Resource Document on Telepsychiatry and Related Technologies in Clinical Psychiatry

APA Council on Psychiatry & Law

Special Acknowledgment

Patricia Recupero, M.D., J.D. Carl Erik Fisher, M.D.

Approved by the Joint Reference Committee January 2014

The findings, opinions, and conclusions of this report do not necessarily represent the views of the officers, trustees, or all members of the American Psychiatric Association. Views expressed are those of the authors." APA Operations Manual.

Abstract

The goal of this resource document is to address the major areas of the use of the internet in communication with patients and the public in the practice of psychiatry. The rate of change of technological capabilities and their implementation is so rapid that the workgroup believes that it would be inappropriate to promulgate fixed rules for constantly changing situations. Rather, we seek to provide some questions to be considered when implementing any new communication technology with patients or the public. This document seeks to address professional use of the internet and does not discuss issues related to psychiatrists' use of social media and social networking sites such as Facebook or Twitter. In order to assist the practitioner, references to resource materials will be given. However, the reference is not an endorsement by either the APA or the members of the work group of the material contained therein.

As with the addition of any relatively new technology, there are complicated legal and ethical issues to consider, and it is beyond the scope of this resource document to provide an exhaustive list of the relevant concerns. This document aims, instead, to provide a general introduction to the use of the internet in clinical psychiatry, to identify some of the key issues arising from the debate, and to provide some starting-point resources for physiccians and other practitioners who may be interested in learning more about this developing area in health services. We expect that the prudent practitioner will use this document as a starting point only and that a more thorough investigation or research effort will be conducted before acting. The role of the internet in medicine is an unsettled area of the law. There are few specific appellate court rulings on these issues. Often, reasoning from analogy is applied. The legal implications suggested herein may not be applicable in any or all jurisdictions. This resource document is not intended to be construed as a clinical practice guideline, nor to define a standard of care.

Introduction to the Available Technology

Technology changes rapidly in today's world. This resource document does not aim to address every relevant technological or internet-related concern in clinical psychiatry. Instead, the discussion seeks to address some of the more frequently asked questions, specifically regarding the use of e-mail, medical practice websites, and e-therapy.

Telemedicine

Telemedicine typically refers to the use of telecommunications technology to assist in the practice of medicine. In psychiatry, the practice is often termed telepsychiatry. Telemedicine is a broad term that encompasses a variety of physical or psychological treatments at a distance, including, for example, remote computer-assisted surgery, teleconferencing, and videoconferencing. Videoconferencing by internet requires that both the provider and the patient have access to webcam technology and an internet connection. In videoconferencing, both the physician and the patient are able to see one another as they chat. They can chat using their voices (which requires that both parties have microphones and speakers) or through textbased instant messaging. From the psychotherapeutic perspective, because therapy via videoconferencing sends the patient and the practitioner a live video image of the other participant, it may be more similar to traditional psychotherapy than other (e.g., text-based) forms of etherapy. However, the nature of electronic communication adds unique risks to this form of therapy that are not present in face-to-face communication, which are discussed below.

Websites

Websites are collections of electronic pages on the internet. A medical practice website is an online resource that provides a convenient mechanism for a physician to communicate with patients and the public. Developing a web presence is an effective way for a physician to provide new and existing patients with administrative information about the practice as well as links to credible healthcare information on the web. Medical practice websites can be classified according to their scope and purpose into basic and interactive sites. A basic website might include the following: an introduction to the practice's care philosophy; physician's bio, CV, and photo; services and procedures summary; contact information; office hours; maps and directions; a list of insurance participation; hospital and professional affiliations; a privacy policy/ disclaimer; medical news; and patient education resources. An interactive website may also include: secure patient and physician log in; secure messaging capabilities; secure bill paying; and a secure system for fee-based online consultations.

Providers may also use third-party websites, many of which provide interactive functions. For example, some online scheduling services allow patients to book appointments on-line. There are also "cloud-based" medical record websites (i.e., web-based services in which records are kept on-line), which may also have interactive functions that enable patients to rate their physicians or to access their medical records.

E-mail

E-mail can be a versatile tool for psychiatrists. Some physicians use e-mail to communicate with patients (physician-patient e-mail), while others choose to use email only for non-clinical matters, such as discussions with colleagues. Issues to consider vary depending upon the way that e-mail is used. Before a psychiatrist considers email correspondence with patients, the psychiatrist should be familiar with the emerging laws concerning the internet and medicine, particularly with respect to HIPAA regulations and current standards of data protection (e.g., encryption, firewalls). Data protection methods will be addressed further in this resource document.

E-therapy

E-therapy refers to the provision of mental health services online (through the internet). Related terms include cybertherapy, teletherapy, internet counseling, online counseling, and so forth. Among the most common technologies utilized in e-therapy services are live (realtime) videoconferencing, e-mail, instant messaging (IM), chat rooms, and discussion groups through e-mail- or web-based message boards. Despite earlier debate among mental health practitioners about the efficacy of e-therapy, trials comparing e-therapy to traditional psychotherapy have generally found that the efficacy of e-therapy is comparable to traditional, face-to-face therapy (for a partial listing, see bibliography at the end of this document).

One of the most complex issues involves the question of what constitutes the provision of e-therapy, as opposed to other types of physician-patient contact online. At what point does an e-mail from a physician become therapy? The easiest way to gain an understanding of the difference between physician-patient e-mail and e-therapy is to examine the limits of physician-patient e-mail. In physician-patient e-mail, the contents of messages between a physician and a patient are normally restricted to minor "matters of business," such as prescription refill requests, appointment confirmations, and similar issues. These e-mails are similar to the messages a patient may leave with a doctor's office staff when the doctor is not available.

In the case of e-therapy, however, the content of the communications is significantly more psychological. Some form of counseling, advising, or other therapy generally takes place. E-mails that delve into areas of the patient's personal life, emotional issues, or even advice may be considered a form of e-therapy. A physician must be careful to ensure that both the provider and the patient are in agreement regarding the nature of their relationship (e.g., is the physician-patient relationship in place, or is this an unsolicited inquiry from a prospective patient?). As a general rule, any individual providing e-therapy services should also be a qualified and licensed practitioner for face-to-face services. The potential anonymity of internet communications does not reduce professional or ethical obligations. On the contrary, the use of the internet creates for the physician an additional set of responsibilities associated with the risks and benefits of the technology and its novelty.

Instant messaging and chat rooms

Instant messages, or "IMs," are very similar to e-mail. Whereas in e-mail a sender may wait hours or days for a reply, in IMs both parties are receiving and sending messages at the same time. In this sense, it is similar to a phone conversation, but parties are typing and sending text messages rather than speaking to one another. The provider and patient typically must set an appointment for this type of communication. Many instant messaging software packages enable features such as file sharing, webcams, and audio or "voice chat," in which the clinician and patient (provided each has a microphone and speakers) can talk as if on the telephone.

Live chat rooms are similar to instant messages, but in a chat room, more than two parties are able to chat. Live chat rooms could be used for forms of group therapy, and instant messaging may be used simultaneously to exchange private messages between participants. Unlike face-to-face group therapy, the combination of instant messaging and chat rooms allows members in the group to direct private comments to the therapist or to one another during the group discussion.

Numerous instant messaging applications are available for free downloading or access through websites. Because privacy policies and security features may vary from one application to the next, it is important to read thoroughly the "terms of use" to which one must agree prior to using a particular program. Some medical practice websites have instant messaging and chat room capabilities.

Texting and mHealth

Recent years have witnessed a dramatic increase in publications about applications for texting and mobile phones (including smartphones) in healthcare. The convenience and improved technology of portable electronic devices has led to a significant shift toward mobile computing and away from the traditional desktop personal computer, at least among consumers. Many individuals now access the internet primarily through mobile phones or tablet computers, and this trend appears to be increasing. Potential applications for texting and mHealth (health applications via mobile phones) are numerous and constantly expanding, as developers roll out new health "apps" (applications) on nearly a daily basis. With new apps come new opportunities as well as new risks. Providers interested in using mHealth applications or texting with patients would be well advised to stay current on the emerging research and should take special care regarding the security and legal implications of these new technologies. It may be advisable to consult with one's liability insurance provider, information technology providers or staff, and/or a legal professional prior to initiating the use of such applications with patients, as the relevant risks and security considerations are continually evolving and changing.

Technological Safeguards and Risk Management

Fortunately, there are many affordable technological measures that can increase the security of electronic communications. If the physician chooses NOT to use any of these security features, the decision not to use them should be discussed along with other risks in the informed consent process. To avoid liability, however, it is not advisable to practice e-therapy or telepsychiatry if one does not have the appropriate technology to ensure reasonable security, confidentiality, and privacy. The informed consent discussion should address not only security risks and safeguards, but also the clinical and practical drawbacks and alternatives, as discussed elsewhere in this document. Below are only some of the options available to decrease risks.

Passwords

All computers and internet accounts should be protected with passwords for log-on. Some e-mail software enables the user to download e-mail automatically through stored passwords; disabling this feature can increase security. Some internet protection software includes additional password protection features. Interactive medical practice websites can be configured to require secure patient and provider log-ins and passwords in order to activate messaging features. For maximum security, passwords should be case-specific and contain a combination of letters, numerals, and special characters. Users should create different passwords for different applications, and passwords should be changed periodically. Patients and physicians should not share with others any passwords used for accessing sensitive personal information.

Screen savers

Most medical offices should set computer screens in a way that prevents passers-by from viewing the contents of the screen during the ordinary course of business. When unattended, computer screens should be obscured by a screen saver program. Ideally, the screen saver program should be supplemented by a security algorithm that automatically logs the user out and requires the next user to log in again. If the physician's computer is in a setting in which others may see the screen as they walk by, a screen saver with password protection may be used. Additionally, for providers who use portable electronic devices such as smartphones or tablets, privacy-enhancing screen protecttors can help to lessen the likelihood of an inadvertent confidentiality breach.

Anti-virus software

Anti-virus software is a must for anyone using the internet. Anti-virus software scans computer files for viruses and other malware (such as Trojan horses) and quarantines infected files. If an essential file is corrupted with a virus, anti-virus software and the virus protection service usually provide resources to help repair the infected file. Additionally, anti-virus software allows the removal of viruses from the computer so that the user may safely resume use of the internet without unwittingly transmitting the virus to other computers. Some anti-virus packages include software that assists in backing up the hard drive onto recovery disks in the event of a systemic shutdown from virus infection. Most anti-virus programs require annual subscription renewals to keep virus definitions up-to-date and effective against newly emerging threats.

Anti-spyware software

Spyware is software often used by advertising companies to track an individual's online activities. Users are often unaware of the existence of these programs on their computers, and anti-spyware software is usually necessary to detect and remove them. Like anti-virus software, antispyware programs scan the computer for malicious software and assist in their removal. Some anti-virus software packages include anti-spyware applications.

Firewalls

A firewall protects a computer from intrusion attempts, which may come from hackers or harmful software. Firewalls, which are sets of related programs, are located at the level of the gateway server network. Together, they form a security protection system that includes software, hardware, and often a router, which is situated between a private network and outside networks. The firewall screens user names, source addresses, destination addresses, and

all other information that is entering or leaving the private network. The firewall system allows, denies, or limits access to the private network, depending on the system rules. A customized firewall may firmly deny access to confidential information on a website while permitting open access to the homepage. In medicine, firewalls help to protect electronic patient records and other medical data from outside users or other unauthorized networks. Firewalls can be programmed to protect various components of a computer network so that no incoming request can gain access to segregated data. A simple firewall could be used to keep all electronic patient records on a separate computer or server.

Encryption

Encryption programs may greatly enhance the security of electronic communications, particularly doctor-patient email. Encryption provides secure transmission of confidential information as it passes over the internet from a patient's browser to the physician's server. It is a software coding procedure that converts plain text into a disguised file or message using a mathematical algorithm. In order to transform the document back into readable plain text, one must know the key to the code.

The internet standard for encrypting web-based information interchanges is based on two protocols, Secure Sockets Layer (SSL) and Transport Layer Security (TLS). SSL/TLS is a two-key system, involving an encrypt/decrypt key at the browser and an encrypt/decrypt key at the server. The keys for this symmetric encryption are generated uniquely for each connection by a pseudorandom number generator (PRNG) and are related to each other by a complex mathematical formula. The longer the string of digits used in the keys, the harder the encryption is to break. The only method for breaking an encryption is by trying every possible key. The keys only work between the browser and server for the duration of the connection, and the encryption dies when the session is terminated. Length of key structure combined with the short time of operation highlights the effectiveness of encryption as a data security measure.

The patient and physician can discuss whether or not to use encryption technology. The education of the average consumer about encryption technologies and the expenses associated with their use may be too high a barrier for the average consumer and too cumbersome for the physician. Encryption which has not been appropriately established may preclude the doctor from even knowing who is corresponding with the doctor. Furthermore, providers and patients should know that even the highest levels of commercially available encryption cannot guarantee security—the recent disclosure that the United States National Security Agency (NSA) has the capacity to "crack" most any form of encryption serves as a reminder that motivated parties can achieve access to data even when it is protected by vigorous security measures. Where the use of encryption is impractical, security may be enhanced through other measures discussed elsewhere in this document.

E-signatures

Some commentators have suggested that an e-mail may be sent by someone masquerading as the patient, e.g. by a spouse who has access to the patient's e-mail. Other times, a patient may deliberately mislead as to his or her own identity. The Electronic Signatures Act provides a way to have near-perfect authentication and identification. The doctor would then know the identity of the person sending the e-mail. Anonymity would not be possible. Although electronic signature technology has been accepted as legally binding for purposes of contract law, the process of registering an e-signature is cumbersome and may not be practical for individual patients for several reasons, including the expense involved. Nonetheless, as technology evolves, the use of e-signatures may become less costly and more user-friendly over time.

Audit trails

Audit trails, similar to their accounting counterparts, are electronic or paper logs that are used to track computer activity. Audit trails can be used to monitor a number of medical office activities, including determining who has had or attempted to have access to patient records, recording of patient contacts, and payment for services. They are also used to investigate the occurrence of hacker activity or other cybercrimes involving medical practices. HIPAA requires that a record of some disclosures of personal health information be maintained and reported to the patient on request. A computer audit trail would help maintain this record of who has had access to the email record.

Authentication and patient registration

Security can be increased using a web-based messaging system that requires a secure log-on. This process requires the doctor to establish a website, e.g., through a practicehosting service. The patient can access a messaging application after logging on and providing a password. Strictly speaking, this is not "e-mail," but it functions in a similar way. The use of this technology provides added security without the cumbersome aspects of encryption. The system may also collect identifying information (such as name, address, date of birth, and telephone number) before the patient is able to access the interactive aspects of the website. As a condition of registration, a patient may be required to acknowledge that he/she has read and understood the physician's privacy policy and terms of service and is willing to abide by them. Patient registration decreases liability exposure by providing a mechanism to authenticate a patient's identity and to document the patient's consent. Each time that a patient wishes to access the interactive aspects of the website, the patient must sign in with his/her user name and password. This technology authenticates the identity of the correspondents and ensures that confidential information will not be lost or copied in transit over the internet.

Networks and connection issues

Most employers who provide internet access to staff members do so via a firewall-protected network. However, always-on connections, such as network connections, are more vulnerable to security threats. Anytime a computer is connected to the internet, the computer has what is known as an IP (Internet Protocol) address. The IP address is essentially a digital location of the computer in cyberspace. If the IP address is unchanging, as is often the case on university networks, there is an increased vulnerability to hackers and other intrusion attempts. To combat these threats, in many networks the information technology or information services department may screen employees' email and other electronic data. While having the protection of a dedicated IT department can help to reduce security risks, physicians should familiarize themselves with the IT policy and maintain HIPAA compliance with updated privacy notices if necessary.

Comprehensive security packages and computer maintenance

Many website-hosting services include sophisticated security tools, and several companies offer comprehensive internet security software packages with subscriptions to ongoing updates for continued protection. These packages may include anti-virus software, anti-spyware software, a firewall, anti-spam software, and password protection. Some provide tools to remove "cookies" and other unwanted files from the computer. Viruses and other malware are continually evolving, and renewed subscriptions are necessary to keep the software up-to-date.

Ongoing computer maintenance also performs a protective function. The physician and patient should both conduct periodic scans of the computer to detect and remove unwanted "cookies" and corrupted files. Subscribing to internet security newsletters and bulletins can confer additional protection. These subscriptions will help to keep the practitioner advised with respect to newly emerging threats so that appropriate safeguards may be used. For example, security alerts may notify the user of viruses for which no virus removal tool yet exists. Tips and suggestions may include temporarily avoiding the use of vulnerable programs until virus definitions and removal tools have been updated. Staying abreast of internet security news will help both the practitioner and the patient to remain safe.

Data breach prevention and management

The risk of data breaches is an unfortunate but inevitable consequence of the shift toward electronic and remotestorage data access. Data breaches constitute a significant and increasingly expensive source of liability in the health sector. Although a thorough discussion of data breaches and their prevention and management is beyond the scope of this resource document, providers should be aware of the risks and stay informed of new developments, including applicable laws and regulations as well as newer technological safeguards. Keeping antivirus software and security patches up-to-date helps to lessen the risk of a breach through remote access (i.e., hackers), as does restricting mobile access to confidential health information.

The risk of data breaches may be minimized by avoiding the clinical use of mobile storage technology, as theft of USB flash drives and tablet computers represents one common source of data breaches. Many data breaches have resulted from inappropriate staff access to patient electronic records; audit trails, discussed above, can help to mitigate this risk and to identify the source of a breach if one occurs. Providers should also be aware that data breach insurance is available to help cover the expenses associated with a breach, should one occur. Laws such as HIPAA and the HITECH Act have requirements for notifycations in the event of a data breach; psychiatrists who use electronic technology to handle patient information should have a policy in place for dealing with potential breaches of confidential data.

Legal Issues

While information technology offers numerous benefits to physicians and patients alike, it also opens the door to a wide variety of legal concerns. Legal issues may vary depending upon which technology is being used and how it is being used. This document does not aim to address all possible legal concerns related to the use of information technology in clinical psychiatry, but to provide some starting points for further reflection and research. There are several aspects of website management that may benefit from a professional legal consultation. Legal experts can advise physicians on specific details of licensing, jurisdiction, copyright infringement, HIPAA compliance, and disclaimer language.

Laws and regulations

A familiarity with federal and state laws and other regulations is imperative to ensure compliance with regulations regarding websites and medicine. Some state laws, for example, require that a physician meet with a patient

face-to-face before the physician is authorized to prescribe medicine or treat the patient online. States are permitted to have more restrictive confidentiality rules than the HIPAA rules, and every state has some legal requirement of confidentiality of medical records, particularly with regard to psychiatric records. How these are applied to e-mail is often unclear. Additional commerce, advertising, and communications regulations apply to websites and other uses of information technology in healthcare. This document details some of the more common concerns.

Licensing

A mental health care provider working from an office in State A, when treating a patient who lives in State B, might need to be licensed and authorized to work as a mental health professional in State B. He/she may also need to be familiar with the applicable laws in State B. Similarly, providing services to patients outside of the United States often necessitates familiarizing oneself with the laws of each patient's country and verifying that one is authorized to provide services via internet in that region. If a physician provides e-therapy services to someone without being licensed in the patient's home jurisdiction, the physician's malpractice insurance company may not be obligated to pay a judgment or even to reimburse associated legal fees if the patient initiates a lawsuit. States and countries have their own laws and regulations for medical and counseling services, and many of the local regulations place additional restrictions on services. In Oklahoma, for example, a physician was sanctioned by the state medical board for conducting appointments via Skype. Online interactions between a physician and a patient are subject to requirements of state licensure. Aside from incidental communications, contact online with a patient outside of the state in which the physician holds a license may subject the physician to increased risk. If either the physician or the patient is traveling, or if by happenstance the physician's office is in a different state than the patient's residence, e-mail contact (like phone calls) would usually be deemed incidental, and the issues of medical licensing may not arise. It bears noting that a local licensing board can be an important resource for information about jurisdictional issues; however, ultimately it is the provider's responsibility to ensure that one is in compliance with the applicable licensing rules.

HIPAA

Originally enacted in 1996, with subsequent regulations issued for medical confidentiality, HIPAA is a federal law that applies to physicians who are involved in the electronic transmission of patient data. The prudent psychiatrist must remain aware of these regulations and how they may affect one's clinical practice. HIPAA requires physicians to develop a security policy for medical data and to notify patients about the privacy procedures in effect for the practice. If a physician's practice falls within the HIPAA definition, then one's practice website should contain a HIPAA-compliant privacy policy to inform patients how their medical information may be used and disclosed and how the patient can get access to this information. Furthermore, e-mail that contains protected health information would need to meet standards consistent with both the Privacy and Security Rules.

HIPAA also applies to e-therapy if a service provider is otherwise a covered entity subject to HIPAA. HIPAA regulations require that service providers who manage patient data observe rules of privacy and confidentiality and also inform their patients about the procedure, safeguards, and risks to privacy that may be involved. Physicians using electronic applications will need to use the appropriate technological safeguards to ensure confidentiality of patients' protected health information to avoid a violation of HIPAA regulations.

Many providers now use third-party applications (i.e., programs such as Skype, or Apple's FaceTime) for videoconferencing. Some of these services state that they are fully secure and private, but providers need to consider the full scope of HIPAA and other confidentiality practices when considering whether these third-party applications are in fact HIPAA compliant and appropriate for the practice of medicine. For example, while many third-party applications advertise confidentiality, they may not be able to notify you when there is a security breach or be able to generate an audit trail. Such entities, when they have access to PHI, may be defined as "business associates" under HIPAA, thereby triggering the need for specific agreements and HIPAA compliance by the third party.

HIPAA provisions and regulations apply to all electronic communications to some degree, depending upon how the doctor chooses to incorporate information and communications technology into the practice. For example, videoconferencing with a patient may raise certain privacy issues, but unless the interaction is saved on a server it may not trigger comments about storage and retrieval of the conference from the patient's medical record.

The HIPAA omnibus rule (published January 25, 2013, compliance deadline September 23, 2013) requires amendments to existing Notices of Privacy Practices and contains additional provisions regarding access to PHI and data breach notification and mitigation. The specifics of the HIPAA omnibus rule and other HIPAA regulations are beyond the scope of this document, and providers should note that these regulations and requirements may change over time. The best strategy to mitigate risk and ensure compliance is to be proactive about staying informed of developments in HIPAA and its implementation. HIPAA noncompliance is potentially very costly, with penalties up to \$1,500,000.

Copyright and related issues

A number of practices that are common in the development of websites raise issues related to copyright infringement. Hyperlinking, the practice of linking one website to another, sometimes warrants requesting the permission of the linked website's owner. Many website owners will not permit a link that bypasses the website's home page, a practice known as deep linking. Another practice that raises potential legal issues is called framing. Framing involves pulling content from one website and putting it into a frame on another website without referencing the source. This practice is essentially plagiarism. Content for a website should not be taken from another website without properly recognizing the true source of the information.

Meta-tags are invisible words and software codes embedded in a website which, although invisible to visitors, are detected by web search engines for indexing purposes. Legal issues arise when a company puts the name of its competitors or other trademark names in its meta-tags in an attempt to attract customers. For example, an overzealous physician eager to get new patients may wish to embed the names of common psychotropic medicines as meta-tags on his/her practice website. Although this may seem like a good form of indirect advertisement, the unauthorized use of these names constitutes a trademark infringement. Using prescription medicines to advertise one's medical practice might raise additional ethical concerns. A number of other practices that are common in the design and development of websites can lead to claims related to intellectual property, communications, or commerce regulations. For a detailed explanation of these practices and their risks, consultation with an attorney is advised.

Evidence in legal proceedings

Electronic communications between doctors and patients, like any other medical records, are subject to discovery and court orders. Unlike a progress note, which can be "sanitized," e-mail and IM transcripts contain the exact words of the participants. Psychiatrists and therapists typically structure their notes to protect patients and third parties from disclosure of inappropriate material such as fantasies. E-mail is more like a complete transcript and therefore is potentially more revealing. When e-mail is sought in discovery, the expense of searching for the e-mail is usually borne by the party obligated to produce the material. This process may be burdensome to an individual practitioner and very expensive to a group practice. The vulnerability of electronic communications to subpoena and search warrant may be especially troubling to patients who are involved in legal proceedings such as family court (divorce, custody disputes, etc.) or criminal prosecution.

Liability and malpractice exposure

The addition of any new technology to a clinical practice often affects the physician's liability risk. Care should be taken to avoid the initiation of a physician-patient relationship solely through online interaction, as this can increase liability exposure (Recupero, 2005). Prior to engaging in online communication, a physician should obtain informed consent from the patient regarding the appropriate use and limitations of online communication. A physician may be held responsible for the credibility of any information made available on his/her medical practice website. Information that is provided on a medical practice website should come either directly from the physician or from a recognized and credible source. If a practice website includes links to external sites, then patients will be able to connect to other websites directly from the physician's website. A physician may reduce liability for information on linked websites through the use of security alerts. A security alert pops up when a patient clicks on a link and notifies the patient that they are leaving the physician's secure website.

An interactive website may increase liability exposure by initiating a physician-patient relationship solely through online interaction. If one replies to an e-mail or other communication from someone who is not currently a patient, one should always include a disclaimer to avoid any liability from a perceived physician-patient relationship. Using the telephone, some physicians have been found liable for "advice" they have given members of the public who have contacted the physician even if there was no pre-existing doctor/patient relationship. E-mail and other forms of electronic communication can potentially give rise to similar liability.

Under no circumstances should the physician give advice of any kind to "strangers" who are not already patients of the practice. Even a "strong" disclaimer such as the following can be made moot by giving any advice: "I do not correspond on clinical matters by e-mail. This response in no way creates a doctor/patient relationship between the sender and the recipient." Even giving advice to established patients has risks. When a physician discusses a concern or symptom with a patient, the possibility of continued questioning for purposes of clarification is present. However, in an exchange of e-mail, the physician does not have the ease of communication that face to face or telephonic communication provides. Therefore, the physician should understand the exact nature of the patient's concern before making a recommendation or ordering a treatment. The physician might include in a routine signature a statement instructing the patient to take certain steps if they are in any way concerned with their condition. E-mail provides a documentation of the advice given, which if not followed by the patient may protect the doctor.

In most cases, a therapist-patient relationship will be established by e-therapy. The distinction between providing information and providing advice is not always clear. Disclaimers for many e-therapy websites describe the service as informational or educational, even when the sites serve as portals to counseling services by licensed mental health clinicians. A common disclaimer warns visitors that the service being offered "is not intended to be a substitute for face-to-face professional advice." The depressed person who visits a website's homepage will read the promotional language but may not find the disclaimer in the "Terms and Conditions" link in small print at the bottom of the page. While the website may claim that practitioners offer information rather than advice, the client or consumer may rely upon this information as he would rely upon advice from a face-to-face treatment. Websites should be configured so as to avoid this kind of ambiguity and confusion. Where a clinician touts his credentials (e.g., Dr. G, M.D., Psychiatrist) but provides a service akin to "coaching" rather than psychiatric treatment, he/she may be estopped from further use of those credentials to advertise the practice.

Some malpractice insurance carriers will provide coverage for telemedicine at no additional cost to the insured. However, such coverage often is not automatic; one may need to contact the carrier and specifically request the initiation of coverage for telepsychiatry or etherapy.

Disclaimers

All medical practice websites should have a disclaimer. The disclaimer should include language similar to the follow-ing:

"Users of this website accept full responsibility for use of information from this site and any sites linked to or from it. We do not make any representations to its completeness or appropriateness for a particular purpose. The content of this website is not intended to treat or diagnose any medical or psychological problem. Use of this website is not intended to be used as a substitute for medical or psychological care by a qualified professional. We are neither responsible nor liable for any claim, loss or damage resulting from use of information on this site. The mention of a specific product or service does not constitute a recommendation unless so stated. Check with your healthcare provider before changing your healthcare regimen."

A disclaimer should be located, along with the website's privacy policy, in a prominent and easily accessible place. The disclaimer should state that the content of the website, and any services contained therein, is not intended to, and does not, provide medical advice, diagnosis, or treatment. Ideally, the disclaimer (and privacy policy) should appear the first time users register at the site, requiring them to "agree" (vs. "disagree") to the terms of the service as a precondition to accessing any interactive portions of the website. In all cases, the disclaimer should be prominently displayed and easily accessible from the website home page. Physicians should have a prepared disclaimer to send to those who send e-mail seeking clinical assistance but do not have an established doctor/patient relationship with the physician. The disclaimer should clearly state that no relationship is being created by e-mail. If the doctor suggests that the inquirer make an appointment, the email should remind the potential patient that no doctorpatient relationship will arise until an agreement is made during the appointment.

Benefits of the Technology

In the sections that follow, which weigh the risks and benefits of various technological aids, this document primarily addresses the direct provision of care (i.e., etherapy). The interested provider, however, will note that each of the several options available will have its own risk/benefit calculation, which will further be informed by individual patient considerations. Psychiatrists should carefully consider the use of a particular technology not only regarding its specific characteristics but also regarding its application to the specific context in question.

Convenience

The internet can offer a great deal of convenience to clinicians and patients alike. E-therapy may allow patients access to mental health services during all hours of the day and during every day of the week, which can be helpful to patients who work long hours. E-mail, in particular, can help to eliminate "phone tag" problems, as it can be sent and answered at any hour. Physicians can respond to email from anywhere in the world, and patients can access their doctors from virtually anywhere. The physician and the patient need not be available simultaneously in order to communicate effectively by e-mail.

Through e-mail and an interactive practice website, patients can utilize online appointment requests and reminders, place prescription renewal requests, and contact office staff with other administrative or billing questions, even at night or on weekends. Many providers have begun to use text message-based appointment reminders and confirmations. Some patients appreciate the convenience this affords, but the provider should obtain the patient's permission before sending text messages, and should allow patients to opt-out of receiving such messages, as they may incur additional charges for the patient, depending upon his or her data service plan. Practice websites can also facilitate appointment setting, confirmations, and cancellations by the patient. A physician can efficiently address many patient requests through electronic communication, reducing the burden of interruptions from non-urgent telephone calls and pages. Some electronic correspondence can be incorporated directly into a patient's electronic medical record or other clinical records, potentially reducing the clinician's paperwork burden.

Documentation

In most forms of internet communication, a written record is easily (often automatically) created of all communications. Patients and clinicians can have a permanent record of the communication to refer to as needed. This record can be helpful in following through on detailed instructions or giving the patient guidance on when to seek additional medical attention. The automatic documenttation can save time previously spent on manual, handwritten documentation and can increase the amount of information retained in the record. As noted later in this document, however, there are potential drawbacks to the automatic creation of detailed transcripts of communication between the psychiatrist and patient.

Increased range of options for communication

Some individuals are better able to express themselves in writing than verbally. E-therapy can utilize both synchronous (simultaneous, e.g., video conferencing) asynchronous (time delayed, e.g., e-mail) forms of communication. A patient may compose an e-mail or message immediately as a problem occurs instead of waiting for the next scheduled appointment. In e-mail communications, there is no time limit on how long a patient may take to compose and organize a thought, and the physician will have more time to think over the issues before sending a response. Because e-mail is an asynchronous form of communication, both sides are afforded the opportunity to reflect upon messages for extended periods of time without the pressure of filling -awkward silences in face-to-face interactions. On the other hand, the physician will be unable to interpret awkward silences and other important metacommunications that do not come through in e-mail.

Increased access to care

Telemedicine enables providers to serve patients who otherwise would not receive care. For example, relief organizations are able to provide e-therapy services to patients in unsafe, war-torn areas, such as refugees in politically unstable regions. Other initiatives provide service to patients and expert consultation to local physicians who are too geographically remote to otherwise receive care. This increases the number of potential patients for a practitioner and also increases patients' access to needed care. Similarly, electronic therapy can enable psychiatrists and patients who are engaged in a face-to-face treatment to remain in contact when one or both are out of the area due to work or vacation. Telepsychiatry and e-therapy are also accessible to those who for various reasons (disability, agoraphobia, paralysis, chronic disease, etc.) have difficulty leaving their homes. Instant messaging and videoconferencing allow for realtime interaction between a psychiatrist and patient from different time zones. Furthermore, technology may help to increase access for patients suffering from rare conditions or treatment-resistant illnesses, as electronic communication may bridge geographical gaps between these patients and experts and specialists.

A growing number of patients have indicated a preference for internet-based counseling and e-mail access to their physicians' offices. The use of the internet may alleviate some patients' fears about confidentiality and stigma. Some patients are wary of seeking face-to-face mental health services, because they fear that acquaint-ances may see them and recognize them on their way to and from services. Others may be uncomfortable discussing sensitive topics in person and may avoid seeking help in a face-to-face setting. The perceived anonymity in internet communications may enable some patients to be more forthcoming, thereby facilitating more therapeutic progress.

Patient education and referrals

Numerous research studies have demonstrated a growing trend for healthcare consumers to conduct health-related research on the world-wide web. Many families use online health plan provider directories when selecting a physician. These directories often include links to physician practice websites. A practice website allows potential new patients to conveniently access detailed information about the doctor's practice (for example, office hours, special areas of expertise, insurance types accepted, etc.) without contacting the office. Medical practice websites can also be important tools for disseminating accurate health information to patients and prospective patients. Websites can be designed to contain a large volume of educational information that cannot be conveyed in a brief, 15-minute office visit. For example, the clinician may wish to include on the website a detailed description of different types of therapy available through the clinic, with links to high-quality medical information on the web if the patient desires to read more in-depth information about his or her condition. Patients often have many questions about their treatment, and an informative website may help them to find answers without unnecessary office visits or phone calls. Web- and mobile phone-based applications also provide opportunities for patient education, for example, by providing easily

accessible references, tools for tracking health-related behaviors (such as nutrition or sleep), or means for cognitive-behavioral assignments.

The internet can facilitate immediate referrals to further reading and adjunctive resources. The psychiatrist can send links to support groups, educational medical websites, or information about prescriptions to support informed consent. Physicians can combat online misinformation and participate in patient education by linking their own websites to various known websites that provide quality content. By supporting patients' use of the internet for self-help and education, psychiatrists can help their patients to become more effective advocates and partners in their own care.

Risks and Drawbacks to the Technology

The risks associated with the use of the internet in clinical psychiatry vary by context and by the extent of the internet's role in the physician's practice. For example, interactive websites present a greater opportunity for risk (e.g., by compromising confidentiality) than basic, informative websites. E-therapy is among the more controversial uses of the internet, and physicians may be cautious about it for several reasons. For some, the technology is a barrier-learning how to use encryption software may seem tedious and overwhelming, for example. Others are wary of malpractice liability. Some may believe that e-therapy is not an appropriate means of practicing psychotherapy at all. A practitioner should be thoroughly aware of the actual risks and limitations of using information technology in clinical practice so that appropriate safeguards may be used and patients can be fully informed. The following list of risks and limitations is not intended to be comprehensive.

Confidentiality and security

All forms of communication have a level of insecurity associated with them. Contents of postal mail, telephone messages, and facsimile transmissions all may be revealed in inappropriate ways. Just as physicians are required to use appropriate care in using these traditional forms of communication, due care is required when using electronic communication. However, the elements of due care must be appropriate to the medium of communication and proportional to its risks. While some patients may perceive increased confidentiality in online communication, the reality is that the use of the internet can increase the risk for a breach of confidentiality if practitioners (or patients) are not diligent in the application of security measures. Viruses, hackers, spyware, and other threats are continually evolving alongside the development of security measures. Although it is a criminal

offense, a hacker may gain illegal access to remote servers and access patients' protected health information or the office's financial records. Viruses have the capacity to shut down websites and contaminate hard drives. Choosing an internet provider with a secure network and excellent antivirus software can help guard against these security risks.

Most e-mail is not completely secure, in that it may be monitored, misdirected, or read inadvertently at the sender's or the receiver's computer. If the doctor forwards e-mail to a home account to answer at the end of the day, security issues again arise. The location of the e-mail on another computer system increases the risk of inappropriate disclosure. Although it is relatively more difficult to intercept an e-mail communication than it is to intercept a portable telephonic conversation, most would recommend the use of extra care in case the transmission is misdirected. When a doctor calls a patient's home and does not reach the intended person, no information may be disclosed. In contrast, an e-mail arrives at its destination with all the intended communications visible. It bears noting that similar concerns may arise regarding telephone contact between psychiatrists and their patients. If the psychiatrist calls the patient's home, the doctor's information may appear on the caller ID screen, potentially compromising the patient's confidentiality. In e-mail communication, an inadvertent misspelling or misidentification on the "To" line may send the message to an unintended recipient. Furthermore, providers must be cautious about the use of third-party email services, as some of these may technically "own" the contents of messages on their servers.

Patients should be cautioned never to use an employer's computer, network, or e-mail address for communication with the physician unless the patient wants the employer to be able to see the communication and any response. In many states, an employer can freely access all e-mail in its systems. Similarly, both patients and physicians should try to minimize the risk of intentional or inadvertent interception or viewing of sensitive patient information via shared family computers or accounts.

Virtually all ISPs (Internet Service Providers) and internet nodes screen e-mail for security purposes. Patients who describe delusions of a political nature may find that the government takes an interest in them. Computers and electronic communications belonging to patients involved in the legal system may be subject to search warrants or subpoenas. Although a live person may not be screening all e-mail, there are significant possibilities that the e-mail will not remain strictly between doctor and patient. Will the physician's office staff have access to the e-mail, or will the doctor be the only one to read it? In the usual telephone conversation the patient can censor information being transmitted depending on the listener. However, with e-mail, the private information may be included for all readers.

The patient needs to know under what circumstances the information contained in electronic communications may be transmitted by the doctor to another agency. For example, the doctor may use the information or even a transcript to document for managed care approvals. A specific release of information should be executed by the patient prior to releasing communications to third parties.

Misunderstandings and misdiagnosis

Misunderstandings and confusion can occur in electronic communications. The emotional tone of a text-based conversation is often ambiguous, leaving room for intended sarcasm to be interpreted literally or for a gesture of kindness to seem hostile. Furthermore, technical aspects of electronic communication can lead to misunderstandings or other failures in communication. For example, e-mails from a patient may wind up inadvertently blocked by the doctor's spam filters or vice versa. Patients' use of "net slang" or "text-speak," such as "lol" ("laughing out loud"), in communications with the psychiatrist may lead to misunderstandings or difficulties in communication. The provider and patient may wish to discuss and clarify how abbreviations and internet slang will be used in the communications.

The choice of screen names is but one example of many ways in which confusion may arise. Although screen names may provide some anonymity, patients may "sign" their emails with a complete name and other pertinent information such as telephone number and street address. This will facilitate rapid contact should it be required, but it may also compromise confidentiality if a message is intercepted or misdirected. The use of a screen name may provide added privacy and security or may increase the possibility of confusion of identities. When an e-mail from a known patient is received in the office, the patient's name may not necessarily be used as the screen name or e-mail address. Casual readers of the screen or the e-mail would not necessarily know the true name of the sender. Conversely, the doctor may not recognize the name and delete the message. The doctor may also confuse screen names between patients and disclose information inappropriately. Patients may have different screen names through different accounts, and this may increase the possibility for confusion.

Emergency Management

Telemedicine requires particular cautions regarding emergency management. Most sources discourage the use of etherapy for suicidal patients, for example. Psychiatrists who provide services remotely may not be familiar with local resources in the area of the patient. The internet is extremely limited when emergency intervention is required. In order to practice remotely, clinicians may need to make the extra effort to learn local resources or consult with services in that area.

Computer Literacy

Patients will require some degree of computer literacy in order to benefit from e-therapy services. They will need to use specific computer services and set up their overall information technology infrastructure reliably in order to maintain continuity of care. Providers also need to assess patients' technological savvy as part of the overall assessment of appropriateness for telemedicine, which creates an extra step in the assessment process. Furthermore, the providers themselves may need to develop proficiency in the practice of telemedicine. Providing care online is in many ways a unique skill. Providers might need practice looking at a camera (i.e., rather than the screen), choosing the optimal backdrop and angle, speaking clearly, and otherwise becoming comfortable practicing online.

Ethical, Clinical, and Practical Issues

Content of practice websites

A medical practice website provides a convenient avenue for delivering medical and health care information and resources. It is incumbent on the physician to monitor the credibility of all links available on his/her practice website. Appropriate links will lead the patient to reliable health care information from trusted sources. Appropriate links may include:

- Colleagues' medical practice websites
- Medication information websites from trustworthy sources, such as the National Institutes of Health and the National Library of Medicine (http://www.nlm.nih.gov/ medlineplus/druginformation.html)
- Websites for patients' health insurance companies
- Medical news from trustworthy sources, such as the NLM (http://www.nlm.nih.gov/medlineplus/newsbydate.html)
- Professional medical organizations (e.g., APA: www.psych.org)
- Patient education resources on disorders and therapeutic strategies
- General health information resources from respected sources
- Patient advocacy and support organizations, e.g., the National Alliance on Mental Illness (NAMI: www.nami.org)

A physician should take care to avoid linking to medical information sources that serve to endorse products or companies rather than to educate. There are some links that may not be appropriate for a practice website, such as:

- Unrelated commercial websites
- Pop-up or banner advertisements

- Pharmaceutical companies or pharmaceutical companies' promotional websites about particular products
- Websites that promote specific treatments to the exclusion of others
- Other websites with evidence of bias

Scope of issues for e-therapy or telepsychiatry

Psychiatrists should weigh carefully the decision to publish e-mail addresses on their practice websites or business cards. The provider also has a responsibility to ensure that adequate security measures are taken to protect patients' privacy and confidentiality. Although some physicians will have different ground rules for e-mail, some topics may be considered entirely appropriate for e-mail or instant messaging communications between a physician and patient, such as:

- Setting, rescheduling, and confirming appointments
- Prescription refill requests
- General information, e.g., time to take medication, name and contact info for covering physician when primary psychiatrist is unavailable

Topics that may not be suitable for communication via e-mail, texting, or instant messaging include:

- Suicidal ideation or intent
- Homicidal ideation or intent
- Intent to do violence

Other topics which may not be appropriate for e-mails or IMs, particularly when risks outweigh potential benefits, include:

- Sensitive personal information, such as HIV status, illegal drug use, or criminal or embarrassing behavior
- Names or identities of third parties or information related to third parties
- Requests to become a patient

The physician should develop a message that can supportively indicate to the patient that the issue cannot be dealt with by e-mail or IM response, suggesting instead an office visit or telephone call. In addition, physicians may want to monitor the number of e-mails per patient per time period in order to address over-utilization as a therapeutic issue.

Scope of issues for e-therapy or telepsychiatry

Numerous issues have been addressed effectively in etherapy, with published literature on a variety of conditions including mood disorders, anxiety disorders, substance use disorders, posttraumatic stress disorder, collaborative care for general medical conditions, and others (see bibliography for a partial listing of published studies). Telepsychiatry has also been studied in a range of patient ages, from child and adolescent to geriatric populations. Effectiveness trials have also examined the use of telepsychiatry versus usual face-to-face practice in more naturalistic settings and have found no difference in clinical outcomes (e.g., O'Reilly et al 2007). That said, not all patients will be well suited for e-therapy or telepsychiatry. These modalities would be contraindicated for any patient for whom the risks would outweigh the benefits.

Providers need to perform an individual assessment to see if telepsychiatry is appropriate for the case in question. There may be evidence about telepsychiatry's effectiveness for a particular disorder, and this evidence should be reviewed when considering the appropriateness of the technology. However, the provider must still perform an individualized medical assessment and exercise one's usual clinical judgment regarding diagnosis, prognosis, and treatment. Additionally, such judgments should take into account factors specific to telepsychiatry, such as the client's local resources, technological proficiency, home or organizational environment, and so on. These and related factors should be assessed in an ongoing way during the course of telepsychiatry; for example, if the nature of the environment where someone is receiving care is leading to repeated interruptions, this would need to be addressed.

Some patient situations require particular caution. Of course, as part of the overall safety and appropriateness assessments, potentially suicidal, violent, or homicidal patients must be considered with particular care. Providers may wish to be cautious when treating clients with paranoia, psychosis, or other forms of disordered thinking, though it bears noting that one review (Sharp, Kobak, and Osman 2011) found no evidence for the inferiority of videoconferencing telemental health for patients with psychosis, and one other report concluded that even psychotic patients with delusions pertaining to television were able to respond appropriately to teleconferencing and did not incorporate their telemedicine experience into their delusional system (Dongier et al, 1986). In the more prosaic vein of using e-mail and other text-based communications, patients for whom extensive written records could be problematic (e.g., patients who are facing investigation or litigation, celebrities and public figures) may wish to be cautious about email and text-based communications, even if they are thought to be appropriate in a narrower clinical sense.

The mental health practitioner will need to rely upon professional judgment to determine the applicability of etherapy for a particular patient. Some providers may have to turn away prospective patients if e-therapy is not advisable and the patient is unwilling to seek face-to-face services. Ethical standards, clinical judgment, and concerns about professional liability can help to guide these decisions. Regarding documentation, in addition to usual practices regarding the informed consent and clinical assessment process, providers should consider documenting their reasons for choosing telemedicine and their thought process regarding the appropriateness of telemedicine for the particular patient.

Telepsychiatry as "augmenting" versus "stand alone" treatment

Telemedicine services can be used as an additional tool to enhance an existing face-to-face treatment, or it can stand alone as the sole modality of treatment for a patient. For some patients, it may be reasonable to use telepsychiatry sessions in addition to standard face-to-face visits—for example, to maintain continuity—but not to use telepsychiatry as the sole means of patient contact. Factors such as whether the patient is at their home versus an organizational (i.e., their workplace) or an institutional (i.e., a remote hospital, prison, or jail) setting will signifycantly affect this consideration. Whether to use telepsychiatry in an "augmenting" or "stand alone" fashion is an important choice that providers should carefully consider in their assessment of treatment appropriateness.

This consideration is particularly important when considering the initiation of treatment. Historically, the APA has issued cautions about the provision of treatment by telephone, letter, or audiotape, presumably applicable to internet-based treatment as well, but these opinions have been withdrawn in light of the progression of telemedicine practices.

There may be some cases in which the requirement of an initial face-to-face interview may prevent a patient from receiving therapy. If an individual contacts a mental health professional online and indicates that he/she is seeking services, the psychiatrist should be careful when wording a reply. Not all who seek e-therapy will be well suited to it. As always, the psychiatrist should assess the patient's suitability for e-therapy before allowing any treatment relationship to develop. In some cases (e.g., agoraphobia), e-therapy could be used in the beginning stages of therapy to work towards traditional face-to-face therapy as the patient's condition improves. In such cases, it may be advisable to establish contact with the patient's PCP or other referring clinician to obtain a history and face-to-face evaluation.

Psychodynamic and boundary issues

Although e-mail can afford an opportunity to compose one's thoughts carefully, the perceived anonymity and privacy of internet communication can also reduce inhibitions, prompting hastily written messages that may lack the thought and reflection that go into a letter or face-toface interchange. Hence, there is a special need to check "knee jerk reactions." There is also a risk that messages may not be adequately proofed and may contain significant typographical errors that may mislead the recipient. Misunderstandings in face-to-face settings may be recognized and corrected more quickly. The "online disinhibition effect" (Suler, 2004) may also affect the doctor-patient relationship, particularly in the areas of boundaries and transference. Bhuvaneswar and Gutheil (2008) discuss psychotherapeutic and psychoanalytic aspects of e-mail and boundaries between psychiatrists and patients.

- Role of transference & countertransference in internet communications
- Professionalism, writing style, etc.
- Physician privacy; patients "Googling" the doctor's screen name or name
- Internet profiles, social networking sites (e.g., Facebook, MySpace)—don't let your patients "friend" you if you have a profile online; is it appropriate for your profile to be searchable through Google, or should you disable this feature?

Some of these issues may be mitigated by improving one's proficiency in providing telemedicine, e.g., by practicing or receiving training in the skills relevant to telemedicine such as using the technology comfortably. Courses and other forms of continuing education are available to providers who wish to improve in this domain.

Communication Practices and Discussions with Patients

As noted in the *Legal Issues* section, the psychiatrist has a responsibility to discuss their communication practices with patients, regardless of the scope of technology used. One role of these discussions will be to specifically address the use of technology in one's practice, outlining practices and expectations. The risks and benefits of electronic communication are sufficiently different from postal mail and telephone that the physician and the patient should have a discussion about the communication technology and its risks and benefits.

Regarding text-based communication, instant messaging, texting, the availability of e-mail on smartphones, and other technology may lead a patient to believe that the physician is immediately aware of any message. This belief may lead the patient to act on that assumption. The prudent physician would want to tell patients not to use email or text messaging for any matter that cannot wait at least 72 hours to be addressed. The physician should routinely disclose information such as:

- How often does the physician check e-mail?
- How soon should the patient expect a response?
- That all requests may not be assented to automatically. The physician may want to tell patients that no assumptions should be made based on a lack of

response and that patients should follow-up by telephone if they do not receive a response.

The physician also cannot assume that the patient will read or receive an e-mail unless confirmation is received. In contrast with a telephonic contact, the physician has no information about whether a message was left at the patient's answering machine, with a live responsible person, or by direct contact with the patient. Psychiatrists and patients can request —read receiptsl on e-mails they send to alert them when the recipient has received the messages.

E-mail may be configured to send an automatic message back to the sender when the message has been read by the recipient. Although there is some risk of many ricochet messages being created when both sender and receiver have auto response working at the same time, some advisors recommend the use of this feature. E-mail can also be configured to indicate to the sender that the recipient will not see the e-mail for a specified period of time and that an alternative form of communication should be attempted for time-sensitive matters. Patients would then know not to expect responses to e-mail for a certain period. The coverage mechanism can also be communicated to the patient. However, patients who routinely use e-mail may have an expectation that the covering physician also uses e-mail. The coverage notice should provide a specific means to access the covering physician.

Both physicians and patients should have adequate mastery of basic computer and e-mail skills. Patients should understand that there are alternatives to internet technologies, each with its own risks and benefits. The patient should be aware that communication can be made via several different ways such as: telephone, office visit, mail, and/or facsimile and that each of these have their own unique risks and benefits. It is incumbent on the physician to educate the patient on the appropriate use of the internet in the physician's practice.

Other issues to consider when discussing the use of technology with patients relate to the risks inherent in the use of technology; e.g., information security, the potential for interruption, etc. Some of these risks and considerations are outlined in the Technological Safeguards section. Telemedicine services will require different considerations for (and safeguards against) potential risks, so providers will need to consider appropriate procedures and local conditions when considering how to communicate these risks and how to fully inform their clients.

Prior to beginning a course of e-therapy, the clinician should educate the patient regarding those risks and benefits and inform the patient of available safeguards and alternative options. Patients should also understand that psychiatrists are not technology experts and cannot therefore fully educate them about all of the relevant security risks. Before beginning an online counseling practice, the provider may wish to develop informational risks-andbenefits handouts to discuss with potential clients. Physicians will undoubtedly discover new risks, benefits, and safeguards, so it may be helpful to keep a list of these factors so as not to omit important information in the informed consent process.

To minimize risk, the physician should anticipate problems and be sure to have a procedure in place in the event of problems or emergencies. This procedure should be developed prior to the provision of e-therapy, rather than improvised at the last minute when a crisis arises. The physician should also arrange with each patient a plan for what to do in the event of a computer system "crash" or a network failure. Because these technological inconveniences may interrupt services at inappropriate times, patients need to know how to contact the physician. One possibility would be to provide patients with the phone number for the doctor's office.

Records and documentation

A physician should adopt a policy concerning online patient communications and medical records documenttation. Whenever possible and appropriate, a record of online communications pertinent to the ongoing care of the patient should be maintained as part of the patient's medical record. Just as the prudent physician makes a notation of emergency phone calls and requests for prescription refills, the physician will want to make a record of e-mail communications. Some physicians may elect to insert a hard copy of the e-mail into a paper chart or save the file directly to an EMR, while others may want to enter only a brief summary. An effective storage and retrieval process would be advisable for computer storage. Presumably, the clinical record retention rules for a given jurisdiction would govern as to the length of time the record must be preserved. Some EMR programs may have a feature allowing for effective archiving of e-mails with efficient search inquires for retrieval.

Medical records concerns may emerge in relation to online interactions between doctors and patients. Some email programs and instant messaging software automatically save a written archive of all communications, even if users do not intend for them to do this. The archive may be stored on the user's device or computer; but off-site, "cloud"-based storage at a remote third-party server (or multiple servers) is increasingly common. Cloud-based file storage carries special risks and ethical considerations in the practice of psychiatry (Klein 2011). Electronic communications are often automatically saved in a computer's hard drive or backed up onto a network even after users have deleted the files. Computer forensics experts are often able to retrieve the full contents of electronic data long after users believe they have successfully deleted the files. This problem raises issues similar to those associated with audiotaped or videotaped sessions, which create a verbatim record of the physician-patient exchange. This record would not be available in the patient's medical records following an office visit. This could be beneficial, as it allows the physician to study the interaction. However, it can also create problems with protected confidentiality if someone else gains (or desires to gain) access to the written record. To minimize risks, the psychiatrist should develop a policy and follow it carefully.

Financial considerations

Like telephone conversations, electronic communications are often considered "incidental" by insurers and are not always reimbursed separately. Some insurers may preclude the charging of a separate fee for e-mail communication. However, fee-for-service electronic consultations and reimbursable "virtual office visits" appear to be gaining ground as viable options. In July, 2004, the American Medical Association assigned a new code (0074T) for reimbursement of online consults, and recently states have begun passing legislation for telemedicine reimbursement. Not all health insurance payers will reimburse e-therapy or other internet-based services, however, and those who do pay for such services sometimes reimburse them at a lower rate than for traditional, face-to-face treatment. If a patient wishes to use his/her health insurance to pay for internetbased services, the provider should obtain the insurance carrier's guidelines regarding claims for online services.

Services and guidance for the virtual practice

Because the use of the internet in clinical psychiatry is a relatively new phenomenon involving rapidly changing technology and ongoing research, rules and regulations are continually evolving. It is best to follow a set of ethical guidelines established by professionals in the mental health field. Psychiatrists should consult the practice guidelines and ethical guidance promulgated by professsional organizations such as the American Psychiatric Association (www.psych.org) and the American Medical Association (www.ama-assn.org) for opinions relating to the internet and electronic communications technology. Other professional mental health organizations, such as the American Psychological Association, the American Counseling Association, and the National Board for Certified Counselors, can be useful sources of additional information. The International Society for Mental Health Online (ISMHO: www.ismho.org), for example, has published ethical guidelines to assist professionals in the development of ethically sound e-therapy practices.

The American Telemedicine Association (www. americantelemed.org) is an excellent resource and has

published numerous practice guidelines and documents to assist physicians who are interested in providing telepsychiatry (e.g., ATA 2009a, ATA 2009b, ATA 2013). The American Association for Technology in Psychiatry (AATP: tecpsych.com/techpsych) is another useful resource with an informative blog. Subspecialty and APA-allied organizations (such as the American Academy of Psychiatry and the Law, the American Academy of Child and Adolescent Psychiatry, etc.) may have their own guidelines and ethical opinions regarding the use of the internet and electronic media in professional practice; a partial list of these organizations and links to their websites can be found through the APA website (psychiatry.org/about-apa-psychiatry/allied-organizations). Finally, the Federation of State Medical Boards (www.fsmb.org) has produced a number of opinions and publications relating to the use of information and communication technologies in medicine.

Some physicians may choose to purchase web design software that will allow them to develop their practice website without a professional consultation. If a professsional consultation is desired, there are several options available. Many hospitals and professional organizations offer web design, hosting, and maintenance services to their affiliated physicians. Professional web designers and third-party companies offer extensive web management services. A company with extensive experience in web development for the healthcare industry will understand the practical and legal implications of designing a medical website. As noted previously in this document, consultation with an attorney may be especially helpful to ensure regulatory compliance and to help minimize legal risks.

Reputation management

With the popularity of online rating sites such as Healthgrades and Yelp, many doctors have grown concerned about the impact of negative online reviews of their practices. Before seeing a new provider, and even sometimes when deciding whether to continue seeing a current clinician, many patients go online and seek out ratings and reviews posted by other patients. Some healthcare providers, in an attempt to control their web presence, have asked patients to sign no-complaint" agreements promising not to give negative reviews on the web. Such agreements violate the basic ethical tenets of medicine and should be avoided. Similarly, attempting to remove negative comments and negative reviews through legal channels may raise ethical issues, as filing a claim may result in breached medical confidentiality (if the patient's name is revealed). Instead, providers are advised to learn more about ethical forms of reputation management. As a first step, one might perform a basic search on Google or Bing and look for outdated or incorrect information that can be corrected easily. These searches may also reveal errors or lapses in one's privacy settings on

various social networking sites such as Facebook or LinkedIn. If information appears in a Google or Bing search that one would prefer to keep private, it may be time to revisit the privacy settings at the site for which the problematic results appeared. An important aspect of reputation management for psychiatrists is ensuring professionalism in the use of social media (see bibliography for several resources on this subject).

Staying informed

Because the practices of telepsychiatry and telemental health (and the associated laws and regulations) are changing so rapidly, it is critical for psychiatrists who offer internet-based services of any kind to stay abreast of new developments in empirical research and laws and rules regulating their practices. Fortunately, modern technology offers many options for staying informed. Some providers may appreciate the convenience of subscribing to RSS feeds or e-mail listservs and electronic newsletters pertaining to their topics of interest. Malpractice carriers and law firms often produce helpful, informative, and concise newsletters and blogs that one can follow in order to learn about the critical developments affecting one's practice. A growing number of CME courses cover issues such as telemedicine reimbursement and interpreting the HIPAA rules. One may also set customized alerts in academic research databases (such as PubMed) so that one receives an e-mail anytime a new article is published on a topic of interest.

Empirical Research

Several studies investigating the efficacy and effectiveness of e-therapy or telepsychiatry for the treatment of several disorders or conditions have recently been published, but this field developing rapidly, and the interested reader should perform a literature review to locate the latest findings. There remains a need for additional research into the use of e-therapy and telepsychiatry in the treatment of various conditions. A selected bibliography follows at the end of this document.

Implications for the Future

Given the rapid increase in the popularity of the internet for obtaining information about mental health, a growing number of people will become aware of the availability of e-therapy and internet applications in mental health services. As knowledge of these services becomes widespread, the demand for them will likely grow. There are already numerous practitioners of e-therapy and telepsychiatry, and this number will continue to increase. Younger generations may express a preference for internetenabled communications with their healthcare providers, and patients' preferences must be taken into account in order to provide patient-centered care. As the use of the internet in clinical psychiatry expands, new research studies will surface. The results of these research projects, in conjunction with evolving case law, regulations, and ethical guidelines, will formulate the standard practices and procedures in the growing field of electronic mental health services.

BIBLIOGRAPHY

Note: References in **BOLD** type are meta-analyses, reviews, or otherwise recommended as especially helpful.

- Amarendran V, George A, Gersappe V, et al. The reliability of telepsychiatry for a neuropsychiatric assessment. Telemed e-Health 2011; 17(3):223-225.
- American Academy of Child and Adolescent Psychiatry. Practice parameter for telepsychiatry with children and adolescents. J Am Acad Child Adolesc Psychiatry 2008; 47(12):1468-1483.
- American Medical Association. AMA Code of Medical Ethics, Opinion 9.124: Professionalism in the use of social media. Opinion issued June 2011. Accessed 2 September 2013 from http://www.amaassn.org/ama/pub/physician-resources/medical-ethics/code-medicalethics/opinion9124.page.
- American Psychiatric Association. Telepsychiatry via videoconferencing [Resource Document]. Washington, D.C.: American Psychiatric Association, July 1998.
- American Telemedicine Association. Evidence-based practice for telemental health. ATA, July 2009. Accessed 29 August 2013 from http://www.americantelemed.org/practice/standards/ata-standardsguidelines/evidence-based-practice-for-telemental-health.
- American Telemedicine Association. Practice guidelines for Videoconferencing-based telemental health. ATA, October 2009. Accessed 29 August 2013 from http://www.americantelemed.org/practice/ standards/ata-standards-guidelines/videoconferencing-basedtelemental-health.
- American Telemedicine Association. Practice guidelines for videobased online mental health services. ATA, May 2013. Accessed 29 August 2013 from http://www.americantelemed.org/practice/ standards/ata-standards-guidelines/practice-guidelines-for-videobased-online-mental-health-services.
- Armfield NR, Gray LC, Smith AC. Clinical use of Skype: a review of the evidence base. J Telemed Telecare 2012; 18:125-127.
- Bailey RA. The legal, financial, and ethical implications of online medical consultations. J Tech Law Policy 2011; 16:53-105.
- Baker L, Wagner TH, Singer S, Bundorf MK. Use of the internet and email for health care information: results from a national survey. JAMA 2003; 289:2400-2406.
- Barak A, Grohol JM. Current and future trends in internet-supported mental health interventions. J Technol Hum Serv 2011; 29:155-196.
- Barak A, Hen L, Boniel-Nissim M, Shapira N. A comprehensive review and a meta-analysis of the effectiveness of internetbased psycho-therapeutic interventions. J Technol Hum Serv 2008; 26(2/4):109-160.
- Bee PE, Bower P, Lovell K, et al. Psychotherapy mediated by remote communication technologies: a meta-analytic review. BMC Psychiatry 2008; 8:60. Accessed 29 August 2013 from http://www.biomed central.com/1471-244X/8/60.

Bhuvaneswar CG, Gutheil TG. E-mail and psychiatry: some psychotherapeutic and psychoanalytic perspectives. Am J Psychother 2008; 62(3):241-261.

- Bosslet GT, Torke AM, Hickman SE, et al. The patient-doctor relationship and online social networks: results of a national survey. J Gen Intern Med 2011; 26(10):1168-1174.
- Callens S, Cierkens K. Legal aspects of E-HEALTH. Stud Health Technol Inform 2008; 141:47-56.
- Cash CD. Telepsychiatry and risk management. Innov Clin Neurosci 2011; 8(9):26-30.
- Center for Connected Health Policy (National Telehealth Policy Resource Center). State telehealth laws and reimbursement policies: a comprehensive scan of the 50 states and the District of Columbia. Sacramento, CA: CCHP, March 2013.
- Clemens NA. Privacy, consent, and the electronic mental health record: the person vs. the system. J Psychiatr Pract 2012; 18(1):46-50.
- Clinton BK, Silverman BC, Brendel DH. Patient-targeted Googling: the ethics of searching online for patient information. Harv Rev Psychiatry 2010; 18(2):103-112.
- Coiera E, Aarts J, Kulikowski C. The dangerous decade. J Am Med Inform Assoc 2012; 19:2-5.
- Currie SL, McGrath PJ, Day V. Development and usability of an online CBT program for symptoms of moderate depression, anxiety and stress in post-secondary students. Comp Hum Behav 2010; 26:1419-1426.
- Dongier M, Tempier R, Lalinec-Michaud M, Meunier D. Telepsychiatry: psychiatric consultation through two-way television. A controlled study. Can J Psychiatry 1986; 31(1):32-34.
- Farnan JM, Sulmasy LS, Worster BK. Online medical professionalism: patient and public relationships: policy statement from the American College of Physicians and the Federation of State Medical Boards. Ann Intern Med 2013; 158(8):620-627.
- Farrell HM, Mossman D. Practicing psychiatry via Skype: medicolegal considerations. Curr Psychiatry 2011; 10(12):30-39.
- Federation of State Medical Boards of the United States, Inc. Model guidelines for the appropriate use of the internet in medical practice. Dallas, TX: FSMB, 2002. Accessed 29 August 2013 from http://www.fsmb.org/pdf/2002_grpol_Use_of_Internet.pdf.
- Federation of State Medical Boards of the United States, Inc. Model policy guidelines for the appropriate use of social media and social networking in medical practice. Euless, TX: FSMB, 2012. Accessed 29 August 2013 from http://www.fsmb.org/pdf/pub-socialmedia-guidelines.pdf.
- Gabbard GO. Clinical challenges in the internet era. Am J Psychiatry 2012; 169(5):460-463.
- Gabbard GO, Kassaw K, Perez-Garcia G. Professional boundaries in the era of the internet. Acad Psychiatry 2011; 35:168-174.
- García-Lizana F, Muñoz-Mayorga I. What about telepsychiatry? A systematic review. Prim Care Companion J Clin Psychiatry 2010; 12(2):e1-e5.
- Goldstein MM. Health information technology and the idea of informed consent. J Law Med Ethics, Spring 2010: 27-35.
- Goodman KW. Ethics, information technology, and public health: new challenges for the clinician-patient relationship. J Law Med Ethics, Spring 2010: 58-63.
- Hilty DM, Ferrer DC, Parish MB, et al. The effectiveness of telemental health: a 2013 review. Telemed e-Health 2013; 19(6):444-454.
- Hunkeler EM, Hargreaves WA, Fireman B, et al. A web-delivered care management and patient self-management program for recurrent depression: a randomized trial. Psychiatr Serv 2012; 63(11):1063-1071.
- Hyler SE, Gangure DP. Legal and ethical challenges in telepsychiatry. J Psychiatr Pract 2004; 10(4):272-276.
- Hyler SE, Gangure DP, Batchelder ST. Can telepsychiatry replace in-person psychiatric assessments? A review and meta-analysis of comparison studies. CNS Spectr 2005; 10(5):403-413.

- Institute of Medicine. Beyond the HIPAA Privacy Rule: Enhancing Privacy, Improving Health Through Research. Washington, D.C.: National Academies Press, 2009.
- Jain S. Googling ourselves: what physicians can learn from online rating sites. NEJM 2010; 362(1):6-7.
- Karasz HN, Eiden A, Bogan S. Text messaging to communicate with public health audiences: how the HIPAA security rule affects practice. Am J Pub Health 2013; 103(4):617-622.
- Kellermann AL, Jones SS. What it will take to achieve the as-yet-unfulfilled promises of health information technology. Health Aff 2013; 32(1):63-68.
- Kenter R, Warmerdam L, Brouwer-Dudokdewit C, et al. Guided online treatment in routine mental health care: an observational study on uptake, drop-out and effects. BMC Psychiatry 2013; 13:43 [epub ahead of print]; doi: 10.1186/1471-244X-13-43.
- Klein CA. Cloudy confidentiality: clinical and legal implications of cloud computing in health care. J Am Acad Psychiatry Law 2011; 39(4):571-578.
- Lardiere MR. Unlocking and sharing behavioral health records: movement emerges to exchange sensitive records through HIEs. J AHIMA, April 2013. Accessed 29 August 2013 from http://library.ahima.org/ xpedio/groups/public/documents/ahima/bok1_050144.hcsp?dDocNa me=bok1_050144.
- Lexcen FJ, Hawk GL, Herrick S, Blank MB. Use of video conferencing for psychiatric and forensic evaluations. Psychiatr Serv 2006; 57(5):713-715.
- Lo B, Parham L. The impact of Web 2.0 on the doctor-patient relationship. J Law Med Ethics, Spring 2010: 17-26.
- Luxton DD, Sirotin AP, Mishkind MC. Safety of telemental healthcare delivered to clinically unsupervised settings: a systematic review. Telemed e-Health 2010; 16(6):705-711.
- Menachemi N, Prickett CT, Brooks RG. The use of physician-patient email: a follow-up examination of adoption and best-practice adherence 2005-2008. J Med Internet Res 2011; 13(1):e23.
- Mewton L, Wong N, Andrews G. The effectiveness of internet cognitive behavioral therapy for generalized anxiety disorder in clinical practice. Depression Anxiety 2012; 29:843-849.
- Midkiff DM, Wyatt WJ. Ethical issues in the provision of online mental health services (etherapy). J Technol Hum Serv 2008; 26(2/4):310-332.
- Modahl M, Tompsett L, Moorhead T. Doctors, Patients, & Social Media. QuantiaMD, September 2011.
- Moreno FA, Chong J, Dumbauld J, et al. Use of standard webcam and internet equipment for telepsychiatry treatment of depression among underserved Hispanics. Psychiatr Serv 2012; 63(12):1213-1217.
- Mostaghimi A, Crotty BH. Professionalism in the digital age. Ann Intern Med 2011; 154(8):560-562.
- O'Reilly R, Bishop J, Maddox K, et al. Is telepsychiatry equivalent to face-to-face psychiatry? results from a randomized controlled equivalence trial. Psychiatr Serv 2007; 58(6):836-843.
- Osunmuyiwa O, Ulusoy AH. Wireless security in mobile health. Telemed e-Health 2012; 18(10):810-814.
- Pho K, Gay S. Establishing, Managing, and Protecting Your Online Reputation: A Social Media Guide for Physicians and Medical Practices. Phoenix, MD: Greenbranch Publishing, LLC, 2013.
- Recupero PR. Legal concerns for psychiatrists who maintain web sites. Psychiatr Serv 2006; 57(4):450-452.
- Recupero PR. E-mail and the psychiatrist-patient relationship. J Am Acad Psychiatry Law 2005;33(4):465-475.
- Recupero PR, Rainey SE. Forensic aspects of e-therapy. J Psychiatr Pract 2005; 11(6):405-410.
- Recupero PR, Rainey SE. Informed consent to e-therapy. Am J Psychother 2005; 59(4):319-331.
- Reynolds Jr DJ, Stiles WB, Bailer AJ, Hughes MR. Impact of exchanges and client-therapist alliance in online-text psychotherapy. Cyber-Psychology Behav Soc Networking 2013; 16(5):370-377.

- Ruskin PE, Silver-Aylaian M, Kling MA, et al. Treatment outcomes in depression: comparison of remote treatment through telepsychiatry to in-person treatment. Am J Psychiatry 2004; 161(8):1471-1476.
- Sarasohn-Kahn J. The Online Couch: Mental Health Care on the Web. Oakland, CA: California HealthCare Foundation, June 2012.
- Seçkin G. Cyber patients surfing the medical web: computer-mediated medical knowledge and perceived benefits. Comp Hum Behav 2010; 26:1694-1700.
- Sharp IR, Kobak KA, Osman DA. The use of videoconferencing with patients with psychosis: a review of the literature. Ann Gen Psychiatry 2011; 10(1):14; doi: 10.1186/1744-859X-10-14.
- Shore JH, Savin D, Orton H, et al. Diagnostic reliability of telepsychiatry in American Indian veterans. Am J Psychiatry 2007; 164:115-118.
- Shore JH. Telepsychiatry: videoconferencing in the delivery of psychiatric care. Am J Psychiatry 2013; 170(3):256-262.
- Siemer CP, Fogel J, Van Voorhees BW. Telemental health and webbased applications in children and adolescents. Child Adolesc Psychiatr Clin N Am 2011; 20:135-153.
- Simon GE, Ludman EJ, Tutty S, et al. Telephone psychotherapy and telephone care management for primary care patients starting antidepressant treatment: a randomized controlled trial. JAMA 2004; 292(8):935-942.
- Singh SP, Arya D, Peters T. Accuracy of telepsychiatric assessment of new routine outpatient referrals. BMC Psychiatry 2007; 7:55, doi: 10.1186/1471-244X-7-55.
- Spielberg AR. Sociohistorical, legal, and ethical implications of e-mail for the patient-physician relationship, JAMA 1998; 280:1353-1359.
- Spielberg AR. Online without a net: physician-patient communication by electronic mail, Am J Law Med 1999; 25(2-3):267-295.
- Taitsman JK, Grimm CM, Agrawal S. Protecting patient privacy and data security. NEJM 2013; 368(11):977-979.

- Terry M. Medical identity theft and telemedicine security. Telemed e-Health 2009; 15(10):928-932.
- Thompson LA, Dawson K, Ferdig R, et al. The intersection of online social networking with medical professionalism. J Gen Intern Med 2008; 23(7):954-957.
- Wagner B, Horn AB, Maercker A. Internet-based versus face-to-face cognitive-behavioral intervention for depression: a randomized controlled non-inferiority trial. J Affect Disord 2013; epub ahead of print; doi: 10.1016/j.jad.2013.06.032.
- Williams AD, Andrews G. The effectiveness of internet cognitive behavioural therapy (iCBT) for depression in primary care: a quality assurance study. PLoS One 2013; 8(2):e57447.
- Wisdom J, Bielavitz S, French R. Psychiatric information systems: an analysis of inpatient and outpatient unit capabilities. J Technol Hum Serv 2008; 26(1):1-17; doi: 10.1300/J017v26n01_01.
- Yellowlees PM, Holloway KM, Parish MB. Therapy in virtual environments: clinical and ethical issues. Telemed e-Health 2012; 18(7):558-564.
- Yellowlees PM, Odor A, Parish MB, et al. A feasibility study of the use of asynchronous telepsychiatry for psychiatric consultations. Psychiatric Serv 2010; 61(8):838-840.
- Yuen EK, Herbert JD, Forman EM, et al. Treatment of social anxiety disorder using online virtual environments in Second Life. Behav Ther 2013; 44:51-61.
- Zack JS. How sturdy is that digital couch? Legal considerations for mental health professionals who deliver clinical services via the internet. J Technol Hum Serv 2008; 26(2/4):333-359.
- Zou JB, Dear BF, Titov N, et al. Brief internet-delivered cognitive behavioral therapy for anxiety in older adults: a feasibility trial. J Anxiety Disord 2012; 26:650-655.