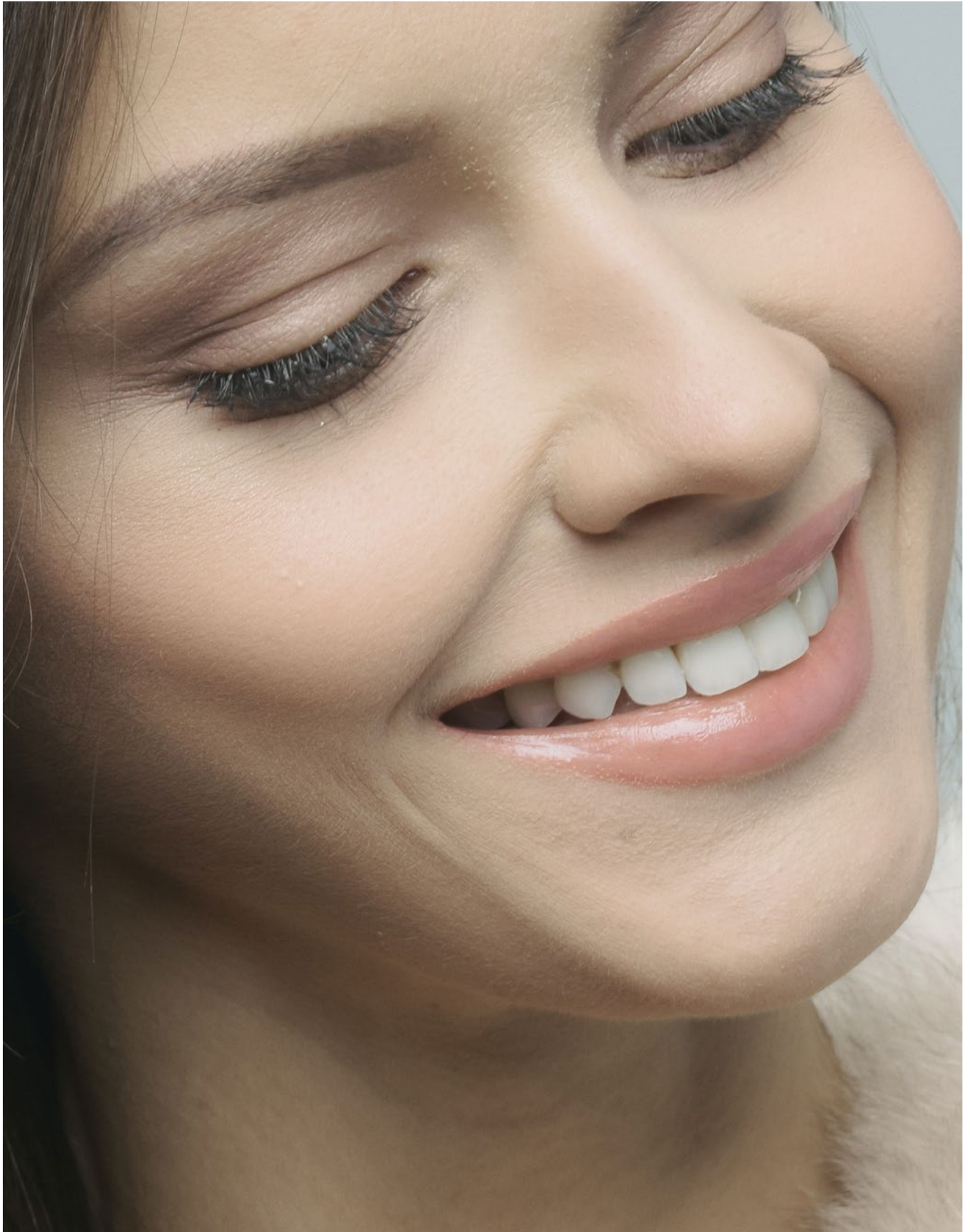
Social Media and Selling Smiles

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Dentistry has a value problem. The line in dentistry between social and physical health is blurred. A mix of pressures, financial and social, can lead to outcomes like overtreatment and a departure from evidence-based health. Newer factors in decision making are being driven by social media and public perception. But how often are dentists looking at what social media is doing to our practices and to us?

If you have treated any pediatric patients recently you may have asked them what they want to be when they grow up. The most common response to this question I hear is "a YouTube influencer," or "a streamer". Gone are the days where astronauts and scientists garnered the majority of admiration by kids and teenagers. Social media platforms have permeated all aspects of our lives and dentistry is no exception. Dentistry must be ready to adapt to the ways that social media will influence our ethics and professionalism.

Interactions with social media platforms by both doctors and patients can affect clinical decision making, professionalism, patient perception, and the standard of care. "Social media" is defined as any form of electronic communication through which people create online communities to share information and content. Examples of social media platforms are websites, blogs, microblogs like Instagram or Twitter, and any video type platform, like TikTok, Twitch, and YouTube.

Social media has a unique ability to address multiple ethical issues found within the four pillars of ethics within healthcare due to the plethora of platforms. Social media can address justice by making resources known and accessible, it can address autonomy through empowerment, it can address beneficence through treatment delivery, and it can address non-maleficence by helping avoid unnecessary or inappropriate treatment. On the other hand, social media can also disrupt the doctor-patient relationship, create an inequality between doctor and patient autonomy, lead to non-therapeutic treatments, and damage society's image of dentistry. The ethics of social media are not discussed enough.

Looking at the numbers

A survey in 2021 by the Pew Research Center showed that 81% of US Adults reported using YouTube, and 69% using Facebook. 20-40% of adults reported using Instagram, Pinterest,

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A survey in 2021 by the Pew Research Center showed that 81% of US Adults reported using YouTube, and 69% using Facebook. 20-40% of adults reported using Instagram, Pinterest, LinkedIn, and Snapchat. The majority of 18–29-year-olds say they use Instagram or Snapchat, while half say they use TikTok—and of this half, the majority are in the younger cohort of 18-24 years old. 55% of dentists have a social media account and 83% of dentists believe that social media marketing is more efficient than traditional marketing.

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Social media use within dentistry has become ubiquitous such that we may not think twice about our virtual activity and how it affects our real-world dental lives. Trend literature searches with the terms "social media" and "decision-making" yields 1,159 articles. But there are far fewer articles found discussing ethics, social media, and decision making. And the further we dig we find that most of these articles are basic meta-analysis studies that skim only the surface of the ethics aspect of social media. There are few intellectual explorations into the interplay between ethics, professionalism, and social media.

Dentistry has seen a barrage of various social media applications as newer platforms appear. The profession has notorious events where social media helped unethical behavior like hoverboard extractions and it has instances of pushing dentists into procedures and interactions that they may not have become involved with otherwise. We have also been introduced to a new level of DIY dentistry, ushered in by social media platforms like TikTok and Facebook. New trends seemingly appear every day. Did you know that teenagers use nail files to file down their anterior teeth so they are all the same length and flat across, or that people fill gaps in their mouth using modeling plastics or press-on nails and super glue, or elastic hair ties to close diastemas in two weeks, or perform "veneer checks" and travel abroad to crown all their teeth, or use a Magic Eraser to whiten their teeth? These ideas spread through popular social media sites and those searching for solutions who mimic those they observe.

It may be easy to write off social media as only harmful for patients, but there are also significant upsides. Finding an Online Health Community can have an everlasting and empowering effect on a patient. These communities are places on the internet where someone can do both objective and subjective data collection. Another way to think of an Online Health Community is as self-guided education. These communities usually take the form of a group or forum on platforms like Facebook or Reddit. Here, patients, their families, and even doctors, can find information about their specific disease, ailment, or upcoming procedure. Self-guided education has become more popular because more patients believe that doctors might not be aware of the latest breakthroughs, and social media platforms provide technological answers that they believe the doctor may not be able to provide them[6]. Moreover, self-guided education, like Online Health Communities, has been shown to create more informed decision making, saves the patient money, and overall empowers the patient with their health.[5,6] Patients exploring these online communities should be a signal to doctors that we may be out of touch with our patients' perceptions, desires, and values.

Improved patient empowerment leads to greater patient autonomy. The four facets of autonomy include confident decision making, enhanced subjective well-being, improved self-management and control, and equal communication between patient and doctor.[2]

Confident decision making comes from better data and outcome understanding. Enhanced subjective well-being is when a patient experiences more pleasant and positive emotions. Improved self-management and control is in the ability of the patient to better handle their situation, as they are more informed to make better decisions, and their perceived control over the situation improves. Lastly, equal communication between the patient and the doctor is a transparent and trust filled situ-

ation where information exchanged allows both parties to better understand the patient's condition.[1,14] When all four of these facets are satisfied it leads to improved autonomy, and this may be an area where social media can help.

A barrier to achieving empowerment is access. Social media is an avenue to address the justice issue of access. Patients need little resources to find information to help them make more informed decisions. Online Heath Communities, as an example, are accessible to people regardless of race, gender, sex, creed, and socio-economic level.

Most patients do not try to circumvent health care professionals via social media. Patients view the doctor-patient relationship based more on medical knowledge as opposed to firsthand experience. Moreover, a patient's willingness to seek medical attention may increase after social media use because they could learn more about their health and improve communication. This is where dentistry needs to embrace social media. Fostering and empowering self-guided education, like Online Health Communities, can increase justice and autonomy for patients, as well as for doctors.

Online Health Communities can also empower doctors by exposing deficits and illuminating gaps of understanding. A generalized criticism of doctors is that we are paternalistic, and we don't listen. Research seems to support this notion. A study done on medical doctors found that, "physicians' perceptions of their patients' health beliefs differed significantly (P<0.001) from patients' actual beliefs. Physicians also thought patients' beliefs were more aligned with their own. Physicians *were not good judges of patient's health beliefs* but had a substantially better understanding when patients more active-

ly participated in the consultation." Finding Online Health Communities within the area of our expertise can greatly empower doctors not only to recognize communication flaws, but also better understand our patients. The same study also found that physicians who reported a patient-centered orientation to the doctor-patient relationship were more patient-centered in their communication and consequently were perceived more positively by the patients.[7] Social media can be a powerful tool in bridging the gap between the patient and the doctor. But clear communication is always key.

Could misinformation or lack of thorough information be misconstrued as autonomy?

The risks for doctors with greater patient social media involvement can be significant when discussing decisions making.[5] The decision-making process involves both agents, but the doctor is not in complete control over the information that the patient is using but the outcome is the doctor's responsibility. Doctors, for better or worse, used to be in more control of the information but now that's spreading to patients as they take more control and ownership of their care, again for better or worse. Even if the doctor is providing direct information the patient still has multiple avenues to obtain supplemental information that the doctor may not even be aware of. Is there an obligation upon dentists to be more aware of the social media landscape?

Patients may feel that they have filtered the information they found for accuracy, but this is limited by their knowledge and their ability to

distinguish between real and false information and to understand it. One of the barriers this creates is that the expertise of the doctor is challenged.[5,9] The doctor must facilitate veracity while maintaining a virtuous doctor-patient relationship.

The challenge to expertise is one of the biggest issues facing dentistry and can be addressed using social media. Doctors can utilize social media by showing examples of appropriate oral health treatment outcomes as a way to spur a patient to collaborate on a plan for their own health. Social media can help dentists open dialogues with their patients. Providing quality information online may be the key to redirecting the landscape of dentistry and patient perception; unblurring the line between commodity and healthcare. Dentistry doesn't need to convince anyone. It just needs to light the way.

The ethical considerations of social media exist both in and out of the operatory. The doctor's concern is patient safety and the actions taken must align with the therapeutic goal. This means that the choices made must be free of undue influence, such as social media influencers or patients coming in demanding a certain treatment.

The doctor patient relationship is marked by asymmetry. The doctor has knowledge that the patient lacks and the possible treatment avenues. The patient has knowledge about their symptoms and social history. The patient also has their own power of keeping the doctor informed of new developments, to follow the agreed upon treatment plan, to seek a second opinion, and to withdraw altogether and seek help elsewhere.[14] Therefore, it is important that the patient is empowered to be involved in their care. There has been a recent shift of patients being more involved in their care since 2014 and

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more programs are teaching shared decision making. By implementing shared decision making, it is possible to improve agency and improve clinical outcomes. Achieving this is done by transitioning the doctor patient relationship from one built on reliance to one built on trust.[14]

Staying mindful of beneficence and non-maleficence is crucial for the appropriate delivery of care. Moreover, as doctors delve into the marketing and promotion aspects of social media, they must be cognizant of privacy concerns such as posting clinical photos of patients or any type of identifier that may be legally justified but it may not be ethically justified. The power of a social media influencer can be objectively measured and can be incredibly powerful. The lure of being promoted by an influencer or even becoming an influencer can lead to questionable photo decisions. Is posting patient clinical photos or radiographs free of identifiers still okay to do? Does the patient fully understand the implications of posting photos? Is altering photos to make the work done appear better an okay action?

There are many downstream effects of posting clinical work. Posting of images and work requires thorough diligence to remove misinformation. Poorly explained or poor quality of work can be posted that can lead either a patient to think that that's the correct treatment, or an inexperienced clinician may gravitate toward that treatment due to the presentation in an attempt at mimicking it, believing it's the correct clinical action.[11] It also changes the expectations of dental care: results must be perfect, the process has no issues, the motivation is superficial, and treatment will be inexpensive.

This can create a power imbalance, where there is unfair pressure on the doctor and unfair power of the patient, when combined this can undermine the doctor patient relationship. Social media can often be considered a teaching tool, but it is unfiltered, and therefore, it requires the individual receiving the information to be that filter. The profession currently relies on each doctor to self-regulate, an action that those viewing social media may not do. All of these social media actions undermine the profession as a whole.

The boundaries of professionalism may also be pushed through social media interactions. Doctors must know when to engage with patients outside of the clinical settings and should be wary of online discussions as the doctor is not only representing themselves but also the profession. There are countries that already regulate the images and marketing done by dentists, such as the United Kingdom and Brazil. Brazil set that standard in their marketing that "the ignorance of norms and laws is not admissible as a defense argument, all professionals in Dentistry must study them and understand them."[12] Furthermore, the reaction to Brazil's dental social media experience led the researcher to write, "Dentistry seems to have abandoned its role as a healthcare profession. What we have seen in social networks is not healthcare promotion." Social media is not what is degrading the profession, but rather it's how dentists are utilizing social media that is degrading the profession.

But the upsides of social media within the profession must not be forgotten. Social media can provide improved autonomy, psychosocial support, information, patient empowerment,

But the upsides of social media within the profession must not be forgotten. Social media can provide improved autonomy, psychosocial support, information, patient empowerment, ease of access, speed of access, branding and marketing help, and connectedness. Embracing social media can pave the way for dentists and patients to better connect.

ease of access, speed of access, branding and marketing help, and connectedness. Embracing social media can pave the way for dentists and patients to better connect. Dentistry can be an isolating profession as many dentists practice in solo practices. Social media can create a sense of belonging for doctors. A communication platform is available 24 hours a day, accessible from common devices. Doctors can share ideas, struggles, and successes in a way that wasn't possible before so-

cial media. And these platforms can help dentists elevate not only their clinical abilities but their social abilities as well, by improving their interactions with patients. Dentists can find deeper roots within the community through social media, and this is incredibly important as society's perception of dentistry shifts.

This is a call to all of dentistry. We need to embrace social media. Dentists need to self-regulate how social media affects the profession–deciding what is appropriate to display and what is not. There are ethical considerations to our use of social media and these considerations present both upsides and downsides.

Social media should be utilized as a tool to promote oral health education, strengthen the profession, and strengthen our ties with the community and each other.

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A Brief History of Communication

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Communication is a fundamentally human endeavor and humans have communicated with each other in some form or fashion since time immemorial. Communication is, and always has been, the singular most significant part of human expression and interaction. Prior to the 15th century, essentially all communication was verbal with very little written expression. The fundamental problem with the oral tradition of communication is that memories fail and stories are lost. The emergence of the written tradition allowed us to preserve our past and share it with successive generations. The iterative development of written communication had a humble beginning. The Sumerian cuneiform is the earliest known documentation of written language. Historically, symbolic images were used to communicate, and this form of visual communication could express entire concepts with a single symbol.

The first non-glyph writing systems that did not incorporate pictorial signs was the phonemic system. As a function of time, the Phoenician system of written communication began to spread along the Mediterranean city states and each literate culture made modifications to the development of what would become the alphabet. In Greece, the script was modified to add the vowels, giving rise to the first true alphabet. The Greeks took letters

which did not represent sounds that existed in Greek and changed them to represent the vowels. This marks the creation of a "true" alphabet, with both vowels and consonants as explicit symbols in a single script.

It is widely known that the Chinese were the first to invent paper and paper making. And somewhere between 1040 and 1050, the Chinese developed the first movable type for printing paper books.

Over the next several hundred years, there would be advancements in both the quality and the quantity of paper as well as substantive improvements in movable type—but it was not until the 1400s that mass printing would experience a revolution. The invention of the Gutenberg press created a practical system for printing books that was both efficient and economical and the printing revolution had begun. Printed materials became the rage and led to increasingly sophisticated innovations to create, duplicate, and circulate the printed word. Circulating the information remained the challenge of their time.

Communication across greater distances required ingenuity. From smoke signals to semaphore, efforts were made to circulate information more broadly and more efficiently. In the 18th century, the public

postal system was established and Benjamin Franklin's approach to the United States Postal system made the delivery of mail more productive and more predictable.

By the 19th century, the world was ready to move beyond the mere printed word. In 1822, the world's first photographic image was captured at a new era of communication began. By 1888, American inventor George Eastman had revolutionized photography with his development and deployment of the Kodak roll film camera. Now that we had a way to print and capture photographic images, we could turn our attention to distribution of this information to mass outlets.

This effort would be informed by the invention of Samuel Morse which produced a single induced indentations that correlated with numbers, the alphabet, and other special characters. Morse had, in fact, revolutionized circulation of information utilizing Morse Code which was for all practical purposes "electric semaphore". After the telegraph was invented, oth-

ers continued to experiment with electromagnets and their potential in telecommunication devices. The popularity of the telegraph was at its zenith when the development of the so-called "speaking telegraph" otherwise known as the telephone arrived.

By the time the American College of Dentists was founded in 1920, radio had become a great source of information and communication. Now, musical entertainment, sports, weather, and news could be delivered instantaneously to the population. This would be followed by the development and universal desirability of the television. The television was simply the union of radio technology and the movies.

For most of the latter half of the 20th century, there were continuous improvements in communication platforms. Advancements in the phone industry collided with the computer enhancements and the emergence of the internet. The personal computer that was introduced in the 1970s became an essential household tool particularly with regard to communication and information. In the long and laudable history of communication, personal computers and email were among the most important innovations. The internet gave rise to social media platforms on which people around the world could connect and share ideas, personal updates, and their views in nearly real time. It has been said that the internet is the most powerful and versatile form of communication we've seen to date.

The 21st century may well be remembered as the age of commu-

Cuneiform to Emojis: A Brief History of Communication

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> *There is an old adage that the primary difference between medicine and poison—is intent, and I often reflect on this adage when I consider the concept of communication. What, then, is the difference between information and communication? I think it, too, is intent. The art of communication requires a willingness to listen not with the intent to answer but rather with the intent to hear. We are listening.*

nication, heralding the launch of the information age and marking the economic transition from industry to information technology. As communication got faster, the users became increasingly impatient and intolerant with slower Internet speeds and demanded more efficiency. This led to the predictable build of more advanced systems as well as enhanced efficiency of existing platforms.

Communication in the time of Covid has been immeasurably aided by videoconferencing software that is uniformly available. The continued development of apps made possible mobile friendly and personal communication in ways that were previously unimaginable. We are living in the age of widespread communication and information. With a near constant barrage of information, the challenge for most individuals is how to use the information in a way that informs our collective conscience. In the end communication requires that the communicating parties share an area of communicative commonality.

What began thousands of years ago as logo symbolic communica-

tions otherwise known as cuneiform communications has found a new audience in the use of an emojis in contemporary digital parlance. In the recent past, I've received entire email communications that were a litany of emojis and miraculously—I fully understood the content. I have also dutifully learned the truncated lexicon of texting, but I do not have it in my DNA to intentionally misspell words and what is missing from "LOL" is the laughter.

There is an old adage that the primary difference between medicine and poison—is intent, and I often reflect on this adage when I consider the concept of communication. What, then, is the difference between information and communication? I think it, too, is intent. The art of communication requires a willingness to listen not with the

intent to answer but rather with the intent to hear. We as are listening.

Although we have often published on technology and communications, this year marks the tenth anniversary of a special issue devoted to the topic. Dr. Steven Chan's article, "Being Professional in a Social Media World," is reprinted in its entirety, and the issue itself is posted in the *JACD* Archive, located at the link below. We hope you enjoy the selections and this special edition of the of the Journal, now in its 89th year of continuous publication.

To read the 2012 issue of the *JACD* on social media, [click here](#).

To view a lively panel discussion on social media in dentistry, visit our YouTube channel at https://youtu.be/aIOZOk0nTKY.

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Being Professional in the Social Media World

This article was originally published in the 2012 *Journal of the American College of Dentist* Volume 79, Issue 4.

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Dr. Chan is a past president of the ACD and was a member of the original task force assigned to study digital communication and social media in 2012.

Abstract

What is at stake for dentists in the world of social media? Because it is unrealistic to completely avoid the new network, dentists should master some of these skills: risk management, crises management, and reputation management, as well as understanding that the playing field is not even. Guidelines for professional use of media are presented, along with some suggestions for effective participation.

Our editor shared this story with me. An Austrian philosopher, Ludwig Wittgenstein, had been pestering the economist John Maynard Keynes about getting a teaching position at Cambridge. In a particularly pushy letter in 1929, Wittgenstein wrote: "Please don't answer this letter unless you can write a short and kind answer… So if you can't give me a kind answer in three lines, no answer will please me best." Social media is a powerful weapon, but we cannot make it only cut the way we want.

Managing Digital Communication

Since it is unreasonable to expect that dentists will be able to completely sidestep the effects of social media, they should be prepared to actively engage in managing risk, crises, and their reputations.

Risk Management

The object of risk management is to anticipate harmful behaviors and unanticipated consequences of business processes. The purpose of risk management is to institute practices to avoid and mitigate complaints that impair reputation in the marketplace, complaints to regulatory agencies, or disputes leading to litigation.

Risk management principles are gathered from case history experiences. As risk managers gather a portfolio of experiences, they see patterns of human behavior. Some observers believe that experiences in social media that negatively impact a dentist are only early manifestations in the life cycle. There are too few cases at this time to see patterns. One must gain a retrospective experience with large enough sam-

Being Professional in the Social Media World

Steven D. Chan, DDS, FACD

plings in order to identify patterns for risk management involving social media.

One of the sidebars at the end of this article outlines some of the principles of good risk management.

In human behavior where anger is aroused, there is an excitation or agitation phase characterized by a strong desire to express the experience. Then there is the infectious phase or the need to share the experience with others. Eventually, there is fatigue and finally the behavior is extinguished. The incident is then forgotten and we go on with our lives.

Entries on the Internet, however, never go away. The risk of social media is the reemergence of the entry, thereby agitating and inflaming old wounds and renewing angst.

Defamation, Libel, and Slander

Generally speaking, defamation is the issuance of a false statement about another person that causes that person to suffer harm. Legal definitions vary in statute from state to state. For example, in California, slander includes "imputations that a person is generally unqualified to perform his or her job or tending to lessen the profits of someone's profession, trade, or business."

Slander is defined as oral defamation, in which someone tells one or more persons an untruth about another, which untruth will harm the reputation of the person defamed.

Slander is a civil wrong (tort) and can be the basis for a lawsuit.

Libel involves the making of defamatory statements in a printed or fixed medium, such as a magazine or newspaper.

Damages are typically to the reputation of the plaintiff, but depending upon the laws of the jurisdiction, it may be enough to establish mental anguish. Damages for slander may be limited to actual (special) damages unless there is malicious intent, since such damages are usually difficult to specify and harder to prove.

Some statements such as an untrue accusation of having committed a crime, having a loathsome disease, or being unable to perform one's occupation are treated as slander per se, since the harm and malice are obvious and therefore usually result in general and even punitive damage recovery by the person harmed.

Crisis Management

Where risk management attempts to anticipate events, crisis management institutes measures for damage control. The characteristics of a crisis are: surprise, insufficient information, intense escalating flow of events, loss of control, scrutiny from the outside, siege mentality, panic, and short-term focus. Key principles in handling crisis:

- Control information

- Isolate a crisis team from daily business

- Define the real problem short-term and long-term

- Recognize the value of a short-term sacrifice

- Resist the combative instinct

Managing One's Professional Reputation

The Importance of Reputation
Benjamin Franklin reminds us that "It takes many good deeds to build a good reputation, and only one bad one to lose it."

In building one's career as a dentist, there are many things we hope to achieve. We work at performing our craft well. We work at making a living from our craft. We work to build our reputation from our craft. What is reputation?

For many, building a reputation means accruing a favorable array of attributes and experiences among members in a community. The drivers are egoistic and economic. Reputation is considered a component of identity or image. It is a series of beliefs about a person or entity based on the opinions of others. To be more precise, reputation transmission is a communication of an evaluation without knowledge of the specifications of the evaluator.

In developing a reputation, there is a life cycle. As any new entrant to a community, one is unknown to the members of that community. The title of "Doctor" may bring some immediacy of respect due

The greatest reputation threat online to companies is negative media coverage (84% of surveyed Americans say so).

The next two greatest threats are customer complaints in the media or grievance sites online (71%) and negative word of mouth (54%). This negative word of mouth could be not only from dissatisfied customers but from employees as well.

to the elevated status afforded in society. However, as an unknown to that community, you now have to prove yourself.

At first, reputation begins with a declaration to the marketplace of an image. It is a self-description of how one wishes to be identified to the consumer. In the early stages, the image is most likely transmitted via traditional advertising vehicles such as ads in various print and electronic media. In these early stages, there are few experiences among members of a target community that have personal experience with the practitioner.

One's reputation is also revealed by behavior. Does one's actions support its claims? Does one own up to an imperfection or flaw in the product or service? A reputation is revealed by action in the face of adverse events. When Johnson and Johnson was faced with the crisis of cyanide laced Tylenol in 1982 and 1986, it immediately chose to pull all product off the shelf. Thirty-one million bottles were removed at an estimated value of $100 million. Tylenol was a core product for Johnson & Johnson. The crisis enabled the company to reposition its image when it introduced tamper-resistant packaging to the market place.

As a community's experience with the practitioner matures, the transmission of one's image expands from testimonials. Eighty-seven percent of U.S. consumers consulted friends or families and professional or online reviews when researching a product or service.

Media Threats to Reputation

The greatest reputation threat online to companies is negative media coverage (84% of surveyed Americans say so).

The next two greatest threats are customer complaints in the media or grievance sites online (71%) and negative word of mouth (54%). This negative word of mouth could be not only from dissatisfied customers but from employees as well.

Historically, disputes between dentists and patients have involved only those two parties. Social media is changing this interaction.

Social media brings an audience to a broader conversation.

There are emerging hazards of practitioners engaging social media. At the core of the dark side, social network exposes the vulnerability and fragility of reputation. It is the fear of damaging or impairing one's reputation in the market place.

The social phenomena of "word of mouth" or informal transmission of a person's experience with a service provider to others is not a new concept.

The conveyor of information is described in sociological terms as a "vector"—transmitting information from one social cluster to another. Social media broadcasts the transmission far beyond the social cluster of origin. Social media propagates both positive as well as negative messages of a professional reputation. Social media now brings a new audience unfamiliar to the original source.

In a well-known experiment, as messages are passed from person to person, the initial message becomes altered, embellished, and exaggerated with each recitation of the message. The downstream message becomes much different than the original incident.

When the exchange in social media becomes adversarial, another disadvantage is the anonymity of the attacker. Attackers do not have to identify themselves. They can adopt fictitious names and personas. It takes time for the recipient of the attack to sift through the entries to determine if the attackers are patients. Then recipients must petition to the site to remove the

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attack. Meanwhile, the attack has been made, the damage is done, and no retraction of the falsehood is entered.

The economic damage to a practice is difficult to quantify. Each point of contact with that knowledge now potentially translates to patients deciding not to choose the dentist to service the patient's needs. The net result is "income not realized" due to an unverified rumor.

Ego is a significant factor affecting a professional's decision to defend that reputation in the market. In defending one's good name in the marketplace, ego can affect how far one commits personal economic resources. Recovery may take time and therefore the practitioner may have income not realized from the damage. "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently." That is the advice from Warren Buffett.

The Playing Field

There is an uneven playing field from the perspective of the practitioner. In disputes referred to local peer review committees, a panel of uninvolved, impartial dentists objectively reviews the facts of the case. They render an opinion based on those facts regarding whether the performance meets the "standard of care."

Complaints to a state dental board are sent to consultant dentists to review the records. Typically, the

Social media is challenging traditional paradigms of dentist-patient relationships. Traditionally, dentist-patient communication has been a private conversation. Social media now inserts an audience into those conversations.

investigation looks for egregious outcomes and gross negligence. While there are state-to-state differences in adjudicating claims, these reviews typically undergo a series of administrative processes before determining an outcome. Only if the findings are decided against the dentist do the outcomes become public.

In complaints to third-party carriers, review is performed by consultant dentists. Typically, review of the records and clinical review will lead the insurance company to decide whether the treatment is consistent with a standard of care. The outcomes are shared with the patient, the dentist, and the third-party carrier. Typically, there is not a public disclosure.

In social media, a patient can make claims, perhaps unsubstantiated, unverified, and not technically reviewed. The practitioner is enjoined from the conversation largely due to the specter of violating patient privacy. The practitioner must defend a negative in the court of public opinion but is gagged when doing so.

A difficult dilemma for the professional is the norm of granting prima facie credibility to patients'

personal remarks while grounding professional responses in objective evidence.

Professional Conduct

Historically, professional conduct was monitored wholly by the individual professional bodies. The codes established by the professions were sufficient. These are self-imposed. In order to join, the candidate agreed to abide by the same standards that hold for all colleagues.

A code of ethics marks the moral boundaries within which professionals in that body agree to be ethically bound. In certain areas, where the public interest is considered to be heavily engaged, legislation is imposed on the professional body. Either legislation replaces professional self-regulation with statutory legislation or a statutory body is given authority to supervise the professional association.

Many principles from the A*DA Code of Conduct* can be implied but are not specifically cited in the context of social media. In the current *ADA Code of Ethics*, there is no language pertaining specifically to the overall subject of social media, as there is in the code of the American Medical Association.

Social media is challenging traditional paradigms of dentist-patient relationships. Traditionally, dentist-patient communication has been a private conversation. Social media now inserts an audience into those conversations.

Social media is creating conflict in traditional dentist-patient communications. Social scientists study the position and role of the professional in the dynamics of that conversation. In this paradigm, there is a "social distance" or separation from the professional to the patient. Social media encourages a leveling of the status among members of virtual communities.

Sharing a bad outcome through word of mouth has always existed. It was often self-limiting through fatigue or merely limited to the contact of the offended party. In social media, parties unknown to the offended party and the dentist now share this complaint. The "posted" complaint never goes away. If there is a resolution between parties, it takes a conscious effort to remove the complaint or publicize the resolution.

Guides to Professional Conduct

The following are references to existing standards that serve as useful guides to professional conduct under the heightened scrutiny of social media.

Federal Regulatory Overlay

The HIPAA Privacy Rule establishes national standards to protect individuals' medical records and other personal health information.

It applies to health plans, health care clearinghouses, and those health care providers that conduct certain healthcare transactions electronically.

The rule requires appropriate safeguards to protect the privacy of personal health information and sets limits and conditions on the uses and disclosures that may be made of such information without patient authorization. The rule also gives patients' rights over their health information, including rights to examine and obtain a copy of their health records, and to request corrections.

The Privacy Rule is located in 45 CFR Part 160 and Subparts A and E of Part 164.

State Regulatory Overlay

Business and professions regulatory statutes governing and protecting privacy of patients and clients vary from state to state in language and content.

California Rules of Professional Conduct (CRPC) 3-100: "A member shall not reveal information protected from disclosure by Business and Professions Code section 6068, subdivision (e)(1) without the informed consent of the client."

American College— Ethical Handbook

The American College of Dentist's *Ethical Handbook* contains standards on advertising, confidentiality, disclosure and misrepresentation. These continue to be applicable as guiding principles for professional conduct in social media. [See page 22-23.]

On the Edge

It is probably an illusion to believe that one might opt out of the social media world. Under the circumstances, it is prudent for professionals to assume that they must act professionally at all times.

The important questions then become those of being a professional participant. A few useful standards for all online communication include:

- Avoidance of overtly or obtusely self-promoting material

- Objective explanations and advice to minimize selective addition or omissions of facts leading the reader to biased conclusions

- Suppression of personal opinions or criticisms of treatment by others

- Full disclosure of risk

- Grounding remarks in evidence

Clean Marketing

Any marketing strategy should be well constructed. Variables such as start-up costs, return on investment, maintenance costs including personnel and personal time to monitor should be considered. Social media is only one tool in that strategy.

Marketing strategy identifies a known target audience and tailors the message which differentiates the practice. Particular attention should define the image you wish to portray to the market.

If engaging a vendor to develop this campaign, there should be a frank discussion of risks and benefits. A "what-if" scenario of an eventual

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negative review should be a part of this tactical discussion. Here are some ideas to think about:

- Flood your site with good reviews.

- Ask your patients to write good experiences. The object is to dilute or subordinate posted negative reviews.

- Avoid fake user reviews. In some jurisdictions, fake reviews, whether written by the dentist, a staff member, or a third-party marketer, can lead to possible fines, jail time, and loss of license

- The Federal Trade Commission monitors truth-in-advertising, including online review sites. Section 16 CRF Part 255 defines "Guides concerning the use of Endorsements and Testimonials in Advertising." The social networks are governed by federal interstate commerce laws.

- Sites such as Yelp have algorithms that identify artificial entries of positive reviews. They are alert to ploys that "game the system."

- False and misleading dental advertising is under the jurisdiction of state dental boards.

- Flood your site with community news of what you did. Develop virtual social capital by counteracting negative images with good things you do in a community.

- Go to the host site and inquire about the process to remove false statements.

- Deflect an accusation with a positive spin. From "Dr. X does horrible work" to "Dr. X gives advice on how to recognize substandard work."

- Hire services of Internet reputation companies such as Reputation.com or Demand Force, which propose to manage reputations online.

The Groupon Gambit

This variation of a social media networking site does not fit the model of abuse seen in the prior case histories. The business model of a social coupon network is based on the seller offering a discount or other incentive to purchase their wares. The network collects a fee from the seller to gain access to the pool. For every "hit" from the network, the dentist remits a percentage of that fee to the network.

The Groupon business model brings several principles for the marketing practice. The social couponing company brings customer acquisition. When a new business enters a market, it must expend resources to capture consumers. The social coupon company brings a pool of customers.

The social couponing company brings communication channels. It delivers messaging to the pool of customers that a subscriber company would have to expend resources to continuously connect with those new customers.

The object of marketing is to attract consumers to a product or service offered by a company. Consumers vary in needs and what attracts them to a product or service. A company should design its marketing to the profile of consumer it wishes to attract.

Groupon consumers are considered to be "price sensitive." They are more likely driven to seek and consume episodically. They tend to shop from place to place—looking for the next bargain. In Malcolm Gladwell's *The Tipping Point*, the profile is the innovator. The innovator wants to be the first to try the new thing within the social system.

Their drive is to be the first to share the experience with others.

The resources used to attract this profile of patients have to be continuously renewed. This consumer is less likely to be sustainable. The hypothesis—that once the vendor's wares are sampled, the consumer is likely to be a repeat customer—has not been demonstrated. The risk of engaging this profile of customer is the episodic behavior.

Contrast the "brand loyal" consumers who tend to stick with that vendor or product once they make a decision to consume a service (or product). They are more likely to continuously reaffirm the brand to others in the marketplace.

The ADA Council on Ethics, Bylaws and Judicial Affairs believes that this business model is fee-splitting and therefore an unethical practice. It issued an Advisory Opinion at its March 2012 meeting [See page 22].

Meanwhile, from the current vantage point in the life cycle, one can only see the immediate threats—the negative excitation, infection, expansion, adop reviews, the attacks. One does not yet have the benefit of perspective. As with many social phenomena, the manifestations vacillate to extremes. All social phenomena are best seen with clarity in hindsight. There are times to take a deep breath and be patient.

This same ethical concern is expressed in associations such as the American Medical Association and the American Bar Association.

Epilogue

Perhaps we are experiencing social media in just one phase of its life cycle. It is much like every other social phenomenon.

All social phenomena undergo life cycles. Social phenomenon experiences the following stages in a life cycle: discovery, curiosity, novelty, experimentation saturation, fatigue, and then they become extinguished.

The growth in the adoption of a social phenomenon is typically seen as an "S" curve. When a social phenomenon is introduced to society, there is a low rate of adoption in the novelty phase. In the growth or exponential phase, there is an explosive rate of adoption. Finally the adoption rate plateaus then declines precipitously. There is a belief that we are experiencing the exponential phase of the social media phenomenon.

While we are in this phase of the life cycle, we do not have the benefit of seeing if the challenges are transient or an integral fabric of the phenomenon. If we adopt media, we should consciously acknowledge both the benefits and trade offs of the phenomenon.

Some evidence of the evolving nature of social media is the push back seen in the marketplace against wholesale, unqualified adoption.

There have been class action lawsuits challenging alleged unfair business practices of online review companies.

While the suits have not prevailed, and challenges have favored the online companies under the Communications Decency Act, online companies have adjusted their policies responding to resistance in the market.

In general, as social phenomena become adopted by the greater whole of a population, the phenomenon adjusts to market forces. It undergoes corrections to accommodate that greater part of the market.

Meanwhile, from the current vantage point in the life cycle, one can only see the immediate threats—the negative excitation, infection, expansion, adop reviews, the attacks. One does not yet have the benefit of perspective. As with many social phenomena, the manifestations vacillate to extremes. All social phenomena are best seen with clarity in hindsight. There are times to take a deep breath and be patient.

Summary

In the face of some emerging adversarial elements of social media, a dentist is still held to a higher level of conduct by society. He or she should be a profes- sional. There is an unwritten code that the dentist should be unemotionally attached in delivering or receiving the message.

However, a dentist does not operate in society in isolation. In today's marketplace, he or she could choose to:

- Be optimistic. The marketplace will self correct.

- Adapt as the phenomena changes.

- Be patient. Wait to see what early adopters do. Observe the mistakes, successes and failures, and what survives in the marketplace.

- Not participate. Recognize that the niche you wish to serve does not use social media as its decision-making determinant.

Social media is a social phenomenon. It is continuously evolving. Social scientists and business scholars who study it are still gathering experiences. New legal challenges and new precedents emerge. The phenomenon is organic. It continuously adapts to market forces. The research presented in this article reflects only a snapshot in time.

Steven D. Chan, DDS, FACD

ADA Advisory Opinion on Social Couponing

4.E.1.   Split Fees in Advertising and Marketing Services. The prohibition against a dentist's accepting or tendering rebates or split fees applies to business dealings between dentists and any third party, not just other dentists. Thus, a dentist who pays for advertising or marketing services by sharing a specified portion of the professional fees collected from prospective or actual patients with the vendor providing the advertising or marketing services is engaged in fee splitting.

The prohibition against fee splitting is also applicable to the marketing of dental treatments or procedures via "social coupons" if the business arrangement between the dentist and the concern providing the marketing services for that treatment or those procedures allows the issuing company to collect the fee from the prospective patient, retain a defined percentage or portion of the revenue collected as payment for the coupon marketing service provided to the dentist and remit to the dentist the remainder of the amount collected.

American College of Dentists Ethics Handbook

Advertising

While the practice of advertising is considered acceptable by most professional organizations, advertising, if used, must never be false or misleading. When properly done, advertising may help people better understand the dental care available to them and how to obtain that care.

Advertising by a dentist must not:

- Misrepresent fact;

- Mislead or deceive by partial disclosure of relative facts;

- Create false or unjustified expectations of favorable results;

- Imply unusual circumstances;

- Misrepresent fees;

- Imply or guarantee atypical results;

- Represent or imply a unique or general superiority over other practitioners regarding the quality of dental services when the public does not have the ability to reasonably verify such claims.

Dentists should seek guidance on advertising from their professional organizations. The best advertising is always word-of-mouth recommendations by satisfied patients.

Confidentiality

The accepted standard is that every fact revealed to the dentist by a patient is, in principle, subject to the requirement of confidentiality, so that nothing may be revealed to anyone else without the patient's permission.

This standard has several accepted exceptions. It is assumed that other health professionals may be told the facts they need to know about a patient to provide effective care. It is also assumed that relevant ancillary personnel, such as record keepers, will need to know some of the facts revealed to them by the dentist to perform their job.

Further, relevant facts may be communicated to students and other appropriate health care professionals for educational purposes. If maintaining confidentiality places others at risk, then the obligation to breach confidentiality increases according to the severity of the risk and the probability of its occurrence.

Disclosure and Misrepresentation

Dentists should accurately represent themselves to the public and their peers. The dentist has an obligation to represent professional qualifications accurately without overstatement of fact or implying credentials that do not exist. A dentist has an obligation to avoid shaping the conclusions or perceptions of patients or other professionals by withholding or altering information that is needed for accurate assessment.

The dentist has an obligation to disclose commercial relationships with companies when recommending products of those companies. The dentist has an obligation to disclose commercial relationships in professional presentations or publications where the dentist promotes or features products of those companies. The dentist may ethically have ties to commercial entities, but the dentist should fully disclose such relationships to patients and professional colleagues when nondisclosure would lead to differing conclusions, perceptions, or misrepresentation.

Incomplete disclosure and misrepresentation may also adversely affect dental research and journalism. In the course of evaluating research and dental literature, dentists are cautioned that such problems may exist and can lead to incorrect assumptions and conclusions. If such incorrect assumptions and conclusions are adopted, less than proper care may result. It is important that dentists critically evaluate dental research, literature, and advertising claims.

Principles of Risk Management

- Identify, characterize, and assess threats.

- Assess the vulnerability of critical assets to specific threats.

- Determine the risk (i.e., the expected likelihood and consequences of specific types of attacks on specific assets).

- Identify ways to reduce those risks.

- Prioritize risk reduction measures based on a strategy.

Immediate steps:

- Respond to all negative reviews promptly.

- Don't be defensive.

- Take the discussion offline.

- Give them back their money.

- Negotiate to remove the review. Go to the host site to inquire how to remove a false statement. It will likely take time. Meanwhile, the review stays in full view of a continuously renewing audience.

- Apologize if necessary ("I'm sorry you had a bad experience").

- Turn a positive into a negative.

- Potential new consumers will see how you solve a dispute.

- Be a real person, empathize, don't be contrived, don't be high-handed, authoritarian.

- Risk prevention.

- Monitor via Google alerts: Go to www.google.com/alerts, and fill in your name and a new alert with your practice name. This will give you quick notice, via e-mail, so you can visit the offending review and decide what to do about it.

- Ask patients to create real, positive reviews.

- Ask patients to go on Yelp or Facebook and write a positive review about you. A case study. A testimonial.

- Be careful of contriving positive reviews or "gaming the system." These sites have algorithms that identify changes in volume, velocity (or increased rate), contemporary entries.

- Establish an office policy on staff engagement on social media and confidentiality agreements on the subject.
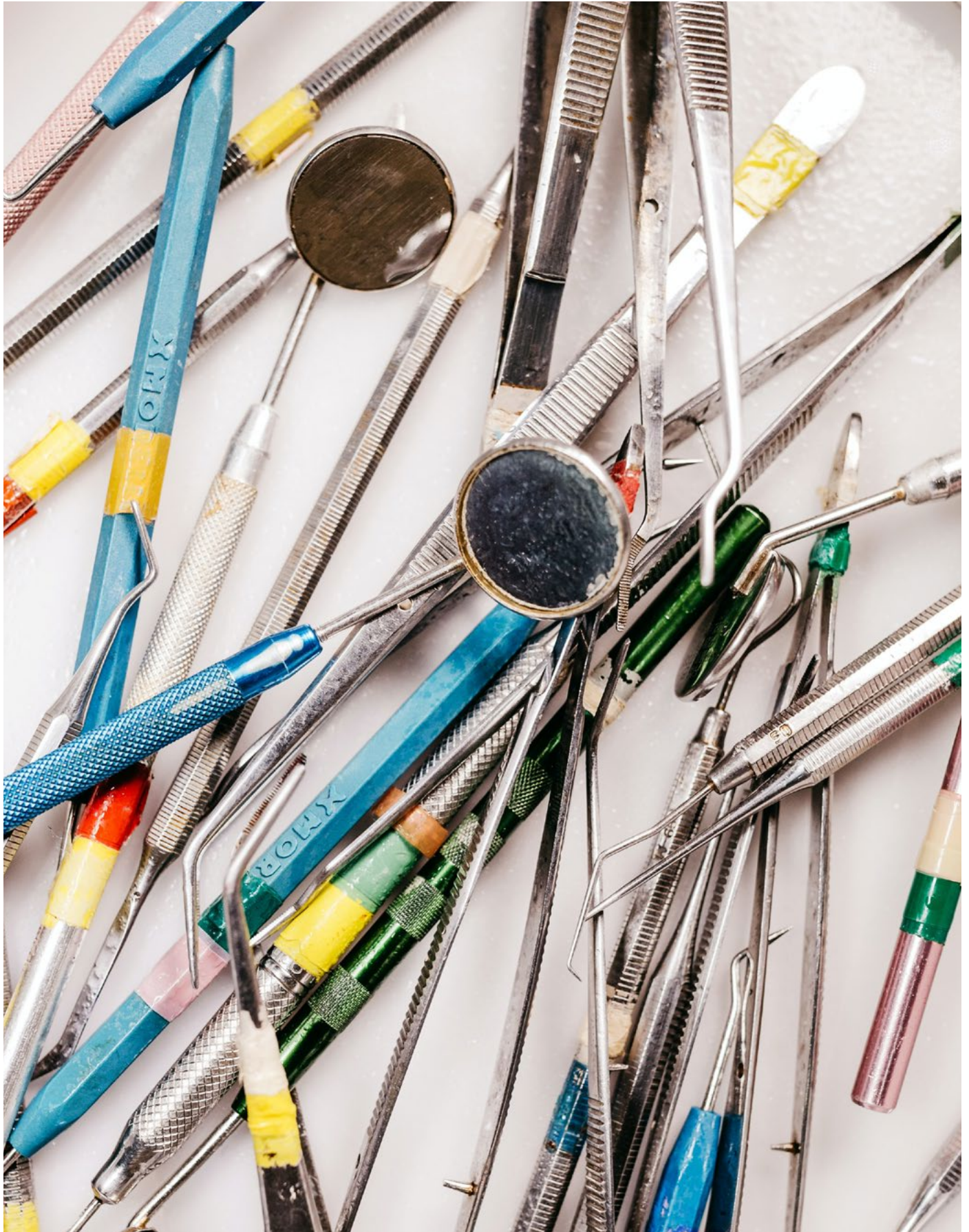
Dentistry on Social Media:

An Ethical Litmus Test

Daniel Kovacik, DMD, MPH, FACD

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The presence of social media in contemporary society is undeniable and growing. In January of 2021, over 4.2 billion people in the world were active on social media.[1] Healthcare information is ubiquitous online and a majority of active users believe that social media has an impact on their daily life in regard to access to information and ease of communication.[2] Today's healthcare professionals are also 'going digital' and utilize social media in various professional and personal ways. Social media can be a powerful tool for dentists to network with other professionals, keep track of the latest trends and research, and for business marketing. However, activities online should conform to the same ethical standards that govern the profession. Poor use of social media can present threats to the ethical treatment of patients, and the public's trust and perception of dentistry. Yet social media networks have proven difficult to regulate and quickly become a potent mechanism for negligent or false information.[3] Furthermore, even basic perceptions of right and wrong online conduct among physicians and dentists are mixed.

Dentistry on Social Media: An Ethical Litmus Test

Daniel Kovacik, DMD, MPH, FACD

Surveys of medical and dental students show a spectrum of beliefs regarding the ethical implications of online activities.[4] The exploding growth of dental content across the various social media platforms underscores the need for a discussion of how to use social media ethically. The American Dental Association's *Principles of Ethics and Code of Professional Conduct* (ADA Code) is a logical starting point. The five fundamental principles of the ADA Code are patient autonomy, beneficence, nonmaleficence, justice and veracity.[5] The following paragraphs examine the ethical crossroads of dentists, patients, and social media through the lens of these principles.

Patient Autonomy

Social media can be a valuable tool for patient autonomy. The public can easily seek information about oral health and dentists in their community. A quick search online can lead a patient to oral health advocacy groups or public health institutions. Tangible benefits to patients seeking support online for their health problems have been documented.[6] A patient also has the right to allow or refuse to have their clinical photographs used in social media posts and other online marketing platforms.

A patient's rights to self-determination and confidentiality are not just ethical principles, they are protected by federal law under the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Using images of a patient without proper informed consent is a clear violation of the law. Moreover, a consenting patient has the right to request their images be removed from any marketing if there's a change of heart. Is it truly possible to remove content once it has been posted on a social media network? Those images could have been saved and shared by other people on the social media site with little recourse for the patient.

Beneficence and Nonmaleficence

The principle of beneficence charges the dentist to 'do good' in service to the patient and the public-at-large. Correspondingly, nonmaleficence is the obligation of dentists to 'do no harm.' It's easy to see how online networks can be used 'for good' by healthcare providers. Social media is an efficient tool for health education and promotion. With little effort, an oral health advocacy initiative can reach large groups of people to shape perceptions and behaviors. During disasters and public health emergencies, social media has been used to monitor quickly evolving situations, provide greater agility, and enhance preparedness.[7] Dental content on social

media is also used for clinical discussions and marketing. Some of it includes patient images and information, and potential harm to patients may or may not be obvious. Dentists often use images of patients for a clinical discussion with peers. An example of this includes clinical vignettes where a dentist discusses a case or technique with peers and includes clinical photographs. Marketing can include images, testimonials of patients, techniques, and clinical outcomes intended to drive social media traffic to the provider or dental practice. While the intent may not be unethical, harm to the patient can easily occur through the unintended exposure of protected information. One study showed that of 271 social media samples, almost one in five contained identifiable information.[7] Since patients tend to be from the same population a dental practice is marketing to, the potential exposure and harm is significant. As healthcare providers, dentists must closely scrutinize any content containing patient information that's published on social media.

Justice and Veracity

The ethical principle of justice obligates the dentist to deal with patients fairly, without prejudice, and to increase access to care for all. Veracity is the principle of truthfulness, integrity of the dentist-patient relationship, and avoiding deception. Social media gives

dentists the power to disseminate oral health information and access to care information to the public. However, dental marketing services often entice dentists by promising increased volume of high revenue procedures. Yet one rarely sees dental marketing for low revenue services like preventative care or simple restorative procedures. An examination of such social media marketing quickly raises some ethical issues. First, the Federal Trade Commission (FTC) has specific rules regulating how patient testimonials can be used. The FTC requires patient testimonials to accurately depict the service and avoid creating an unjustified expectation about results the dentist can achieve.[8] The advertiser must clearly communicate that result in the testimonials can vary. But even in the presence of such disclaimers, the nature of such advertisements can be deceptive.[8] Second, is it possible to maintain integrity of the dentist-patient relationship in the realm of social media? It has been suggested that healthcare providers who interact with their patients on social media may be violating the boundary even if patients initiate the online communication.[9] There are certainly benefits to "humanizing" the healthcare provider to patients, but connections between dentists and patients on social media may expose either party to compromising non-dental information and create atypical channels of communication.[9]

Conclusion

The impact of social media in today's world is profound, continually evolving, and unavoidable. The ADA Code provides a framework of ethics for dentists to follow when engaging in social media use, but disruptive social phenomena, like the explosive growth of social media, test the boundaries of convention. While long established clinicians may not depend heavily on social media, the reality for new dentists is that an online presence is not optional. After all, new dentists today may not remember a time before social media, therefore turning to the established principles outlined in the ADA Code can help to navigate that journey.

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Social Media in Cosmetic Medicine

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Over the past decade, the use of social media has permeated nearly every domain of life. For the purposes of this discussion, the definition of social media is broad and refers to any web-based communication system, whereby a community is formed allowing relatively free expression and connection. Notable examples include Facebook, Twitter, Instagram, Tik Tok, Reddit, Snapchat and Youtube. In 2019, Facebook reported 290.49 million monthly active users in the United States. while Twitter reported 68 million. Pew Research statistics from 2021 show that 72% of individuals in the United States use at least one social media platform.[1-3] Overall, these communities include an enormous segment of the population, and therefore wield considerable influence over public life.

Healthcare has proven no exception to the growing trend of social media integration. While several medicine-specific websites are indeed thriving, such as PatientsLikeMe and RealSelf, a large volume of social media oriented towards medicine exists in non-specific forums. Cosmetic medicine in particular has seen an immense increase in presence on social media.[4] This may be due to cosmetic procedures naturally lending themselves to showmanship and spectacle by demonstration of transformation. The modes in which patients encounter and use social media related to cosmetic medicine are varied. These include evaluating potential providers, gathering information prior to consultation, providing or reading reviews of a procedure, seeking peer support, contributing to public health debates, and facilitating self-care.[5-9]

The link between social media and cosmetic surgery has been heavily investigated. A study in Saudi Arabia found that 48.5% of surveyed individuals undergoing cosmetic procedures reported being influenced by social media, with 51.4% of respondents following

In 2019, Facebook reported 290.49 million monthly active users in the United States. while Twitter reported 68 million.1,2 Pew Research statistics from 2021 show that 72% of individuals in the United States use at least one social media platform.3 Overall, these communities include an enormous segment of the population, and therefore wield considerable influence over public life.

accounts of plastic surgeons.[10] Another study in Saudi Arabia found that usage of social media within fifteen minutes of going to sleep and within fifteen minutes upon waking up was highly linked to the decision to undergo cosmetic surgery.[11] And yet another study in Saudi Arabia found 65.7% of respondents believed before-and-after images on social media contributed to cosmetic surgery trends and 54.1% believed wanting to look better in selfies was the reason for increased rates of cosmetic surgery.[12] An investigation conducted in Turkey by Abbas & Karadavut found that 88% of cosmetic surgery patients visited social media sites "regularly" or "always" compared to 44% of the control group.[13] 15% of respondents in a United States study by Ross et al. cited social media as the primary influence in seeking cosmetic dermatologic care, and it was found to be more influential in that capacity than other forms of media.[9] Another study in the United States noted that following a reality television character on Twitter was associated with pursuing cosmetic surgery, though no such association was found for Facebook.[14] And yet another United States study by Chen et al. found social media investment to have a positive association with

consideration of cosmetic surgery, and increased cosmetic surgery acceptance in users of Tinder and Snapchat.[15] Statistical comparison between increased frequency of internet searches on noninvasive cosmetic procedures and increased social media usership in the United States led Hopkins et al. to conclude online interest in cosmetic procedures was being partially driven my social media.[16] Additional studies in Italy, the United Kingdom and Australia have established links between cosmetic surgery uptake and general media exposure of which social media is a component.[17-20] This body of evidence suggests that social media exposure to cosmetic procedures is leading to increased demand and treatment acceptance, and just as social media is effectively borderless, it appears to be a rather global phenomenon.

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Though a less thorough investigation has been made into the link between social media and cosmetic dentistry than cosmetic procedures in general, similar trends are emerging. A study conducted by Sampson et al., which involved populations in both the United Kingdom and Brazil seeking ortho-

dontic treatment for overwhelmingly esthetic reasons, found that 83.7% of respondents agreed or strongly agreed that social media was useful in evaluating dental treatments and 58.1% indicated they would purchase something based of what they had seen on social media.[21] Parmar et al. noted that a majority of patients surveyed in the UK expressed before-and-after images being important when assessing potential providers.[22] A study in Saudi Arabia found a majority of patients seeking esthetic treatment had noticed a "Hollywood smile" on social media.[23] Barber et al. evaluated Twitter posts involving hypodontia and a main theme was found to be decision-making around treatment characterized by a desire for an appearance perceived as normal.[24] Salim et al. also conducted a Twitter investigation and noted extensive use to share patient experiences with teeth whitening and veneers.[4] While it is not clear whether their study population was esthetically motivated, Wexler at al. speculated based on their Twitter and Instagram observations that many users of direct-to-consumer orthodontic aligners engage in related social media.[25]

In reality, cosmetic dentistry is best conceptualized as a subgroup of

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cosmetic medicine, with its patient population holding similar motivations, its practitioners upholding similar standards, and its successes being defined by similar psychosocial outcomes. Considering the congruence between the two previously discussed bodies of literature, it is likely that the impacts of social media on cosmetic medicine and cosmetic dentistry are analogous. The mechanism by which social media increases uptake and interest in cosmetics is perhaps best expressed by the Tripartite Influence Model of body image.[18,26,27] This explanatory theory posits that parents, peers and media influence body image via internalization of societal ideals and social comparison. Social media, as the term implies, combines two of the three prongs – peers and media – in that it is a primary mode of social interaction and a primary mode of media consumption. By participating in social media, dental professionals are effectively influencing body image and its complex role in society, which raises a number of ethical considerations. Principlism is a normative approach to medical ethics originally articulated by Beauchamp & Childress, which forms the backbone of the American Dental Association *Code of Ethics* and provides a useful framework herein for discussion of these considerations. It affirms four principles as part of a common morality: respect for autonomy, veracity, beneficence/nonmaleficence, and justice.[28,29]

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Veracity and Normalizing Effects

Cosmetic dentistry inherently tends towards a more commercialized model of medicine and patient-provider interaction.[30,31] Procedures are often performed on a fee-for-service basis due to lack of insurance coverage, which is indeed contributory to this tendency. But also, due to the absence of pain, dysfunction or other somatic motivation to seek care, an alternative impetus is needed. This is typically low self-esteem or dissatisfaction with body image. A patient with a fractured tooth, temporomandibular joint pain, acute intraoral infection or partial edentulism visits a dentist seeking a return to baseline. Much of general dentistry is restorative or preventive, whereas cosmetic dentistry is transformative. The general dentistry patient is well aware of the goals of treatment, it is either their current or former state of health. Prospective cosmetic dentistry patients need to be made aware of the possibilities. This generates a need for advertising, for which many dentists are using social media.[4,22,32-36] It is worth noting that often these advertisements are not in the traditional format, but rather presentations of cases or educational posts about new products and techniques. In cases where the advertisement is merely an educational discussion of a service, veracity is a key consideration as these posts should be viewed as counteracting misinformation. Evidence suggests that information found on social media regarding cosmetic dentistry, and dentistry in general for that matter, suffers from inaccuracy and inadequacy. These shortcomings have been noted on the subjects of antibiotics, surgically assisted rapid palatal expansion, orthognathic surgery, dental trauma, whitening and implants.[37-43] This indicates a broad need for practitioners to not only be veracious, but vocal.

Case photos and discussions have a somewhat different set of concerns. When cosmetic dentists advertise on social media, the summative bolus has a normalizing effect. There is an establish-

ment of a beauty standard, which some argue is arbitrary, that is being put forth as an attainable ideal, and also the increased perception of such procedures as commonplace. It is important the prescribed normal be rooted in veracity, and the onus is on each dental provider to be cognizant of their social media account's individual contribution. Committing to veracity is a curious task however, when it is the committer who is defining the truth. Advertising with cases means putting one's work on display for public scrutiny. It is normal to want to showcase one's best work, which would indeed be prudent from a business perspective. However, when practitioners do so they are contributing to a collectively-defined normal with work that is not reflective of their normal outcomes, and the aggregate result is an unrealistic beauty standard. Cosmetic dentists should be wary of this when constructing their clinical photos for public consumption, as their "perfect shot" is ultimately internalized as realistic ideal. Because cosmetic dentistry, in keeping with its commercialization, is a competitive enterprise, avoiding the false standard requires a profession-wide commitment. Otherwise, those who moderate their advertising towards veracity will not generate online interest, and therefore not generate business, and ultimately become irrelevant.

While overtly false advertising is an obvious violation of veracity, there are subtle ways in which cosmetic dentistry advertising can be misleading. Social media thrives on its brevity, and even when there is not a strict character limit placed on posts, users are typically exposed to mere snapshots or snippets. With this brevity comes a detrimental loss of context. Before-and-after photographs are lacking something of great importance – the entire process. Even when context is attempted, it is challenging to ensure universal readability within the limitations of social media. These posts may create a false sense of minimal invasiveness and relative ease of treatment, which can engender the tantalizing idea that physical perfection is effortlessly accessible. This has the potential to create a culture that views cosmetic transformation in an inappropriately flippant manner. An additional concern is a misrepresentation of volume. As previously discussed, cosmetic dentistry requires a certain degree of advertising for its uptake and is also uniquely suitable for visual presentation. For these reasons, a practitioner may disproportionately invest their social media efforts in cosmetic procedures in a way that is not reflective of the relative cosmetic patient volume in their practice. The results is a public perception of cosmetic dentistry as extremely prevalent, which when coupled with the human inclination towards conformity, can generate false interest.

Nonmaleficence and Psychological Harm

Whether that false interest is detrimental, however, depends on in whom it is instilled. Concerns of veracity surrounding social media and cosmetic dentistry function largely on a societal scale, however on a more individual scale there are concerns of nonmaleficence. Social media is an immensely generalized and nonspecific forum. Laypersons can be readily exposed to information aimed at professionals and vice versa. Whereas in more traditional media a target audience could be selected based on appropriate demographics, once information enters cyberspace its originator has little control over its eventual reach or destination.

The success and moral justification for esthetic dentistry relies on appropriate patient selection. Invasive cosmetic dentistry has always carried an undercurrent of ethical debate because the risk of irreversible physical harm is being weighed against the more amorphous psychosocial benefits when choosing to proceed with treatment.[30,44] As mentioned, the motivation for seeking cosmetic care is typically dissatisfaction with body image, but there is a threshold of dissatisfaction and realistic degree of eventual satisfaction that characterizes the optimal patient. Providers must, and typically do, take measures to identify patients most likely to benefit from cosmetic care, however it is difficult for such a process to occur on social media. This would constitute no more than inefficient advertising were it not for the reciprocal relationship between social media and self-esteem. In alignment with the Tripartite Influence Model, social media is a driving force behind decreased satisfaction with self-image. In the most extreme example, social media has been shown to contribute to body dysmorphic disorder.[15,45] With regard to practitioners injecting so-

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cial media with cosmetic dentistry content, by exposing individuals to an ideal destined for internalization and portraying treatment as common amongst peers, they are fundamentally causing the disease by offering the cure. For those whose socioeconomic circumstances are obstructive, or those who lack access for other reasons, their dissatisfaction with self is generated, but untreated. This also thereby raises a coupled issue of justice in that those deprived of access secondary to inequity are the recipients of maleficence.

Augmenting these concerns is the reality that the age demographics most likely to be exposed to cosmetic dentistry are adolescents and young adults. Studies consistently show these age groups are most active on social media.[46-49] The introduction of individuals below the age of majority raises a broad set of issues involving social media and dentistry in general, that are outside the scope of this discussion, an example being whether or not following an account constitutes consent for information. In the specific context of cosmetic medicine, there is a unique issue when adolescents are on the receiving end of social media. Young adulthood is a time of change and transformation, with one's sense of self constantly in flux. An interesting theme in the cosmetic medicine literature, is the strong association between photograph enhancement techniques, social media, and cos-

metic procedure interest in the younger demographics. Chen at al. noted in a study population with an average age of 24.7 and range of 18-55, increased cosmetic surgery consideration in users of the photo-editing application VSCO and Instagram photo filters.[15] A prospective cohort study in a university population by Parsa et al. found increased cosmetic surgery consideration in users of the digital appearance manipulator Facetune2.[50] Beos et al. noted social media photo manipulation to be associated with facial dissatisfaction and cosmetic procedure attitudes in a study group aged 17-25.[51] Shome et al. found increased desire for cosmetic surgery in a study population with age range 21-26 associated with posting a selfie, and even greater increased desire when that selfie was edited to the satisfaction of the patient.[52] Othman et al. compared demographics using face-editing applications and found they were more commonly used by younger individuals, also noting their primary influence was social media and their belief it played a role in pursuing cosmetic surgery.[53] Anecdotally the role of photo-editing is so profound it has led several authors to use the term snapchat dysmorphia to describe patients presenting their edited photos as a goal reference during consultation.[15,45,53] This body of literature suggests that photograph enhancement techniques perhaps perpetuate a sense of the body as malleable,

which is also the core precept of cosmetic medicine. When combined with the malleability characteristic of adolescence, it seems the predominant social media demographic is particularly susceptible to cosmetic medicine exposure, making them particularly susceptible to the aforementioned maleficence, especially if they are unable to obtain care due to their limited autonomy.

Autonomy & Beneficence

While the largest age demographic using social media may not wield complete autonomy, participation in social media by healthcare providers, in and of itself, is an act of respect towards patient autonomy. Providing information with the goal of education aligns well with the notion of consent being truly informed and ambitions of shared decision-making processes. Provider selection and direct-to-consumer medical advertising are additional hallmarks of a culture that prioritizes patient autonomy, both of which are facilitated by social media. There is an often touted ideal in the medical community of "meeting patients where they are," and evidence suggests social media is exactly where they want to be met. Over 80% of internet users in the United States have searched for healthcare information.[54] A study limited to Arabic-language searches noted that 74.9% of those seeking online health resources searched for oral health information.[55] The dental profession should seek to meet this apparent de-

mand and view it as an opportunity to empower patients.

Research also suggests the potential for additional beneficence to be done through inventive use of social media by medical professionals. Reports have suggested ways social media can be used to ameliorate patient anxiety before procedures, improve adolescent health literacy, more accurately assess procedure outcomes, and access patients who have barriers to care.[54,56-61] Overall, there is a clear need for professional voices speaking on cosmetic dentistry within the sphere of social media, and there is a moral obligation that this need be fulfilled. However, those voices must be tempered, with consideration given to the complex socioethical framework of cosmetic medicine.

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The American College of Dentists' White Paper on Digital Communication—10 Years Later

Steven D. Chan, DDS, FACD

Dr. Chan is a past president of the ACD and was a member of the original task force assigned to study digital communication and social media in 2012.

In 1861, two simple copper wires were connected. In that moment the Transcontinental Telegraph connected a Country. This connection transformed how we talk.

It's 1869. Transcontinental Telegraph became obsolete.

Humankind wanted more.

Fast Forward.

The first social media site, SixDegrees.com, debuted in 1997. By the turn of the Millennium, social media platforms exploded. Economic growth, competition, and court cases were drivers on how to navigate in this rapidly evolving ecosystem. The marketplace discovered this tool has power.

Yet—like other any tool—it depends on how it is used.

Ten years ago, the Board of Regents created a Task Force to explore frontiers of this social phenomenon as it infiltrated our profession. Through the authorship and leadership of ACD Editor Emeritus, David Chambers, the Task Force presented: "A Position Paper on Digital Communication in Dentistry." In 2012, the ACD Board of Regents adopted this position. We are reminded of the College's primary reason to exist. The College is considered the "conscience of the profession." If we don't look out for our profession, who will?"

A mallet can create, and it can destroy. Social media can create relationships. It can destroy relationships. A single online comment can crush a reputation that took a lifetime to build. The doctor may be the bearer of the tool . . . or they may be the object of the tool.

Ten years ago, the Board of Regents created a Task Force to explore frontiers of this social phenomenon as it infiltrated our profession. Through the authorship and leadership of ACD Editor Emeritus, David Chambers, the Task Force presented: "A Position Paper on Digital Communication in Dentistry." In 2012, the ACD Board of Regents adopted this position. We are reminded of the College's primary reason to exist. The College is considered the "conscience of the profession." If we don't look out for our profession, who will?"

In 2012, the frame of reference for the paper approached the audience as if they were new entrants engaging this medium. The target audience was the newer colleagues entering the profession and those in their career growth mode.

Ten years later. The ACD Editorial Board believes that the lessons of this position paper have value for a fresh new audience. The principles still apply today.

Explore the frontier. Discover the excitement. Watch for the caution signs.

When Society allows us to wear the robes of a health professional... Society expects more from us. In today's parlance, the College is a *social influencer.*

Isn't this what we do?

A Position Paper on Digital Communication in Dentistry

Officers and Regents of the
American College of Dentists

Prepared by David W. Chambers

Abstract

Digital communication offers advantages and challenges to dental practice. As dentistry becomes comfortable with this technology, it is essential that commercial and other values not be accepted on a par with professional ones and that the traditional dentist-patient relationship not be compromised by inserting third parties that introduce nonprofessional standards. The Officers and Regents of the American College of Dentist have prepared this background and position paper as a guide to the ethical use of digital communication in dental practice.

There are eight principles:

1. The professional relationship between dentist and patient should not be compromised by the use of digital communication.

2. Digital communication should not permit third parties to influence the dentist- patient relationship.

3. Dentists should exercise prudence to ensure that messages are professional and cannot be used in unprofessional ways by others.

4. Personal data should be protected, and professional communication should be separated from personal communication.

5. Dentists should be generally familiar with the potential of digital communication, applicable laws, and the types of information patients have access to on the Web.

6. Practitioners should maintain an appropriate distinction between communication that constitutes the practice of dentistry and other practice-related communication.

7. Responses to criticism on digital media should be managed in a professional manner.

8. Dentists should be prepared to make more accommodations to patients than patients do to dentists in resolving misunderstandings about treatment.

A Position Paper on Digital Communication in Dentistry

Officers and Regents of the American College of Dentists

Electronic media have created entirely new ways for people to communicate. New media have altered what we discuss. They also have the capacity to build new relationships and change existing ones, and they leave a footprint. Finally, they are evolving at a rate that is currently faster than most users can keep up with, faster than society can absorb and respond to, and in ways that are not easily predicted.

Digital communication media are exploding. While household budgets for clothing and other items are shrinking, the digital budget is increasing rapidly. In terms of convenience and content, tablets outperform movie theaters.

Handheld devices have more computing power than computers that filled rooms a few decades ago. There are apps for selecting apps. Few can name all the social media programs that exist, and the list will change next month. The big- box stores that threatened to dominate American commerce a decade ago are being shouldered aside by on-line shopping. Students can "fact-check" their professors while the lecture is in progress.

Some dentists are digital communication mavens, both personally and professionally. Others are reluctant. Still others contract for media services. The majority are perhaps fragmentary users. Regardless of dentists' attitudes and talents with digital media, their practices are affected by patients who are skilled in placing a digital interface between themselves and professionals.

Commercial firms have also inserted themselves into the dentist-patient relationship. They have not asked, nor do they need permission to do so.

Integrity of Dental Values Uncompromised by Digital Media

In October 2011, the Board of Regents of the American College of Dentists created a task force to explore the impact of digital communication on dentistry, with a view toward preparing a position paper on the subject. The resulting position paper was approved by the board in October 2012.

The intent of this position paper is to inform dentists of some of the effects of digital communication on dental practices. Dentistry is based on a set of professional values that guide practitioners toward improving oral health consistent with the dignity of the patient. These values are expressed in the objectives and codes of the American College of Dentists and the codes of other professional organizations. Digital communication is also embedded in its own value structure. These values are more diffuse and not necessarily consistent with professional values. The overarching theme of this position paper is that dentists should live their professional values uncompromised, regardless of their involvement in digital communication. Further, it is incumbent on dentists to be familiar with digital communication and its potential impact on dentistry, regardless of the extent to which they use these media.

A Classification of Digital Communication

The term "digital communication" is intentionally general: it is used to indicate a broad class of technology and uses, including cellphones, Google searches, turnkey electronic dental records, customized web sites, e-mail, YouTube, sites that gather and disseminate information about dentists, Facebook and its many cousins, health-related apps, tablets for patients to enter health histories, and many others. To the extent that traditional forms of communication such as the Yellow Pages, newsletters, and phone calls share the functional characteristics of digital communication their use is incorporated into this position paper.

The physical characteristics and business names of digital communication devices is diverse and rapidly changing. The best way to understand this field is in terms of functional features. Despite their range of manifestations, digital communication shares these characteristics:

- Rapid, almost instantaneous dissemination of content
- Extremely low cost for multiple distribution
- Longevity of content, will not go away
- Potential for anonymity and aliases
- Inexpensive and rapid creation, editing, and updating
- Privileging of short messages
- Privileging of visual content
- Partial regulation

- Increased difficulties maintaining security
- Conflicted understanding of privacy
- Large participation but fragmented across platforms
- Senders and receivers need not share time and place
- Easy and almost costless duplication and forwarding
- Potential for misrepresentation and unintended use by others
- Potential for sharing content out of context

The intended use of digital communication is an accepted means of classification. There are three broad categories: (a) broadcast, (b) relation- ship, and (c) transaction.

Broadcast. The broadcast function of digital communication is a one-to- many dissemination of a fixed message. The typical Web page or blog is just a fancy, inexpensive Yellow Pages ad, billboard, catalogue, or other general message. Some dentists are producers of broadcast digital communication; all are consumers. Wikipedia, online dental journals, information about dental products, and room availability for conventions are examples of sites to which dentists refer for packaged general messages.

Organizations of all types, from a local restaurant to the American Dental Association, create an image of them- selves and reveal selected information to targeted audiences. By extension, these images also affect the public's perceptions of the dental profession generally.

Commonly, broadcast digital media are intended to distribute un- customized information. Information is selected by the producer, not the consumer; it is not individualized, but instead tailored to a hypothetical "modal customer"; it is intended to put the best face forward; usually it has high visual content because attention span will be short.

Sometimes called "Web 1.0," broad- cast- function digital communication is one-directional. The trend is for such sites to invite transfer to other two-way communication media (the second function), such as a phone number or Twitter feeds or to sections that handle business transactions (the third function).

Broadcast function sites often discourage interactive communication and may specifically state that no reply will be responded to. Success of Web 1.0 systems is measured in "hits" or "eyes."

Relationship. Web 2.0 is the common designation for a second function of digital communication designed to build relationships through exchanges of messages. Those who are struck by the banality of Facebook postings have missed the point. The message is subordinate to the relationship. Twitter limits the number of characters in a message to 140, forcing canned abbreviations.

The small screens on handheld devices discourage depth of communication or management of complex issues.

Social media can be used to very quickly spread tiny bits of information through a network, but the work of net- work building must have taken place previously. Relationship-building digital media define status. Celebrities lose much of their legal protection from defamation because they are "public" figures and the number of their contacts is media content. Social media rep- resent a challenge to established power because it is not based on established position or depth and accuracy of information, nor is it vertically structured. Every user of social media is at the center of his or her Web, and importance is a function of the number and richness of the cascading relationships. Cellphones and text messaging can be grouped under this heading. Web 2.0 measures success in terms of followers, members, subscribers, and the like.

Transaction. Digital media are rapidly beginning to manage transactions, and this is the third function. Dentists and their office staff can purchase supplies, register for meetings, pay professional dues, participate in surveys, and contract with Web designers using electronic media. Patients can locate dentists, make appointments, pay bills, and fill prescriptions on the computer. Within the office, functions such as obtaining informed consent, patient education, and graphically assisted treatment presentations are becoming electronic. The situation has come further in medicine, where patient questions to providers are taken on the computer, chronic conditions are managed by teams of mid-level providers reaching out to patients before symptoms appear, and consultations among professionals and even diagnoses are mediated electronically and in the complete absence of a physical patient. The impact of the transaction function of digital media is measured in traditional business terms of time saved, accuracy, number of transactions, and profit.

The reason for offering this brief categorization of the three functions of digital communication is to demonstrate its reach, to show that dentists may occupy various roles in the net-

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work, to draw attention away from the gadgets and the apps and focus it instead on the effects that can be expected from various patterns of use of digital media. It is the effects of electronic communication that count. Dentists will participate in digital communication in many ways, and success will be defined differently across practices. It is the fit between the practice and the media that matters, not just getting the currently most fashionable equipment.

Principles for Professional Use of Digital Communication

Eight principles are presented to guide the use of digital communication as an effective extension of dental practice. Where the relationship between new media and dentistry is synergistic, we have noted ways dentists can enhance oral health care by taking advantage of new ways to communicate. Where there are conflicts, these are pointed out, including possible adverse effects and appropriate precautions. The term "should" and cognate phrases are used in their ethical sense, calling dentists to higher ideals. Although there are legal and regulatory considerations in the use of digital media, such as Health Insurance Portability and Accountability Act (HIPAA), the positions presented here are aspirational rather than requirements.

1. The professional relationship between dentist and patient should not be compromised by the use of digital communication.

The relationship between dentists and patient is special and essential to

appropriate care. Although the term dentist-patient relationship will be used for convenience, this should be under- stood in the broadest sense of including the entire dental office team, the dental profession generally, and individuals who are not patients of record but are in need of oral health care. This relation- ship is based on trust. It is impossible for patients to know all the necessary details of their current oral condition, its likely course, alternative interventions, or even the competency of particular dentists to provide the best care. Similarly, dentists have to trust patients to

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provide accurate health status information, follow through on their part of care, and pay for services. Further, dentists have a wide range of individual strengths and skills, and patients represent individual combinations of medical, dental, and personal needs and values.

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changeable and the only way to add value is to compete on price.

A traditional idea in dentistry, and one that the American College of Dentists believes should remain central to its identity, is the five Cs of comprehensive, continuous, competent, compassionate, and coordinated care. Appropriate care addresses all of the patient's oral health needs, not just ones that the patient picks out because of uninformed interest, or the dentist identifies because of personal preference or potential for other returns. It is also continuous, both over

the number of appointments needed to achieve stability and via recall. Competency for the level and type of practice is assumed by the patient and should be guaranteed by the profession. The phrase compassionate care is redundant, but it reminds us that "care" is not synonymous with "treatment." Finally, the capacity of one office should never place a limit on the potential for the health of any patient. Where appropriate, care should be enhanced by referral to a specialist while the general practitioner retains overall management responsibility, cooperation with insur-

ance and other financial resources, and attention to total health by coordination with all health professionals.

This general ideal can serve as a standard against which to evaluate the use of digital communication.

New patients can be recruited by electronic means. It is certain that individuals use their computers and hand-held devices to make contacts and form first impressions of potential practices. In this sense, the ethical issue is what image the practice provides for the general public in its broadcast of one-to-many messages. Information about practice type, including limitation of services based on advanced training or limited practice type, office location, hours, languages spoken, and even practice philosophy (family-oriented, comprehensive, community-based) are all appropriate. Insurance acceptance, credit availability, and other features having to do with payment are more nuanced. It is assumed today that standard financial arrangements will be available in all businesses, so dentistry may be well served to avoid any reference that might be construed as suggesting that oral health care is a commodity.

Perhaps the most informative statement along these lines would be that insurance plans are not accepted.

Because search behavior of electronic media is dominated by superficial and quick searches for "hits," a position near the top of a search algorithm and a quality visual image are critical. One gets to the top of a page by paying for it, by having been successful in previous searches, and by using key phrases that match the terms potential users will use in beginning their searches. A patient who is interested in "sleep dentistry" is not seeking a definition

of sleep dentistry (they have already searched the Web in general if they have any appreciable level of curiosity). They want to see the term on the office Web page, surrounded by other symbols they associate with quality care. In general, Web 1.0 users are not interested in reading a Web page but they can, in a fraction of a second, form an impression of the office from the overall appearance of the page.

The ethical issue associated with broadcast digital media is the difficulty of establishing personal relationships with patients. Because it is difficult to honestly express factors associated with the quality of care indicated by Web 1.0 format, there is a temptation to emphasize other characteristics. The proportion of Americans visiting the dentist has not increased noticeably in the past decade (it may have actually decreased slightly), but the number of patients changing dentists has grown. It is likely that broadcast digital communication has promoted "churning": patients moving from one dentist to another. This represents a threat to the value of continuity of care. It should also be borne in mind that the use of broadcast digital communication is one-way and there is a certain generality about where the message is coming from. That means there is no opportunity in the communication itself for correcting misconceptions. What is more troublesome about the communication channel itself is that the message can be and usually is interpreted as coming from "dentistry." The attractive expected outcome is what "dentistry" has to offer, and the one that most attracts the would-be patient's attention is just the best of what dentistry has to offer. All digital communication between dentists and the public speaks for the pro-

fession as a whole. The potential for broadcast digital messages regarding dentistry to reach the multitudes under- scores both the legitimacy and the importance of the profession as a whole, taking an interest in what individual dentists are saying to the public about oral health.

A second characteristic of broadcast digital communication, one that is not as large a concern for relationship building and transactions, is anonymity and image manipulation. Traditionally, individuals sought out professionals based on their reputations among acquaintances. This was followed by a face-to-face meeting and the beginning of care that, if all progressed satisfactorily, grew into a relationship. Positive relation- ships feed positive reputations. The dentist-patient relationship was personal, customized, and based on the outcomes of care. Digital communication has the potential for short-circuiting this cycle and distorting the dentist-patient relationship. When dentists seek patients based on a promised image of care, the relationship collapses into one involving providers and customers. Dentists compete on criteria that can be standardized, such as appearance and price. Customers shop. What has happened in these cases is that expectations based on anonymous and mass-produced (or marketing-manufactured) images has been substituted for personal dental care. All five Cs are put at risk: comprehensive, continuous, competent, compassionate, and coordinated care are left off to the extent that they cannot be quickly depicted on a computer screen. It is a limp answer to say that digital communication allows us to better give the customer what he or she wants. This is a substitution of commercial for professional values. If such custom-

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ers wanted veneers on periodontally involved teeth, no professional should accede.

A large positive potential exists for digital communication to build relation- ships between existing patients and the practice. This is the function that was managed traditionally by the office newsletter. Patients begin to identify with the practice when they see their comments or images on the office Web site. They will check to see whether their Facebook postings have been responded to. The practice is building a community by hosting a site. The important values promoted by an effective office Web site include all but one of the five Cs: comprehensive, continuous, compassionate, and coordinated care. These four are fertile fields for effective use of social media. Competence of the dentist and staff is the one value that cannot be enhanced through the use of electronic communication. Claims of competence, even indirect ones such as announcing that the dentist has been selected for some form of distinction, are inappropriate and unnecessary in electronic communication designed to build relationships between the office and the patient. Use of the initials FACD in electronic communication with patients is contrary to the Code of Conduct of the College precisely because it can be misinterpreted as a claim of competence.

Electronic transactions are just beginning to become a part of dental practice. To the extent that they ease any perceived barriers to care they offer great potential. The largest issue with respect to digital support for transactions in the dental office is that most such applications are pur-chased from outside vendors. Care should be taken to ensure that the services match both the needs of the office and the characteristics of the range of patients served. Additional care is required to make certain that patient privacy, confidentiality, and security are honored. It is also appropriate to inquire of vendors with respect to the full-value proposition or business model. It can happen that the fee paid to vendors is only a small part of the benefit they derive from an arrangement. Access to information about patients can often be of great value to vendors, as can connection with the dentist's business relationships, reputation, and even control over access to patients.

2. Digital communication should not permit third parties to influence the dentist-patient relationship.

Some dentists are quite adept at developing and using digital communication as an extension of their practices. Most copy general trends in the profession and must rely on commercial vendors and consultants. This situation is much like the relationships that exist between dentists and equipment manufacturers, brokers, insurance companies, and advisers, including practice management consultants. The role of third parties in dentistry is to assist the dentist in providing more and better dental care than would be possible otherwise.

As dentists seek assistance in designing and implementing digital communication systems in their practices they should be aware of the potential for introducing the virus of commercialism that some-times accompanies these applica-tions. There is no value in equipment sales or software development that corresponds to the oral health promotion value or dentistry or the professional value of promoting the patient's long-term interests. Advice, services, and equipment are sold to dentistry as commercial transactions, and the standards governing these sales do not extend to cover the same range of values that prevail in dentistry. It is the dentist's responsibility to ensure that decisions about digital communication place commercial interests in a position subordinate to oral health.

Dentists are open to introducing third-party influences in all three types of digital communication: broadcast, relationship, and transactions.

Web designs, communication practices, building of electronic communities, and computerized interfaces with customers that are most effective in commercial applications are not automatically the best ones for a dental practice. The operative question is not what other users are doing or what financial rewards others have gained but whether patients have better oral health as a result of the practice adopting certain kinds of digital communication.

The common commercial index of success, number of "hits," is of doubtful value. The true professional value is oral health outcomes. Discounts and giveaways orient patients to cost rather than health. Chaining and hosting—rewarding patients for using their computers to promote your practice—are mistaken notions of what dentistry offers. Advertising prices and offering guarantees may be acceptable to other clients

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for whom Web designers' work or some things which a practice might be tempted to copy, but they risk being false or misleading in dentistry because of its custom nature. Unqualified price offerings can drift toward "bait and switch" practices. The common thread in these examples is that nonprofessional, commercial values may creep in when digital communication is designed by outside vendors or borrowed from sources that do not understand the professional nature of dentistry. It is the dentist's responsibility to ensure that inappropriate third-party influences are kept in place.

In extreme cases, third parties insert themselves into dentistry by becoming co-providers of care. Groupon is an example where a for-profit company has attempted to broker increased numbers of patients to the dentist in exchange for lower cost to the patient. The prospect that a third party could make a profit from such a model presumes that there is an excess margin in dental fees. There are also third parties who are willing to provide ancillary dental services, such as lab testing, financial services, and patient education to be accessed from the Web pages of practices. This normally includes a financial return to the dentist for allowing others to become partners in patient care.

It is embarrassing to Google-search a dentist's name and find half a dozen sites introducing that dentist. It is sometimes the case that dental trade association groups that dentists join will sell personal and practice information to vendors as a source of non-dues income. The American College of Dentists does not engage in such practices. These sites offer unrelated services, such as listings for other dentists in the area, advertisements in the margins, and even an opportunity to rate the quality of the dentists one has not yet seen. Typically, such sites offer patient education information about such topics as disciplined licenses (which they mine from public records available to all through state Web sites) as a value- added feature. Other vendors are more direct, offering to give an opinion with- out being asked. For example, organizations now notify dentists that they have been recognized and offer to publicize this fact for a fee. In all of these cases, a third party with some sort of commercial interest is seeking to insert itself between the dentist and the potential patient. This is perfectly acceptable in a commercial culture. Dentists should regularly monitor their electronic public image. To the extent that all dentists offer excellent care based on the five Cs, there is no commercial value that third parties can profit by selling. Third-party information is only valuable to the extent that it guides patients and others through a fragmented profession.

3. Dentists should exercise prudence to ensure that messages are professional and cannot be used in unprofessional ways by others.

The communication between dentists and patients is inherently individual, personal, and complex. The discussion of how best to manage oral diseases, their complications, and the effects these have on patients' lives is best done in an environment of trust, give and take, and where there is an opportunity for immediate responses to patient's concerns and an opportunity to evaluate nonverbal and other circumstantial factors.

There are aspects of dental communication that do not require this level of interaction and may be well suited to digital communication. These include information about the practice location and characteristics such as office hours, bills sent to patients on a monthly payment program, and information shared as a community outreach, such as background information about an upcoming public water fluoridation campaign.

Although it is impossible to prevent all cases of others misusing messages and information that appear in digital format, reasonable precautions include password protection and other security practices, legal disclaimers accompanying postings, care in distributing messages,

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and prudence regarding content. The last suggestion—not saying anything one would be embarrassed to read on the Internet with one's name attached to it— probably affords the greatest degree of protection. Care should be taken to ensure that professional communication matches the media used. Three factors are especially important.

First, no claim should be made in a public forum that is not universally applicable to all patients or the public. If there is any question whether a statement on the office Web, in a text response to a patient, or through a commercial service will have to be qualified once there is a direct relationship between the dentist and the patient, it is questionable whether such a statement should be made. Claims such as "one- day tooth straightening" and "painless dentistry" either are misleading or involve puffery, a watering down of professional communication. An office that blogs about how friendly it is to every- one runs the risk of not being able to dismiss patients or cultivate a "select clientele" without broaching hypocrisy. Adding quibblers such as "generally" will make the lawyers happy but may still leave a bad taste about the profession as a whole in the mouths of patients. The ethical principle of veracity is defined by philosophers as not allowing others to maintain misbeliefs that are detrimental to them. This is a higher standard than telling the truth.

Second, care should be taken with claims and information where others can hijack the information for their own, nonprofessional purposes.

Politicians, CEOs, actors, and sports stars are not the only ones who have been bit- ten by an unflattering remark captured on a cellphone. The concept of "going viral" means that digital content has escaped the control of the originator.

That can be an attractive prospect in the case of flattering messages, but devastating if the message has negative overtones. The important thing to remember is that there are reasonable controls on the con- text of direct communication between dentists and patients that disappear when the content becomes digital. Digital content has a life of its own, and it is an indefinitely long life.

Third, consumers of messages on digital media are often unclear about the source of the message. The reputation of every dentist is af- fected by the actions of heavy users of media, regardless of their own attitude toward it. Many dentists or their office staff have been confronted with a computer printout of an unsubstantiated treatment or of price quotes from other offices. Some messages are naturally easier to express digitally.

Usually attractive outcomes are better understood by the public than improvements in health. Sim- ple and quick treatments are easier to explain than cases involving staging, trade offs, and complex decisions. Inexpensive, single prices are easier to grasp than fees contingent on the multiple factors of the case. Because digital communication favors short, standardized messages, it is intrinsically biased toward misrepresenting the most

appropriate forms of oral health. That is the case before considering the attractiveness of digital media in the hands of those who intentionally misuse it for personal gain.

4. Personal data should be protected and professional communication should be separated from personal communication.

United States law has established standards for healthcare professionals with regard to their communication about patients. Certain individuals and entities are entitled to access to this information, including patients them- selves, insurance companies, and the courts under some circumstances.

Others are specifically excluded from seeing the information. The HIPAA regulations are over 1,000 pages long. The "P" in HIPAA does not stand for privacy. The word is "portability," as in Health Insurance Portability and Accountability Act. The underlying issue addressed in this legislation is that patient information will be ballooning in value and flying around at fantastic rates once it has become digitized, thus formal standards are needed.

The three fundamental standards in HIPAA are privacy, confidentiality, and security. These are not three terms for the same general idea; they are three ways that the information about people is part of the dignity of the person.

Privacy refers to the right to refuse to reveal personal information. If a patient is coerced or tricked into revealing information about their

sexual preferences, their income, or their health status to individuals who have no business knowing this, their privacy has been violated. This is true even if that information is not shared with anyone else. In an electronic world where there is so much personal information in cyberspace, we have become concerned that we should not have to reveal anything more about ourselves than we choose to, unless that information is needed for legitimate purposes. Usually, we must be informed about privacy policies, although the notifications are now so ubiquitous, lengthy, and expressed in such legal language that in fact we may not actually be informed. Think of a violation of privacy as looking for information that one should not have.

Confidentiality is sharing information you have, whether obtained by appropriate means or otherwise, with people who have no business knowing it. Most of the "privacy" issues involving electronic information are really concerns about confidentiality. Selling mailing lists, leaking classified information, and gossiping about famous patients are violations of confidentiality.

Security, the third function, means taking reasonable precautions to ensure privacy and confidentiality. Unauthorized individuals should not be placed in positions where they may overhear private details. Charts should be stored in locked cabinets. Staff should be trained. And suspected breaches must be reported according to the regulations of federal and state laws.

Broadcast digital communication is not likely to be an issue with regard to personal information—it is the dentist who is making revelations. Transaction digital communication is especially at risk as it contains health history, financial, and other sensitive matters. Relationship digital communication may become an issue as cellphone communications and texts can now be subpoenaed and may be inadvertently sent to the wrong people. Hosted Web sites may post information that later is recognized as inappropriate. The dentist should make a determination in building relationships where the proper boundary is between professional and nonprofessional communication.

It would also be out of bounds to brag about well-known patients on the practice Web site. If permission had been given for such posting it would not be illegal, just very bad taste. Facebook and other social media sites should be closely and continuously monitored and inappropriate postings removed immediately in cases where that is possible. In fact, it would be good practice to have a clear policy regarding publication of personal information printed on the site.

Transaction electronic sites, such as payment systems, automated health histories, and insurance apps need to be carefully designed and monitored for conformity with HIPAA regulations. It is prudent to give training and guidelines to all staff members, and to log in from time to time as a potential user of one's own digital communication to see what it looks like from the outside.

A slippery area is the dentist's personal media use. Occasionally, the formal office protocol is immaculate, but the line between personal and professional communication of the dentist becomes blurred. Dentists should not become faceless, unreachable non-entities. Neither should they be everyone's "hangout buddy." Virtually all professions except dentistry have formal language in their codes of professional conduct regarding avoidance of dual relation- ships. Dentists should protect against the ambiguities of indistinct professional boundaries by maintaining separate e-mail addresses, Facebook and other social media accounts, and cellphones. One is for the dentist as a person and one is for the dentist as a professional. Communication to patients or staff that comes over the wrong channel is apt to be misinterpreted. A legal action should never open a dentist to requests for access to personal communications just because they have been blended with professional ones.

Although the dentist is ultimately responsible for all practice communication, it may prove useful to delegate continuous monitoring of the office social media site to a staff member for the sake of consistency and immediate attention. First, the staff member has more time. Second, there needs to be a buffer in decision making between the request and the dentist as the ultimate responsible authority. And third, patients may overuse direct access to the dentist and they might interpret everything the dentist says as professional communication. Diagnosing on the cellphone is very risky business.

5. Dentists should be generally familiar with the potential of digital communication, applicable laws, and the types of information patients have access to on the Web.

Digital communication affects all practices, even those where the dentist is personally determined not to participate. Because of the nearly universal use of digital communication and the inevitability of having to make decisions about its bene-

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fits and its abuses, dentists should know enough in a general way to make ethical decisions and to seek competent advice when that would be helpful. At a minimum, dentists should be able to distinguish between those opportunities that help or harm patient care based on informed opinion rather than vague awareness of "trends."

There are no general laws or ethical principles that apply exclusively or in a special way to professional use of digital communication—with the exception of HIPAA and perhaps some others. Special cases may come to light, and dentists should seek the advice of qualified council if that is suspected to be the case. The obligation that cannot be avoided is to think through the effects of using digital communication and then to apply the same standards of law and ethics that would be applied to the same effects were they the results of any other action not involving digital media. The five Cs of comprehensive, continuous, competent, compassionate, and coordinated care can serve as a guide.

Dentists should also be familiar with applicable law and regulation regarding practices involving digital communication and ethics and professional standards that guide their use. Among the issues that are essential are relationships with third parties (as in responsibility for patients), relations with other practitioners (as in fee splitting), privacy, confidentiality, and security (as in HIPAA), and copyright, libel, and conflict of interest matters. Various codes of professional conduct and ethical guidelines are also relevant.

For example, mention of branded products or treatment modalities on one's Web site may constitute an endorsement and create an undisclosed conflict of interest. Colleagues may come to regard claims or even the general appearance of broadcast sites as claims of superiority. And, of course, every practice or statement that is ethically questionable when presented in any other medium is equally suspect in digital format.

A 2009 study of all dental practices in San Francisco revealed that 11% of dentists practice in offices that market themselves by a fictitious name that does not include the identity of the dentists. It might be imagined that these practices have distanced themselves to some extent from direct personal relationships with patients. Disconcerting is the fact that less than half of these practices with fictitious business names have registered the name with the state dental board, a requirement for licensure. The same study found that 24% of practices list a Web site. Likely the number is greater today. There was no difference in the average age of dentists who have Web sites and those that do not.

Patients have unprecedented access to health information and misinformation on the Web. No one can "unring" that bell. It then behooves dentists to be at least familiar with both commonly used patient sources of information and with the more widely circulating claims. A dentist should count it as fortunate when patients present questions about such claims and ask for a professional opinion. The alternative of patients simply matching their uninformed opinions with dentist Web sites that contain the key words they are looking for is border-line collective malpractice. But dentists should be informed well enough about what patients are finding to have an honest discussion that extends beyond their own scientifically-based knowledge. It is an irony that in an age of massive information available to the public, professionals now have the additional responsibility of being familiar with the misinformation that patients are apt to encounter and of having the skills to guide patients to sound oral health choices.

6. Practitioners should maintain an appropriate distinction between communication that constitutes the practice of dentistry and other practice-related communication.

Some dental treatment is accomplished without the use of a handpiece. For example, a patient may phone with postoperative pain and be instructed by the office staff to take analgesics and continue self-monitoring. It might be argued, if the case fails, that the staff member was practicing dentistry without a license. Similarly, patients may rely on information posted on the office Web site in a way that causes complications. Although disclaimers can be added to digital communication, it is unclear at this point the extent to which this constitutes legal protection. There have been reports from the medical community that physicians responding to text messages from patients have increased legal exposure.

The fact that dental licensure in the United States is managed at the state level raises additional concerns because electronic media know no

geographic boundaries. Charts, prescription information, photographs, and radiographs can be transmitted electronically, often with no clear identification of the location from which they originated. If patient advice, professional consultation, diagnosis, or direction of care given by staff is interpreted as constituting dental treatment that crosses jurisdictional boundaries, the dentists may be practicing without a license.

7. Responses to criticism on digital media should be managed in a professional manner.

It is unlikely that the growing availability of electronic media has or will increase the proportion of actual negative experiences in dental practice. The ratio of patients upset with their care and the ratio of patients who are difficult to manage are likely constants. What is rapidly changing is the capacity for these disagreements to be played out in

ments are made and reputation is maintained most effectively through personal conversations. Such conversations are increasingly taking place in public. It will become more difficult for dentists to exercise control over oral health communication.

Increasing caution is required with regard to communication in the office regarding patients and one's professional colleagues. It has always been unprofessional to make disparaging comments about patients, especially those that involve value judgments. With more office records being in electronic format, even including texting and cellular phones, the prospect is growing that damaging remarks will be uncovered during the discovery phase of a legal action. Sophisticated electronic search algorithms exist for finding information, and data has an increasing life span and is becoming almost impossible to dispose of. A

sites, postings on patients' own sites, and postings on public sites, as well as traditional word of mouth.

Some of this damage has been justified and some has not. More people are reached by digital postings, messages tend to be more strongly worded because the writer must justify the position, blasts reach people who are not in a position to know all of the relevant facts. These circumstances narrow the possible actions a dentist can take in response.

The new reality of wider public scrutiny of practice invites any of several responses.

Improved patient relationships in the office are the preferred strategy. This takes the form of full communication, more extensive involvement in informed consent, development of multiple channels of communication with staff, and clear signaling that the dentist is willing to listen and dis-

Improved patient relationships in the office are the preferred strategy. This takes the form of full communication, more extensive involvement in informed consent, development of multiple channels of communication with staff, and clear signaling that the dentist is willing to listen and discuss concerns on a personal basis. In this sense, the best antidote to potential abuse of digital communication is effective use of non- electronic communication in the office.

front of a large audience and the prospect that third parties will become involved. In two studies of dentists' preferred response for managing issues of a technical nature or those involving staff, patients, financial matters, and office routine, the overwhelming "go-to" strategy was face-to-face communication. This is judged by dentists to be both the most commonly used approach to solving problems as well as the most effective one. Appropriate adjust-

more professional level of discussing patients and of discussions with patients is now required. Training of the office to ensure that this standard is the dentist's responsibility.

There have been clear examples of dentists' reputations being unfairly impugned by patients spreading reports of what they interpret as poor treatment. Various electronic media have been used for this purpose, including postings on dentists' Web

cuss concerns on a personal basis. In this sense, the best antidote to potential abuse of digital communication is effective use of non- electronic communication in the office.

Once patients have signaled, publicly, that their sense of trust has been violated, the dentist has the options of ignoring the matter, denying the facts, offering excuses, promising reparations, apologizing, and taking or threatening legal action. Efforts

A Position Paper on Digital Communication in Dentistry

Officers and Regents of the American College of Dentists

should be made to obtain a copy of the electronic complaint. Failing to respond, denial, and making excuses (including blaming the patient) generally have the effect of creating further distance and potential escalation in front of an audience. Even when the original issue is ambiguous, a disgruntled patient is on very solid grounds in complaining to anyone who will listen when the dentist refuses to engage in a conversation. That will become the dominant voiced concern. Courts and malpractice carriers are sensitive to due process matters. Promising reparations is a decision about the costs of maintaining a patient or one's reputation. Some malpractice carriers still advise against professionals apologizing, although the literature shows that this does not increase and may actually decrease settlement costs in the event of legal action. It does have a strong effect on decreasing the likelihood of legal action. Apology includes a believable expression of regret over the outcome and openness to accept just responsibility. The apology should be extended in private and should be understood as an invitation to seek a mutually satisfactory resolution.

The literature on service recovery (effective management of customer complaints) shows that satisfied customers tell three friends and dissatisfied customers tell seven to ten. Digital media magnify these numbers but probably do not change the ratio. The goal of service recovery is to convert an unsatisfied customer into a satisfied one. An open effort to do this is often effective, and surprisingly, recovered customers are actually more loyal than originally neutral ones. It is something like remineralized enamel.

A third alternative is to engage in positive reputation building through customers. Recently companies have very openly taken to "coaching" customers about responding to satisfaction surveys and openly soliciting testimonials and positive comments. It is not uncommon for service companies to instruct personnel to inform customers that they "expect a perfect 10 on the third-party survey you will be receiving." This has extended to language, often buried in consents and agreements that the customer can be used for promotional purposes at the discretion of the company. There are firms that will sell bulk Facebook "likes." At the homemade level, small businesses encourage employees to make positive comments on relationship- hosted sites and to recruit their family and friends to do the same. This local ballot box stuffing is sometimes so crude that it must be obvious. The ethics of professionals soliciting favorable public opinion is suspect.

The most reactive, and certainly the most damaging, response is for professionals to attempt suppression of negative opinions expressed in public.

There are two forms this response takes. First is legal action under the head of prosecution for libel. Libel is the publication of defamatory remarks that tend to injure another's reputation. To prevail in a libel case the plaintiff must be able to show that the claim was made by a person who knew or should have known that the damaging statements were false. A patient's opinion that he or she was not treated as they expected to be treated generally does not meet this criterion. A second strat- egy that some professionals have attempted to prevent negative postings to electronic systems is to require that patients sign a promise that they will not criticize the provider. Courts have almost universally rejected libel cases brought by dentists against their patients and have held that con- tracts precluding expression of opinions following treatment to be against "public policy" and unenforceable.

Sites such as Yelp, Angie's List, Healthgrades, Ratemds, Vitals, and Doctoroogle are commercial platforms that serve the public by hosting the opinions of users of professional services. They are lay ratings of professional services—uninvited electronic scorecards. Presumably there is an equal potential for an uninformed patient or a family friend to give a practice an unrealistically high rating or for an equally uninformed or biased individual to give an unwarranted low rating. The fact that third parties can make a profit by hosting such ratings demonstrates that professional reputations have value. Dentists should monitor these ratings and seek to diagnose opportunities to improve their reputations.

8. Dentists should be prepared to make more accommodations to patients than patients do to dentists in resolving misunderstandings about treatment.

There is a perception of a double standard for professionals and the public in terms of what can be said in public about their relationships and how far each should go to resolve differences.

That perception is accurate, and professionals have to extend themselves more than patients do.

This is the case for two reasons: one ethical and the other economic. There is an implied contract between the professions and the public which includes, among other matters, an expectation that the profession will have exclusive markets and a degree of self-policing in exchange to it agreeing to serve the public's interests. This is different from the relationship between the public and commercial operations such as car dealerships or pest control. Professionals are granted a very large measure of trust from the beginning of any relationship that strictly commercial relationships must earn.

To the extent that dentistry is both a profession and a business, there is a risk that professional trust will be compromised when dentists signal an emphasis on commercial values. There is certainly ample potential for confusion. It would be inherently unethical for dentists to expect the full benefits of professional trust at the same time they counted on full access to the rewards of commercial enterprise. Digital communication, with its bringing previously private relationships between patients and dentists into public view and beginning to make a place for third parties in those relation- ships has drawn attention to the ethical dimension of this double standard.

The economic reason why dentists must extend themselves further to reconcile differences of perception between themselves and patients is because dentists are in a favored position in the relationship. Finding the "fair" balance between parties of unequal power is known as the Nash Bargaining Solution. John Nash won the Nobel Prize in Economics in 1994 for, among other things, pointing out that society pulls toward a balancing of conflicts of interest based on how much each party has to lose by not reaching accommodation. Generally, dentists enjoy economic status, reputation, and positive standing in the communities where they live and work that exceed those of their patients. Ethically fair resolutions of disagreements are based on adjustments that are proportional to what each party stands to lose by not coming to agreement.

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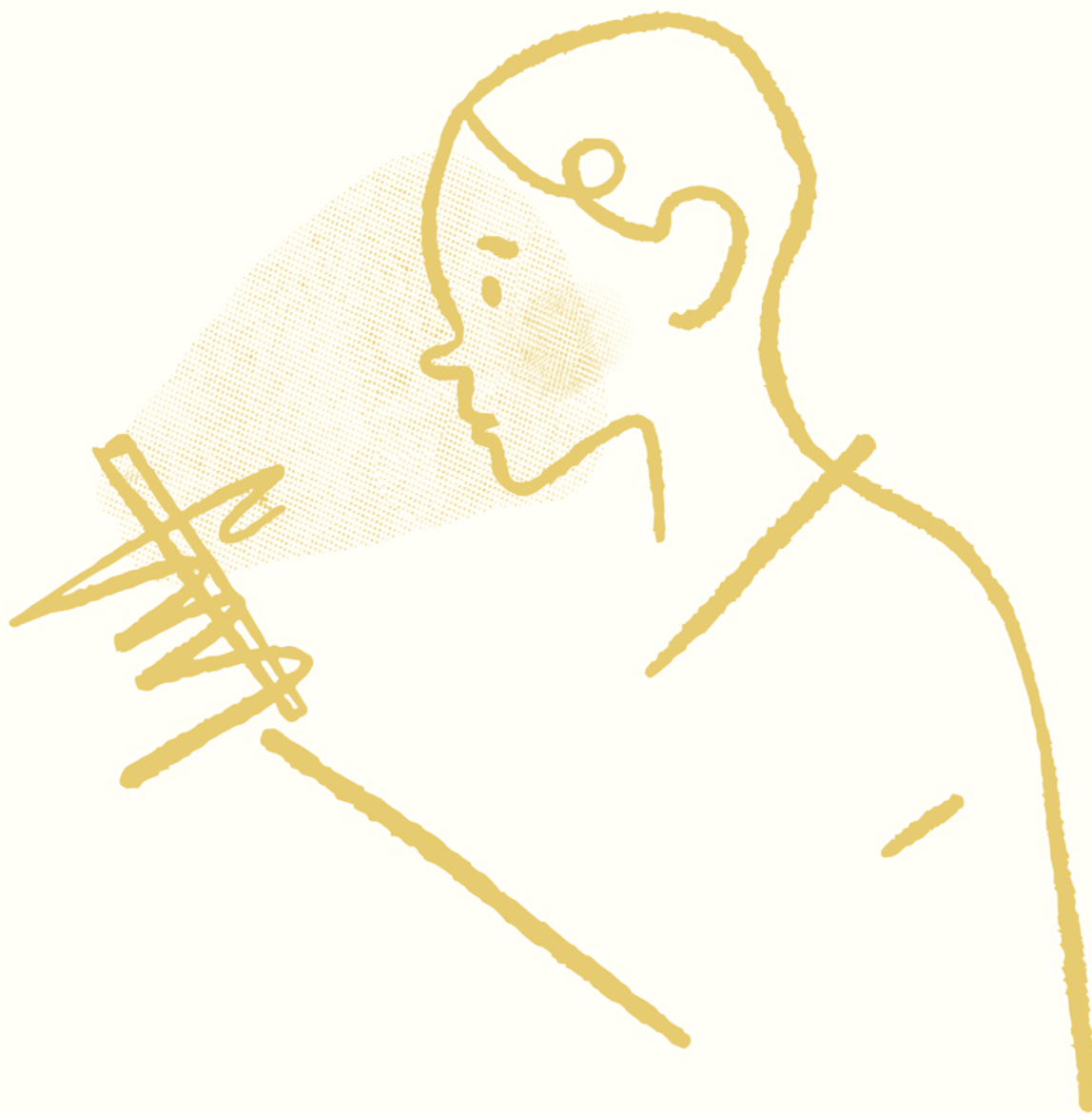
Though social media may not play a large role in my personal life, there was never a doubt in my mind about how important an online presence would be for my practice when I started Kids Tooth Team from scratch in 2020. I was the new doc in town and had no real ties to the community before moving here. I knew we needed to find as many ways to establish ourselves in the community as a resource to the families that we would serve.

Social Media Burnout & Ethically Outsourcing the Stress

Alexandra Otto, DDS, FAGD, FACD

Dr. Alexandra Otto, DDS, FACD, FAGD is a pediatric dentist, member of the ACD 2020 Centurion class, and an American Dental Association Success Program Speaker. She is a Board Member for the Southwest Society of Pediatric Dentistry, and an Alternate delegate to the Capital Area Dental Society.

She and her husband, Tim Otto, are the co-founders of Kids Tooth Team Pediatric Dentistry, with locations in Buda and Austin, Texas. They also recently founded Kids Tooth Team Outreach, a 501c3 school based mobile dental outreach program that utilizes a 2-operatory dental RV to provide free dental care to underserved children in greater Central Texas. You can reach out to Dr. Alex directly and follow their social media channels through @kidstoothteam and @kidstoothteamoutreach.

My Millennial generational cohort would likely be very embarrassed to claim me as its own. Unlike 82% of my peers, I've never posted a selfie.[1] I have a paltry total of 2 social media accounts, which pales in comparison to the average 6.6 accounts that most social media users own today.[2] I haven't posted on my personal Facebook account in about 2 months, whereas 77% of my fellow Millennials are engaging on Facebook daily.[3] Though social media may not play a large role in my personal life, there was never a doubt in my mind about how important an online presence would be for my practice when I started Kids Tooth Team from scratch in 2020. I was the new doc in town and had no real ties to the community before moving here. I knew we needed to find as many ways to establish ourselves in the community as a resource to the families that we would serve.

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Why exactly is a social media presence so important to a dental practice? A recent study found that the most frequently mentioned factors that respondents took into account when choosing a dentist were the dentist's competence (22.22%), the recommendation from a trusted source (20.56%), and the overall quality of the service provided (19.72%).[4] Today, these are all decisions that are determined by the patient based entirely on your online presence – in other words, well before the patient ever gives you the chance to introduce yourself in person.

Proof of competence no longer comes solely in the form of advertising your degrees, awards, and accolades on your website. It now includes engaging the local community on Facebook to answer questions, post helpful oral health tips, and demonstrate expertise in your field. R ecommendations a re no longer simply "word of mouth." They now come in the form of local moms-only Facebook groups, Google reviews, and Mommy-blogs. And determining quality of service provided is based on the beautiful before-and-after shots that you'll post on social media. Don't take my word for it though – trust the data. Over 50% of my patients select me as their provider through Google or Social Media sites, and another 10% come from existing patient referrals, typically in the form of their social media posts and recommendations. Patients will naturally flow t o t he

Proof of competence no longer comes solely in the form of advertising your degrees, awards, and accolades on your website. It now includes engaging the local community on Facebook to answer questions, post helpful oral health tips, and demonstrate expertise in your field. Recommendations are no longer simply "word of mouth." They now come in the form of local moms-only Facebook groups, Google reviews, and Mommy-blogs.

practice with the most compelling and cohesive online presence across multiple platforms. Make sure that it's yours!

Luckily for us, we got the website part of the equation figured out quickly, but the social media component was harder to master than I originally anticipated. After giving it a go on my own for a few months (how hard could it be, right?), I realized exactly how time consuming and exhausting figuring out the social media algorithms and trends were. I spent weeks developing content around the most frequent-

ly asked pediatric dental questions. Countless hours flew by as I personally responded to our reviews and follower comments and shared all our "shout outs". Capturing content in the office, editing posts, determining the best hashtags to use, and everything else quickly became overwhelming. I felt like I was becoming 90% social media manager, 10% dentist/practice owner, and 0% Alex Otto. The next step was total burnout: I knew I needed to delegate and outsource this task.

We gave several agencies a shot to wow us with their social media prowess, and my asks were always the same. I wanted our content to feel organic and fresh; decorated with pictures of the cute real-life kiddos we see. I wanted to highlight our amazing team and show how they contribute to an amazing patient experience. Finally, I wanted to address FAQs that I always get in the form of thoughtful dental tips for the parents. It was also very important for us to engage in our local community and support local businesses online as well. All that said, the bottom line was that it needed to help drive actual real-life patients into our actual real-life door (dental work doesn't pay much in the Metaverse, at least for now). It didn't matter if we got all the likes and shares in the world; if it wasn't helping us drive patient flow with a proven ROI, what was the point?

One group we worked with gave us the exact esthetic I was hoping for but couldn't deliver on converting

Don't take my word for it though – trust the data. Over 50% of my patients select me as their provider through Google or Social Media sites, and another 10% come from existing patient referrals, typically in the form of their social media posts and recommendations. Patients will naturally flow to the practice with the most compelling and cohesive online presence across multiple platforms. Make sure that it's yours!

our online presence into real-world patient flow. Another could prove that they were helping us get patients in the door, but their content felt pushy, salesy, and over-produced. Furthermore, despite having "outsourced" this task, all the groups we worked with still required a significant amount of my personal time and effort to capture the content. It got the point that my team and I would literally spend more time posing kids for a boomerang and figuring out which tik-tok dances they knew than we spent doing actual treatment! I was still easily spending 10 hours a week on my social media responsibilities despite paying outside groups a great deal to take over our social content for me.

After over two years of searching for the perfect team to take over our social media and hundreds of hours on my end spent managing our social media efforts, we have finally found a local producer and storyteller that we are incredibly happy with. First and foremost, they have taken a tremendous amount off my plate. Our practice's social media journey is ongoing and ever-changing, but I do see the rewards in my everyday practice. Patients are excited to see what new photo booth backdrop we have each month and

take pictures together at the end of the appointments. Countless parents let us know they selected us as their provider because of our stellar google reviews or because they saw that we sponsored their school on one of our social media posts. Local businesses support us as much as we've supported them. We have been able to establish ourselves as a pillar in our community by becoming a recognized and trusted brand, a reliable oral health expert, and by creating a presence that has allowed us to be available to our families in person and online. We couldn't have done this without building our reputation online.

Many of you likely share my sentiment that social media is 100% necessary but can be an overwhelming and exhausting part of our dental practices. The thought of becoming the next tik-tok dancing dentist sensation seems more like a prison sentence than a career ambition. Though we cannot deny the importance that social media plays in our culture and for our practices, I do encourage you to keep searching for the perfect team to outsource this part of your marketing efforts, help your practice grow, and minimize the burnout.

Tips on How to Minimize the Burnout & Ethically Outsource your Social Media Efforts:

- Look outside the main dental agencies for support. In the end, we found a local Austin videographer and storyteller that had no previous dental experience but is very social media savvy and understood our vision for the practice. Because she is local, she can come into the office on a regular basis to help gather content and has been able to spend much more time with us than any of the dental focused agencies we've used.

- Understand it's still not going to be 100% hands off. Even after you've found the perfect fit, a good agency is still going to rely on you and your team to get content for the posts. Stock photos simply are not engaging or successful. I've successfully started delegating this role to my team members with the help of a shared google drive. To protect our patients and content, we upload all photos and videos into the drive at the end of the day and immediately delete them from our devices.

- Remember compliance. Have a plan in place for your team

Social Media Burnout & Ethically Outsourcing the Stress

Alexandra Otto, DDS, FAGD, FACD

about what is ethical and appropriate and make sure to review privacy and HIPAA compliance policies. It is still the owner's responsibility to make sure appropriate photo and/or video releases are signed, and that no patient-identifying information is included without explicit consent. Our video and photo consents are built into our new patient paperwork and my team also directly asks parents if they are comfortable with us taking a photo or video for us to share online. If they say "no" we create patient alerts in their chart to ensure that photos and/or videos are not taken.

• Have the final say in your posts. As much as we trust these agencies and individuals to use their best judgement, they are not necessarily bound by the same ethical and professional standards to which we hold ourselves. Several of the groups we worked with tried to post photos of our actual patients along with captions of conditions or procedures that may have a negative connotation. No one wants their child to be the example for "rampant baby bottle caries!" It is up to us to set our boundaries and expectations about what is reasonable and ethical to post. I had to be clear that anytime we make a post related to an issue or condition that may be perceived in a negative way, they should choose a photo of our office or of myself instead of an actual patient. Our agency sends us content to review a month ahead of time so that it is done all at once and is more manageable for me.

• Be prepared to pay a pretty penny. Our marketing budget may make some of you feel queasy. Social media management is a booming industry and outsourcing this to someone comes at a cost. These agencies spend a tremendous amount of time researching topics, following the trending hashtags and accounts, responding to reviews and comments, sharing and engaging with followers and the community, and so much more. You get what you pay for.

• Quantifying results on social media is not easy. Even the best agencies have a hard time quantifying that a specific post or ad resulted in an exact number of new patients, despite their promises to do so. In reality, a patient likely selects your office after scrolling past your Instagram ad a few times, seeing a friend post about you on a Facebook mom's group, reading your google reviews, driving by your office sign, and then finally clicking on a link to your website from a Google ad. You've got to be everywhere, all the time, and it takes a multi-platform approach to be successful.

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Cultivating Dental Students into Educators Through the Use of Social Media

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The popular use of social networking platforms as a means of human connection is transforming the way information is shared within masses such as the general public, as well as between masses, such as the general public and the healthcare profession.[1-6] Social networking platforms include any web-based or mobile technology that allows for collaboration and sharing of information and opinions through text, images, videos, comments, etc.[2,3] WhatsApp, Instagram, and Facebook remain in the top 5 most commonly used platforms around the globe.[7,8]

In dental education, the concept of using social networking platforms to educate the public or even target audiences such as people who use tobacco or disabled people is in infancy. However, as an educator, it is important to recognize the powerful role social networking platforms have on today's student, resident, and new healthcare professional.[3,4,9] Today's student, resident and new healthcare professional identify their online profiles as experts in healthcare. Therefore, it is important to train them to effectively utilize social media to create accurate and effective content that they are posting to the public. More importantly, as educators, we could train while also using it to reinforce the students' knowledge and understanding.[10]

Learn By Teaching

Research has shown that individuals who teach gain a better understanding of their subject matter.[11-13] Therefore, it is logical to hypothesize that one way to measure the depth of a student's knowledge is to provide assignments where they teach others.[3,10,14] Real life observations already show that students in higher education programs are "social media influencers" who are sharing information on social media and reaching tens of thousands of people.[6]

Furthermore, it is important that we serve as trustworthy sources of the dental information that is being disseminated throughout the world.[4,6] As educators, it is import-

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Mai-Ly Duong, DMD, MPH, MAEd, MAGD, FACD, FICD, FSCD, FPFA

ant to acknowledge how influential social media is in today's society.[2,3,4,9] We need to stress to our students the important role they play and the duty/responsibility they have should they choose to participate in educating others through social media, they need to understand how to do it effectively and accurately.[3,6,10,14]

Developing Educators, Not Just Doctors

Graduates of dental schools can trust that their CODA-accredited schools will teach them the skills to be compassionate, skilled dental health professionals in the community. However, not every dental school provides education to develop the skills in language, communication, and information dissemination.

In today's world, one of the most popular arenas to disseminate information is online, more specifically on social media platforms with which students are already actively engaged.[2,3,4,9,10] Therefore, it is an interesting avenue to harness the informal skills that they already have in creating content and help encourage students to use their skills and develop their skills into creating professional and engaging content that can help them educate more people while reinforcing their knowledge as well.[2,3,4,14]

Simple assignments that involve creating educational content to measure their knowledge in the classroom and encouraging them to format their knowledge in a way to deliver to the average layperson can be an interesting way to measure their knowledge, a fun way

for them to apply their knowledge, and an indirect way of encouraging them to contribute reliable, accurate information into the world.[3,10,14] Therefore, they are not only doctors in the clinic or dental office, but they are also building their voice in the greater community.

In the Classroom

While there is very little evidence for the use of social media as a means for dental students to learn by teaching, there are some in other healthcare arenas.[2,3,4,9,10] This prompted the idea of including social media assignments to the 2020 and 2021 coursework for the Evidence-Based Dentistry and the Special Care Dentistry modules at the Arizona School of Dentistry & Oral Health for the second-year dental students for many reasons. The first reason was to obtain anecdotal feedback and gauge interest in this type of learning.[10] Secondly, it was an opportunity to provide an introductory level of guidance on writing and creating informational messages for the greater public.[2,3,10] And thirdly, it was an opportunity to help students understand the importance of their voice and how it can influence the greater public.[2,9,10]

Both courses required the students to work in groups and create an infographic regarding an assigned topic for the respective course. Prior to creating the infographic, students were given training in using an online media creation platform called Canva where they could use templates and drop in information and images. This training was followed by key concepts from the

CDC's Guide to Writing for Social Media.[16]

After the students created their infographic, they were required to splice the infographic into smaller square-shape images to create an Instagram carousel post or to create an Instagram story on one of the students in the group. They were only required to keep the graphic open for the public for 24 hours and afterwards, they were allowed to delete the post if they desired.

Some samples of student work are as follows:

From course review, some of the student feedback regarding the infographic assignments:

- *In order to do the assignment, I had to think of the best words to use for a layperson. I am more used to trying to use more sophisticated words or complex sentences in my class essays. This was different and fun.*

- *I really liked how my friends and followers enjoyed reading my infographic that I posted. My friends and family don't get to see many of the assignments I do in class. So that was neat.*

- *I wish we had more time to get used to the creation platform so we could do better with our infographic. I really wanted to create something useful and important when I knew that it would have to be posted for the public to see.*

THE THREE COMPONENTS OF EVIDENCE BASED DENTISTRY

GROUP 1: JONATHAN ABRAMS, SHIVANI GUPTA, JORDAN NOLAN

BEST SCIENTIFIC EVIDENCE

WHAT EVIDENCE IS OUT THERE?

FIND CLINICALLY RELEVANT SCIENTIFIC EVIDENCE THAT IS RELEVANT & RECENT THAT PERTAINS TO THE TREATMENT YOUR PATIENT NEEDS.

EX: FINDING SCIENTIFIC EVIDENCE ON THE BENEFITS OF AMALGAM VS. COMPOSITE

CLINICAL EXPERIENCE

WHAT AM I GOOD AT?

BASED ON THE PROVIDER'S PERSONAL CLINICAL EXPERIENCE

EX: COMPOSITE IS MORE ESTHETIC COMPARED TO AMALGAM

PATIENT VALUES

DOES THE PATIENT HAVE A PREFERENCE?

WHAT DOES THE PATIENT VALUE, OR PREFER WHEN IT COMES TO DIFFERENT TREATMENT OPTIONS

EX: PATIENT VALUES ESTHETICS OVER DURABILITY

Statistic Terminology

What is SAMPLE SIZE, POWER, and POPULATION?

Group 17
Ashlee Spann
Austin Larson
Joshua Clark

Sample Size

Represented by variable 'n', the sample size is the total number of subjects participating in the study. A fraction of the whole population. Sample size should be large and representative of the overall population being studied.

Power

Power or sensitivity is the probability that you will reject the null hypotheses. Power is also the probability that a test of significance will detect the presence of an effect.

Population

Population is the entire group of distinct individuals. The population is the group from which the sample population is drawn from.

EXAMPLES

Sample Size

There are 100 new dental school graduates and there is a study interviewing them what they will do after graduation. All 100 graduates cannot be interviewed, so a select sample size that is representative of the entire 100 is interviewed and results can be extrapolated to the whole 100 graduates.

Power

If a study looking at the effect of fluoride toothpaste on caries prevention has a 60% power, this means that the results would have a 60% chance of having statistically significant results.

Population

A study seeking to determine stress levels of 75 dental students a part of the class of 2025 attending Arizona School of Dentistry & Oral Health was conducted. The results concluded there as a score of 1-10, 57 of the 75 dental students stated they experience a 7 on a weekly bases. 6 students stated they experienced a 5 on a weekly bases, 2 student reported a level of 2, 3 students reported a 10, and 8 students reported a mean level of 9. The original 75 dental students is the population.

Information source: https://www.statisticshowto.com/statistical-power/ https://www.keydifferences.com/difference-between-mean-by-sample-size-and-power/

COMMUNICATING WITH INDIVIDUALS WITH AUTISM

Be aware of your mood

Individuals diagnosed with autism are hypersensitive to other's moods and behaviors. Nervousness or tension can be picked up on very easily and the individuals with autism may respond the same way. Thus, by feeling relaxed and confident it can calm the pressure off of everyone and ease the situation.

Smile & Make eye contact

Every child with ASD is unique in their ability to interact and communicate with others socially. Many have trouble with common social cues and find it difficult to interpret non verbal communication. Therefore as a provider it is often helpful to establish eye contact and smile while talking to a child with ASD.

Be non-judgemental

When encountering someone with autism, be non-judgemental! Show acceptance through kindness, compassion, and empathy.

Age appropriate conversation

When speaking to those with autism (both children and adults) do not talk down to them.

Positive Speech

Everyone deserves respect and acceptance. Speak in concise, simple language. Use words of praise and positive reinforcement. Let the love flow!

www.autismspeaks.org

Learn more at realfychoutome.com

ORAL HEALTH AND AUTISM SPECTRUM DISORDER

Autism Spectrum Disorder (ASD) is a complex developmental disability that impairs communication and social, behavioral, and intellectual functioning.

General Characteristics

- The prevalence of ASD has increased dramatically in recent years. The Center for Disease Control(CDC) estimates that 1 in 110 children under the age of 8 have an ASD.
- Social interaction
- Communication
- Repetitive behaviors or restricted interests

Oral Complications

- Bruxism (20 -25%)
- Non nutritive chewing
- Tongue thrusting
- Self-injury (picking at gingiva, biting lips) creating ulcerations
- Erosion (many caregivers report regurgitation medical consult may be indicated)
- Caries - similar to general population
- Poor oral hygiene
- Limited dietary preferences (exclusively pureed foods, no fruits/vegetables, etc)

How to manage patients with ASD

- Tell-Show-Do
- Desensitization
- Voice Control
- Home-based Preparation
- Positive Reinforcements
- Parental Presence
- Protective Stabilization
- Nitrous Oxide for cooperation

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Every dental student commits to the Oath to the Profession at their White Coat Ceremony when they first begin dental school and again when they graduate dental school. This oath is a commitment to being a steward of the influence we have as an expert in this profession.

Be A Steward of Your Voice

Every dental student commits to the Oath to the Profession at their White Coat Ceremony when they first begin dental school and again when they graduate dental school. This oath is a commitment to being a steward of the influence we have as an expert in this profession. Therefore, it is important that as a dental health professional, the information that is shared and disseminated be delivered in an ethical, moral, and honest manner.[2,3,4,5,9]

The CDC's Guide For Social Media is an incredible resource that provides an overview of how social media platforms such as Facebook and Twitter can be used by healthcare professionals as well as guidance regarding the use of plain language, useful and interesting images, and examples so that health care professionals who

Cultivating Dental Students into Educators Through the Use of Social Media

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Social media is a powerful tool that can be used for good or bad. By incorporating the use of assignments using social media, we are not only helping our students learn by empowering them to teach others while in dental school, but we are also helping train the next generation of dental health professionals who can enter the world with the skills to effectively communicate and educate the greater public beyond the dental office.

wish to serve as educators and influencers on the greater public can be effective voices in their messages.[16]

Utilizing plain language is of the utmost importance when communicating with the greater public.[16] Healthcare professionals can often complicate or exacerbate existing health literacy problems by using words or presenting information that makes it difficult to understand. Therefore, common mistakes such as using dental jargon, scientific or technical phrases, or long explanations can be avoided by using short sentences that encourage action, using familiar and simple terminology, or using simple analogies to build understanding.

Emphasize small, practical steps. Offer concrete examples of successful action steps.

Example of an encouraging message

GOOD EXAMPLE: You can live a healthy, tobacco-free life. The first step is deciding to quit. Set a quit date and mark it on your calendar.

WEAK EXAMPLE: People who use tobacco are more likely to develop disease and die earlier than people who don't use tobacco. Quit today.

The use of images should be related to the text that is in the caption of the post. It is crucial for the creator

Example of a time-relevant Facebook post

CDC

Celebrate this 4th of July by declaring freedom from nicotine addiction. Learn how today's cigarettes are even more addictive and how you or a loved one can quit.

Freedom from Nicotine Addiction

CDC – Tobacco Control Events Calendar – July – Declare Your Independence – Smoking & Tobacco Use
www.cdc.gov
Independence Day theme related to the damaging health effects of smoking and secondhand smoke.

(healthcare educator) to ensure that they do not infringe on any copyright or licenses of images. The best way to ensure that there is no copyright infringement is for the creator to own the images they post. This can be done by purchasing stock photos or capturing the photos themselves. However, another way to use photos that the creator does not own is by obtaining permission directly from the owner of the photos or by using images with the appropriate creative commons licenses. There are courses for creators on how to utilize media and materials that have copyright.

The CDC also includes several good and bad examples of social media posts that can help health care professionals/creators begin to create and craft messages that are appealing, effective, and attractive for the greater public.[16] Here are some examples:

GOOD EXAMPLE:
10 tips for keeping your independence when suffering from memory loss, Alzheimer's, or dementia: go.usa.gov/XYZ
(At 111 characters, this message provides room for RT—retweet—or a hashtag or @ mention.)

WEAK EXAMPLE:
We're offering you 10 practical tips for keeping your independence when you suffer from memory loss, Alzheimer's, or dementia go.usa.gov/XYZ
(At 140 characters, this message should be edited for conciseness to be shared on Twitter.)

Conclusions

Dental students are the next generation of dental health professionals. They are entering a world where information is readily available at the fingertips of everyone and anyone. They will be competing with messages that may not be as accurate or dependable as what our dental stu-

dents know. It is vital that they have the skills to communicate, to combat inaccurate information, and to inspire positive change in the people with whom they interact.[4]

Social media is a powerful tool that can be used for good or bad. By incorporating the use of assignments using social media, we are not only helping our students learn by empowering them to teach others while in dental school, but we are also helping train the next generation of dental health professionals who can enter the world with the skills to effectively communicate and educate the greater public beyond the dental office.

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"The only problem with the internet is that you can't believe everything you see there."

– Abraham Lincoln

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