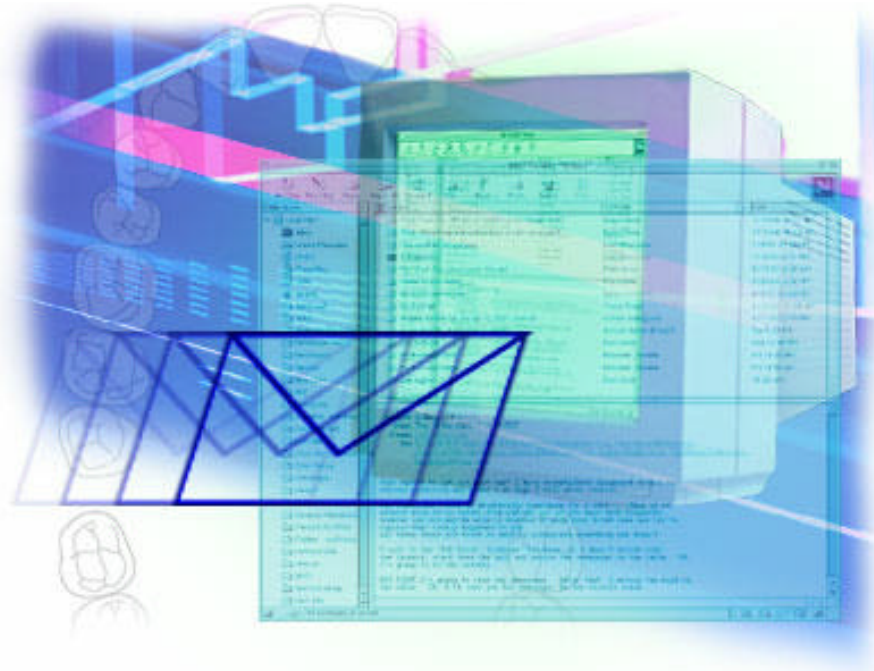


E-mail: A New Management Parameter

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Abstract

E-mail is an increasingly common way to share information within business communities and the general population. This technology can significantly affect the process of and expectations for communications between the clinician and the patient. The unique characteristics and attributes of computer-based communications can ultimately enhance outcomes for patient well-being if the clinician is informed, proactive, and avoids certain potential pitfalls related to the technology and its inclusion within the pattern of care.

In this article the author considers the impact of E-mail on personal and professional life and includes ideas the reader may find of value in managing and orchestrating this new dimension for communications.

Keywords: E-mail, "spamming," Electronic Communications Privacy Act, ECPA, HIPPA regulations

Introduction

As the general public increasingly embraces the world of E-mail communication for both personal and professional conversations, E-mail is woven into the fabric of everyday life. For many, E-mail literally reaches across the globe to family, friends, and colleagues. Using the Internet, we connect to others, anywhere, anytime. The impact of E-mail on our lives can and should be incredibly productive and serves to enhance value in personal, professional, and business environments.

The Burden and the Benefit

As a communication tool, E-mail affords the user significant powers. Similar to the telephone it allows instantaneous delivery of information. However, unlike a telephone, it is never busy, does not require someone to answer, and allows access for minimal or often negligible cost. E-mail communication can also be managed asynchronously and responded to at the convenience of the recipient. Phone systems require voice-messaging services (often at increased cost) to provide similar functionality.

Although E-mail is transmitted in a similar manner to a telephone message, it can be better documented. Like postal mail it requires a unique address for both the recipient and the sender. Unlike postal mail, it is easily susceptible to interception or modification without the knowledge of the sender or the recipient.

E-mail can also be printed. This is an important convenience for practitioners using E-mail to manage patients and maintain a written patient treatment record. Because the functionality of E-mail depends on using the Internet, copies and records of the messages also reside on servers. Although the E-mail may be deleted from your computer, the electronic version will survive. Therefore, a user can neither deny sending or receiving a message. Because many copies of the message exist in many different environments as the message is transmitted over the Internet, E-mail also has the capacity to be shared (and viewed) beyond the immediate or designated recipient. Because E-mail is used to stay informed, stay in touch with others, and enhance the effectiveness and productivity of the workplace, many view their initial introduction to E-mail as exhilarating and exciting. This excitement

may be short-lived as overwhelming numbers of messages can, at times, arrive daily in the E-mail inbox. Often these messages are unsolicited and have little or no value. Worse yet, they all may require an immediate response. In this situation, dealing with E-mail is essentially like taking out the garbage or shoveling snow. It never ends and just keeps piling up until you do something about it.

Overwhelming, unpredictable, and unprecedented information overload is the true culprit. Modern society welcomes technology in an effort to increase efficiency and effectiveness. All too often, however, it finds itself drowning in a flood of useless knowledge. Information overload may come from commercial vendors using intelligence agents and data mining techniques in marketing to users and potential customers (e.g., Doubleclick.com). Innocent excess may even flow from the individual who makes it a mission to inform everyone about every detail of every aspect of every event with the simple stroke of the "Send" button.

Broadcast Potential

The broadcast potential of the E-mail message is enormous. Consider the case of Ms. Forrest's fifth grade class at Taylorsville Elementary School in North Carolina. Their curiosity initiated an experiment to see where in the world their E-mail would travel. The project "Geography Alive: Around the World with E-mail" started with the school's computer lab assistant sending copies of the E-mail to 32 people in her address book. A note asked these individuals to send the information to everyone they knew online. Within an hour they heard from Texas, a couple of hours later Japan. In less than 30 days there were over 7 million responses to the initial E-mail from all 50 states and over 70 foreign countries.¹

The impact and potential power of geometric progression facilitated through technology is profoundly demonstrated in this example. There should be little doubt as to why marketers in the electronic world place such high value for electronic information networks. There is no other vehicle where marketers can generate such a vast connection with potential customers. Many states have instituted legislation that strictly regulates the use of "spamming" or broadcasting unsolicited E-mail in order to protect the public from an onslaught of unwanted advertising.

Rules of The Road

Solving time management needs for online resources on a personal level doesn't conclusively



address the bigger picture of functional (or dysfunctional) use of telecommunications. Effective utilization of E-mail for both business and personal functions extends beyond strategies that

relieve the congestion of the inbox. Because E-mail directly connects to the world at large, there are certain caveats and conventions that should be observed to better protect all E-mail correspondents.

Effective use of rules of the road for E-mail requires using common sense and self-discipline. Charles Bermant, a writer for the Seattle Times, offers a thoughtful list of E-mail etiquette rules for online communication:

- Guard your E-mail address
- Get a Web based mailbox (e.g., hotmail)
- Don't share messages with shocking content
- Value your message (don't communicate excessively)
- Don't use the priority tag
- Don't reveal too much
- Respect the recipient
- Pay attention to (and effectively use) the "cc" and "re" lines
- Don't forward canned messages
- Say thank you

For a complete and unedited listing of E-mail Etiquette, access <http://seattletimes.nwsources.com> under "Personal Technology."¹²

The Dreaded Virus

Viruses are small computer programs that nefarious computer users send over networks with the intent of reaping havoc on users of E-mail. As a result, one should always take precautions when opening E-mail. It is advisable to exercise special caution before opening an attachment to an E-mail message from an unexpected, or an unknown source. Because virus attacks are increasingly frequent and sophisticated, it is not uncommon to inadvertently open an infected attachment, corrupting your computer and then unwittingly sharing the same fate with family, friends, and business contacts via subsequent E-mail communication spreading the virus. The more wide of E-mail becomes, the more potential exists for spreading computer viruses if caution is not exercised. Inexpensive anti-virus software programs are available (and recommended) to protect your computer against a virus attack and to repair files that may have been damaged by a virus (e.g., McAfee, Norton Antivirus). Some online E-mail sites (e.g., hotmail) scan all messages sent and received within their site with anti-virus software and, therefore, protect their users' systems from importing "corrupt or tagged" data.

To learn more about the potential of virus/worm attacks to ruin computer systems, refer to McAfee, Symantec, and other virus bulletin boards (e.g., <http://www.virus-btn.com/>).



E-mail Communication and Patient Care

While most clinicians still use postal mail and the telephone to manage both patient and inter-professional communications in their dental practices, one to two percent of health practitioners have started to use E-mail for professional connections with patients.³ More commonly, practitioners are starting to use E-mail to communicate with their colleagues. As the use of E-mail becomes more common in the office environment, practices should consider including the disposition of E-mail in the established and documented security policy of the office.

Practitioners are also discovering the need to use the Internet to find and market to the "new consumer" of the 21st Century.⁴ Just as telephone came to the forefront as the convenience of the 20th Century, the landscape of technology utilization is migrating to new communications technologies for the 21st Century.

Clinicians may find complexity and frustration play a large part of their E-mail experience. Ironically, E-mail lurks as one of the most "time-devouring time-savers" of all time. It is so effective to "connect," using E-mail has progressed to where it borders on counter-efficiency. E-mail takes on a life of its own and can overwhelm the activities and needs we once hoped it would sustain. The question is one of how to describe and implement solutions that tame the dragon.

Change the Rules

Effective measures can be taken to prevent the glut of E-mail information overload. Unfortunately the answer is not simplistic when taking strategic needs and responsibilities into account. This is especially true if professional interactions rely on electronic communication. Patients and physicians have certain rights and expectations when they communicate electronically. The practitioner who uses electronic communications should strictly adhere to privacy and confidentiality requirements as mandated by federal and state law and other regulations. Equal attention should be paid to exercising common courtesies and conventions traditionally used in conventional communications. For instance, the courtesy of a reply is a must. Cyberspace can be a wasteland of dead-ends and replies ignored because of missed and overlooked connections or information overload; so, the effective practitioner must engage effective protocols to effectively deal with such variables. Specific initiatives and strategies initiated in resolving these issues might include:

Divide and Conquer. Use folders in the E-mail software to divide content into more cognitively discernable and functional entities. Try establishing a dozen or so useful categories and set up folders for each of these groups. Move each meaningful message into an action-oriented group and expedite needed actions.

Don't Procrastinate. Deal with messages punctually. Sort the mail and answer what you can immediately. Keep the inbox small. Reduce the angst.

Use Routing Filters. Electronic filters can be used to automatically route specific types of E-mail messages to appropriate holding folders. For instance the subject line of incoming E-mail from patients can be set to read "patient E-mail." Software products such as Eudora or Outlook can file the message directly into a folder set up for that purpose. This can save time otherwise required to just sort messages based on the nature of message content.

The Delete Function. If the value of a message is not immediately clear, delete it. Revisit the delete folder later if it turns out to be important after all.

The Doctor is Out. Don't stay online continuously. Real E-mail junkies using an instant messaging service should give it up.



Remaining connected all the time generates more E-mail that others feel obliged to answer. This grows the quantity of unneeded E-mail. Save energy for the really important messages. Establish behavior (or a policy) that fits your needs and stick to it.

Sort the Wheat from the Chaff. Use the advantages offered by E-mail programs. Sort and delete messages by the correspondent. Often times the information can be superfluous. Eliminate by reviewing the sequence of messages in context of the overall conversation. Flag the important messages that require more scrutiny during the process. Keep on track. Using the preview pane to instantly view content without actually opening the correspondence. This saves time, but beware, using the preview pane can make your system more susceptible to attack by an E-mail virus.

Multiple Addresses. Use different mailboxes based on "business." For instance, a personal E-mail address should be exclusive and different than the E-mail address for a practice. This also allows using a division of labor by assigning a staff member to review and sort E-mail correspondence from patients, colleagues, and other business contacts.⁵

Add Functionality. Use intra office E-mail to augment your communications within the office. Some messaging systems (e.g., <http://www.pinknotes.com>) allow staff and practitioner to stay connected continuously throughout the day online. For those with integrated computer systems in the office this is a wonderfully progressive alternative to a light system or using "sticky-notes."

Special Healthcare Considerations

These rules form a framework for online solution-oriented behavior. As a healthcare practitioner using E-mail for patient conversations, be informed and follow strict guidelines. Sharing personally identifiable healthcare information online with individuals or colleagues requires protecting the privacy of the individual's information. As discussed in the previous article of this series,⁶ federal legislative regulatory code addresses the privacy expectations of patients as they apply to the healthcare industry through the newly promulgated HIPAA regulations (Health Insurance Portability and Accountability Act of 1996).⁷

E-mail can be very useful to address patient communication issues. Often, some characteristics inherent in the traditional office-based dental practice leave patients "wanting more." Electronic contacts with practitioners can be less intimidating for some patients than in-person, face-to-face conversations. This technology certainly supports a "one-on-one" virtual opportunity to seek information and understand its implications for personal health outcomes.

Privacy is an issue in the day-to-day routines and protocols of healthcare. While increasing numbers of patients seek health information online, the practitioner must understand the implications for dental office practices and adapt protocols to address requirements and inform patients. The doctor-patient relationship implies certain expectations of privacy. New legislation (HIPAA) extends that responsibility to due diligence as information is shared outside of the doctor-patient relationship.

A cavalier attitude on the part of the clinician toward the use of E-mail for patient communication should be avoided. E-mail by definition is included as "all communication that is generated by or about the patient, including any photographs or imaging, is part of the medical record."⁸

As described by Attorney A. Spielberg writing in the Journal of the American Medical Association, "Medical E-mail represents a lasting record of healthcare provider judgment and patient response and the reporting of symptoms. Accordingly medical E-mail sent in a medical relationship, or generally in the course of treatment, should be drafted with care and composed as a formal written document on a professional letter-head. Furthermore, as a precaution, the provider's preferred method of communication should be noted in the medical record, along with relevant telephone numbers and E-mail addresses that the patient has specifically endorsed for use by healthcare practitioners for medical purposes."⁹

With the use of E-mail as a facilitator in healthcare practice, the patient needs to be informed about the level of privacy and confidentiality they might expect as their data is shared over vast institutional and private databases. Spielberg offers specific remedies in her paper for the American Medical Association. She says, "Medical E-mail should only be used after a patient has been informed of potential risks and benefits and signed a "E-mail consent" form. Despite arguments that a physician may infer consent if a patient initiates E-mail contact, physicians should not assume that patients who use E-mail in other settings understand the implications of its use in the medical context."¹⁰

Additional concerns include the interception of E-mail containing medical data while transiting the Internet. Generally, the Electronic Communications Privacy Act (ECPA) of 1986 precludes the interception of data as it flows across a distributed network. However, because of the nature of the Internet and the server-router configurations, static data is not protected by the ECPA. It is subject to archive and inspection by the transmitting service while it is housed or stored on their domain.¹¹

In dentistry, these protections may seem excessive and overwhelming to implement. However, by taking the specific steps recommended by experts and required by law, the practitioner can illustrate concern for the patient and their right to a professional and confidential doctor-patient relationship.

Conclusion

Using E-mail offers significant advantages in efficient communication. It can become burdensome if not managed properly. Special attention to legal considerations is required if E-mail is used by healthcare professionals to communicate with and about patients. By using common sense and forethought, E-mail can contribute productively to both professional and personal needs.

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