

Teleconferencing Model for Forensic Consultation, Court Testimony, and Continuing Education

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A medical center-based forensic clinic that provides the necessary comprehensive consultation, continuing education, court testimony, and clinical services through an applied model of teleconferencing applications is addressed. Telemedicine technology and services have gained the attention of both legal and clinical practitioners, examining trends and models of health care for underserved populations, and identifying where consultation with a team of professionals may benefit service providers in rural communities. The contribution offered herein provides an understanding of the history of the development of the clinic, a theoretical model that has been applied to a clinical forensic program that employs telepsychiatry services, and the ethical and malpractice liability issues confronted in using teleconferencing services. This model is examined through a child and adolescent forensic evaluation clinic. The goals of this model are offered, as are a number of applications within the broad spectrum of services utilizing telemedicine. Finally, changing patterns are addressed in clinically based health-care delivery for criminal justice, social services, and forensic mental health. Copyright © 2008 John Wiley & Sons, Ltd.

Forensic clinical practice in a child psychiatry outpatient clinic in a university affiliated institution has led to applications for clinical consultation that enhance the quality of patient care through video teleconferencing. Baker (2000), Miller (2001, 2006), Miller, Burton, Hill, Luftman, Veltkamp, and Swope (2005), Miller, Elliott, Long, Marzenac, and Moder (2006), Miller, Miller, Burton, Sprang, and Adams

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(2003), Shaw, Goodwin, Whitten, and Doolittle (1999), Tang (2000), Whitten and Cook (1999), and Wood, Miller, and Hargrove (2005) have all addressed the use of video conferencing with both children and adults. Through this medium, patients in need of specialized care that might not readily be available to them can have the specialty consultation of experts using teleconferencing technology. Our purpose is to provide an applied model of mental health and behavioral science care delivery and highlight the use of child psychiatric teleconferencing services as a vehicle for improving access to needed mental health-care consultation for patients who are at the intersection of mental health and the legal system.

While elements of video teleconferencing have been used in medical diagnosis, patient care, and professional education for more than 30 years in the United States, interest surged when digital-imaging technology became widely available, costs of transmission and equipment were reduced, and some reimbursement barriers were eliminated. In 1991, there were four telemedicine networks in the U.S.; about five years later, there were approximately 160. In 1994, there were 2,083 teleconsultations; in 1998, more than 52,000 teleconsultations were carried out. Video consultations increased from 1,750 in 1993 to 18,766 in 1996. The most active specialties for teleconsultation have been psychiatry (17.9%), cardiology (16.7%), ophthalmology (9.6%), and orthopedics (5.7%). Costs for the hardware, software, and signal transmission started high but have dropped dramatically. In 1992, interactive video equipment cost more than \$100,000; in 2000 the same equipment could be purchased for less than \$20,000 (Baker, 2000).

Clinicians and forensic specialists are experiencing several paradigmatic changes, including administrative paradigms, clinical models, information systems, and intervention models. Some of the emerging trends in each of these categories are summarized in Table 1. Most notable among these changes are the multiple uses of video teleconferencing in the criminal justice and forensic domains.

Table 1. Patterns in forensic consultation

	Past patterns	Contemporary patterns
Administrative paradigms	Forensic referral to medical centers, independent clinical practices and independent provider-based contracting.	Forensic clinics establish partnerships, networks, and alliances; contracting through integrated service delivery system of service providers using teleconferencing.
Clinical models	Provider focused, clinicians and individual providers/specialists. They provide services on an independent basis to courts and lawyers.	Patient focused, clinical models, clinician, and team of providers and specialists provide services to courts, judicial systems.
Information models	Paper clinical records, provider developed record systems, local accessibility in the courts to records.	Interactive television consultation, electronic health records, online support systems, electronic files and e-mail electronic information exchange for comprehensive and integrated forensic services.

FORENSIC CLINIC MODEL

The forensic clinic model has existed for more than two decades and a brief history of the Child and Adolescent Forensic Clinic within the Department of Psychiatry at University of Kentucky Medical Center reflects the growth and development of teleconferencing services in its service delivery. Initially subspecialty clinics were established in the Child Psychiatry Outpatient Clinic. One was called the Family Mediation and Evaluation Clinic; this focused on child litigation cases and offered mediation and evaluation services in child custody cases. The clinic accepted only court ordered cases for mediation. If mediation was not successful, the clinic moved towards evaluation and subsequently offered an opinion to the court regarding a custodial and timesharing plan that was in the psychological best interest of the child.

A second clinic was established called "The Child Abuse and Domestic Violence Clinic." This specialty clinic focused on neglected, physically abused, and sexually abused children, and children psychologically impacted by family dysfunction. In the last two decades, the child psychiatry clinic received referrals for a variety of other forensic cases, including children who had threatened to hurt others or damage their school property, as well as those with clinical depression, anxiety, and traumatic stress disorder symptoms. More recently, the subspecialty clinics were merged under one "umbrella" clinic labelled the Child and Adolescent Forensic Clinic. In addition to the traumatized children and child litigation cases, child competency cases were seen, as well as the assessment for the impact of childhood trauma and family dysfunction on its members.

A MULTI-DISCIPLINARY MODEL

The Child and Adolescent Forensic Clinic is located in the Child Psychiatry Outpatient Clinic, Department of Psychiatry, University of Kentucky Medical Center, University of Kentucky, Lexington, Kentucky. Child psychiatrists, along with clinical social workers, clinical psychologists, and nurses, work cooperatively in assessing and treating cases. At least two or three disciplines are used in all evaluations. A multi-disciplinary approach allows the opportunity to offer a variety of psychotherapeutic approaches, including interpersonal therapies, individual therapies, psychological testing, and a range of medical interventions that include hospitalization, residential treatment, medication management, and medical evaluation, where there are allegations of sexual abuse.

SUPERVISION AND CLINICAL TRAINING

Wood et al. (2005) addressed the use of video teleconferencing in clinical supervision. Such models are an important part of the delivery of health services to rural and underserved sites. Clinical training and supervision of graduate students in social work and psychology, medical students, and psychiatric residents are achieved through observation with one-way mirrors, as well as having the faculty member and the trainee jointly participate in evaluations and treatment. In addition, courtroom testimony is taught and trainees accompany expert witnesses to the

courtroom. More than 50 hours of courtroom testimony has been accumulated on videotape and made available to all trainees through video teleconferencing.

In addition, using video teleconferencing, a “Juvenile Justice/Child and Adolescent Forensic Clinic Seminar” meets two hours per month and focuses on a wide variety of topics, including evaluation strategies, treatment approaches, courtroom testimony, child competency, court ordered evaluation in sexual abuse cases, child litigation, fire setters, and dangerousness evaluations.

TRAINING THROUGH A TELECONFERENCING NETWORK

Education, consultation and continuing education via interactive teleconferencing have been found to be effective (Miller & King, 2003). Such a program is offered through a network model to mental health practitioners. In the case of this model, education and training are offered through the Kentucky Telecare Network throughout Kentucky (Kentucky Telecare, 2008). The network offers links between key forensic units as exemplified in Figure 1 below and is used for case consultation along with didactic presentations of topics related to child maltreatment. Interactive teleconferencing via a POTS-based system (plain old telephone service) has also been useful in courtroom testimony, making it possible for mental health practitioners to testify in courts many hours away from the clinic and an impossibility if faculty had to travel to the remote site. In addition, forensic issues

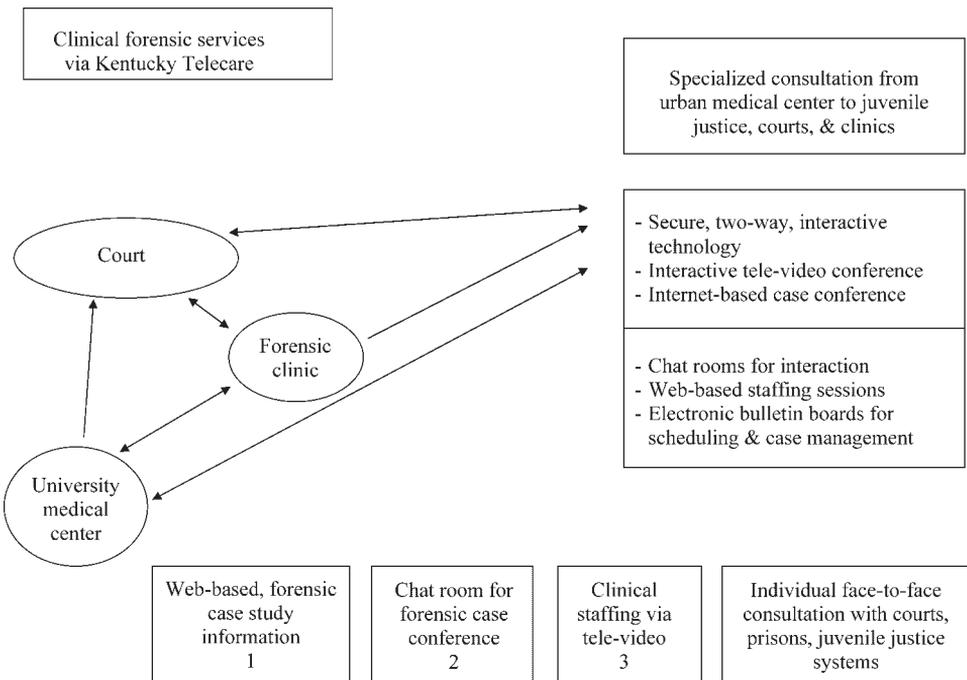


Figure 1. Clinical forensic consultation through teleconferencing technology.

are taught in graduate school courses (forensic mental health and psychopathology), in a medical school psychopathology course for second year medical students, and for child general psychiatry residents in their seminars.

VIDEOCONFERENCING IN PREPARATION FOR LITIGATION

The focus here is on mutual education. The mental health expert needs to know what the attorney will ask and the attorney must know how the expert will respond. Here the best surprise is no surprise. Videoconferencing provides an opportunity for sharing ideas and role playing. Jurisdictional issues in videoconferencing and telemedicine must be taken into account. Laws will vary from state to state and, therefore, it is necessary to realize these differences. Evidentiary aspects of videoconferencing are important. The expert is usually given the evidence in the form of police reports, laboratory reports, mental health records, health records, school records, etc., long before the testimony. Therefore, the experts, as well as the attorneys, have all the evidence in front of them when videoconferencing while preparing for litigation. Any questions can be raised and issues confronted.

ETHICAL & MALPRACTICE LIABILITY ISSUES

Even the most successful telepsychiatry clinics must be alert to the ethical and liability management issues that are emerging with burgeoning technologies. In fact, in his recent presidential address, American Psychological Association president, Gerald Koocher (2007, p. 375), has identified “four C’s” in this area of innovative practice: “. . .contracting, competence, confidentiality and control. What contracts or agreements for providing services will we make with our clients? What competencies will we need to offer services remotely? What new factors will constrain confidentiality protections? Who will control the practice of telepsychology (i.e., the regulation of practice and data access)?”.

Koocher (2007) makes three recommendations for ethical management. First, the mental health professional (MHP) should hold a valid license in the states or jurisdictions in which the MHP and client agree shall be controlling regarding the ethical and legal delivery of services. This agreement should also cover the “usual issues” that compose informed consent and therapeutic contracts. Second, the MHP should hold a reasonable level of confidence that the telepsychological intervention can be effective in creating positive treatment outcomes and should monitor therapeutic progress carefully. Third, the MHP should discuss HIPPA provisions and other confidentiality issues with each client as part of the informal consent process. Clearly MHPs engaged in this kind of work must attend to the wide range of traditional ethical and malpractice issues (Clark, 1999), as well as determining the applications of longstanding ethical approaches to this innovative service delivery approach, all while responding to new iterations that are only becoming observable as telemedicine is actually practiced.

Indeed, some observers claim that the successful management of ethical and liability problems are *essential* for the sustainability of telemedicine in general and

telepsychiatry in particular. Wachter (2002) puts the case forcefully: "The addition of telemedicine technology to healthcare delivery has had positive effects . . . yet it is telemedicine's effect on medical liability . . . that requires some examination if its eventual assimilation is to be ubiquitous or just a footnote to modern healthcare" (p. 1). In other words, the legal and economic costs and benefits associated with practice will be highly influential in determining the widespread institutionalization of telemedical technologies. But what specific risks and strategies are important for the effective management of liability risks?

Wachter (2002) notes that, while the discussion of specific areas of risk is impeded by the "lack of telemedicine case law" (p.2), logical and analogical reasoning can help practitioners analyze potential liability risk issues. He delineates three major risk areas, which we will also elaborate upon based on our observations. First, telemedicine cases often involve multiple professionals from multiple locations working with the same patient. This creates complex risk interactions, especially if each professional is providing diagnoses and intervention opinions. Risk is certainly magnified in cases where the MHPs are not communicating to coordinate care. Second, there has been historical resistance by malpractice insurance carriers to cover telemedicine, and especially its interstate practice. It is risky for MHPs to wait until they face a complaint to discover how willing their carriers will be to provide the necessary coverage. This public policy issue will prove an important area for state insurance commissioners and policymakers to engage sooner rather than later.

Finally, it is currently unclear how legal jurisdiction for telemedicine cases will be determined. For example, if the MHP is located in Kentucky and providing services for a patient in Ohio, it is can be uncertain in which jurisdiction subsequent complaints would be handled. MHPs might be faced with the requirement to defend their actions in unfamiliar, out-of-state jurisdictions, or even in two jurisdictions—a considerable burden. Additionally, these considerations potentially extend to licensure or consumer protection boards. While obtaining multiple state licensures provides the MHP with the authority to practice across jurisdictions, it also obligates the MHP to understand and comply with the laws and regulations that pertain in those jurisdictions. These can vary significantly across jurisdictions.

Martin's analysis of this last issue concludes with the assertion that a "non-resident defendant health-care provider may be legally subject to the jurisdiction of a court pursuant to the state's long-arm statute and 'minimum contacts' theory" (Martin, 2002, p. 2). Using this legal theory, a state court system has jurisdiction over any person doing business in that state, as long as the resident plaintiff purposively engages in a business or professional relationship with a non-resident defendant who knowingly benefits from the resources and benefits and protections enjoyed through commerce in that state (e.g. through advertisement or business solicitation). Indeed, such cases appear to combine such new burdens with traditional malpractice risks. For example, in the case of *Harvard, et al. v. The Children's Clinic of Southwest Louisiana, Inc.*, an out-of-state plaintiff's damaging affirmative statements regarding a telephone consultation were admitted into evidence because of the absence of the health-care professional's documentation regarding the specific content of their contact. Hence, poor documentation and interstate liability created an almost non-defensible lawsuit for the defendant (Martin, 2002).

Additionally, traditional ethical and liability issues such as professional-client confidentiality and Health Insurance Portability and Accountability Act (HIPAA)

compliance are more complex when information transmission is always assumed rather than occurring in special situations. Martin argues that providers must utilize important preventative measures, including training and supervising all professional, paraprofessional, and support staff; developing specialized patient safety protocols; implementing QA mechanisms to assure all professional credentialing is in order, including interstate background checks regarding previous disciplinary or legal actions; careful practice within scope of licensure; and adequate malpractice insurance held by each staff member.

Indeed, the current literature can only offer thoughtful conjecture and advice about the future behavior of the courts, because there is very limited case law concerning telemedicine and telepsychiatry. The authors conducted a Westlaw search and found a number of cases filed by state and federal prisoners that involved telemedicine and telepsychiatry, but none attacked the practitioners nor raised the use of these technologies as potential Eighth Amendment violations.¹ In fact, only a single appellate case addressed telepsychiatry as a major issue raised by the parties. Specifically, in *Kottle v Provident Life and Acc. Ins. Co.*,² a nephrologist disabled by panic disorder sued his insurer after the company denied his long-term disability. One claim raised in an appeal by the defendant company was that the plaintiff's participation in telepsychiatry constituted a "no treatment" condition, despite the fact the mental health professionals utilized cognitive behavioral therapy (CBT)—an empirically supported therapy for the plaintiff's mental disorder. Several defense mental health experts opined that CBT delivered telemetrically was inadequate to treat the plaintiff—i.e. that face-to face contact was required for CBT to be effective as a treatment. The trial court disagreed, and was upheld on appeal. While this case does not represent a solid precedent for use across the nation, it provides a good example of the type of issues future plaintiffs might raise in malpractice cases filed against health-care professionals using video teleconferencing.

THE APPLICATION OF FORENSIC VIDEOCONFERENCING

Teleconferencing in psychiatry and mental health is the use of telecommunications technology to provide a spectrum of clinical consultation and services across distances and has recently re-emerged as a potentially clinically appropriate, cost-effective means of meeting the needs of some students, in the changing health-care system. This definition stresses a focus on delivery of services across distances, with a sense of concern for ethical provision of services and confidentiality of the patients, in addressing the health-care needs in our society. Delivery of clinical forensic services through teleconferencing has been considered a partial solution to the problems of accessing health care in remote areas, as well as in areas underserved

¹ These cases include *Odom v. Hutchinson* W.D. Mich., 2007; *Bell v. Okuwobi* M.D. Ga., 2006; *Shah v. Rhinehart* W.D. Pa., 2006; *Morris v. Mitchell* E.D. Cal., 2006; *Young v. Bresler* E.D. Cal., 2006; *Ocltree v. Phillips* E.D. N.C., 2004; and *Polk v. Duke* N.D. Tex., 2005.

² These cases include *Odom v. Hutchinson* W.D. Mich., 2007; *Bell v. Okuwobi* M.D. Ga., 2006; *Shah v. Rhinehart* W.D. Pa., 2006; *Morris v. Mitchell* E.D. Cal., 2006; *Young v. Bresler* E.D. Cal., 2006; *Ocltree v. Phillips* E.D. N.C., 2004 and *Polk v. Duke* N.D. Tex., 2005.

by health-care professionals. Various projects have demonstrated a wide variety of clinical tasks that can successfully be accomplished by a telecare network³ comprising interactive television and voice communication systems. The need for such systems is obvious in the face of the major obstacles clinicians face in providing a high standard of health-care delivery in a time efficient and cost-effective manner (Bashshur & Armstrong, 1996; Western Governors Association, 2001). Through teleconferencing networks, consumers can connect with the health-care provider via live, two-way audio and video teleconferences, eliminating the distance factor and permitting efficient diagnosis and treatment, as well as other health-care services.

CASE STUDY

This case was evaluated subsequent to a court order and later heard in a court room approximately a 150 miles from Lexington via Telepsychiatry. This evaluation involves a detailed assessment of two children, ages 7 and 5. In addition, their parents were seen individually, jointly, and with their children, and the paternal and maternal grandparents, who care for the children frequently, were seen as part of the evaluation. This included the assessments of the children's symptoms, which were determined to be a reaction to the escalating conflict between the parents and included night fears and anxiety, as well as regressions. The goal was to offer the court an opinion regarding the least detrimental alternative for the children.

It was determined that the children needed liberal contact with each parent as well as all the grandparents. In addition, it was clear that both parents were adequate and that neither should lose custody of their children. Clearly, the best alternative for the children could be achieved by maintaining the psychological attachments each of the children had with each other, as well as with the parents and grandparents. In addition, it was clear that continuity of place, as well as relationships, were vitally important.

Testimony, involving examination and cross examination, occurred via Telepsychiatry. The judge, attorneys, and family members could see and interact with the witness and the witness could see and interact with the judge and attorneys. The court officials, including the judge and the attorneys, gave positive feedback, explaining that interactive television allowed court testimony to rural areas in cases where the distance factor might have prevented testimony in the past.

TELECONFERENCING TO COMMUNITY AGENCIES IN RURAL AREAS

Figure 1 summarizes a model for using clinic-based teleconferencing technology in serving rural populations. Children with special needs in rural settings are seen in their community setting through the rural mental health clinic. The clinician may wish to consult a mental health specialist and may use a telecare network link to a child psychiatry clinic of a university hospital. In an Internet based model, clinical records can be shared through electronic medical records with consulting clinicians, providing them with an opportunity to review information individually and respond

³ Kentucky Telecare is the statewide network used by the Department of Psychiatry and forensic services offered through the University of Kentucky (see Figure 1).

to relevant clinical issues. A clinical treatment of the child involving the clinician in the rural clinical setting can be achieved through interactive teleconference links through a telecare network. Using dedicated two-way interactive technology, a spectrum of telemedicine services can be provided in a more cost effective and time efficient manner.

VIDEO CONFERENCING FOR CONTINUING EDUCATION

Vide Conferencing technology can provide a means to reach isolated mental health clinicians from multiple disciplines. Clinical social workers, psychologists, nurse practitioners, and physicians can obtain continuing education hours required for licensure board eligibility and board certification. The University of Kentucky Psychiatry Department has developed a telepsychiatry curriculum specifically for mental health clinicians in rural areas. This program has 15 contact sites throughout the state and provides these isolated treatment facilities with a comprehensive seminar series, covering an array of topics relevant to meeting the mental health needs of children and families, including courtroom testimony, treatment of the sexually abused child, evaluation and treatment of eating disorders, etc. In addition, a two-hour monthly seminar is designed for consultation of difficult cases. This is an opportunity for clinicians to receive feedback—eliminating the need for clients to have to travel distances for consultation. It also provides valuable support to clinicians who are managing very difficult complex cases. Another less tangible product of this endeavor is the development of a spreading statewide collegiality. Professionals from multiple disciplines and varied backgrounds come to know each other. This provides a network of statewide cooperation that goes beyond the teleconference sessions.

VIDEOCONFERENCING FOR COURTROOM TESTIMONY AND DEPOSITIONS

The faculty and staff of the “Child and Adolescent Forensic Clinic” have testified in court more than 300 times across Kentucky as well as in six additional states. Clearly, courtroom testimony, particularly testimony at some distance, creates two problems. The first is the heightened expense of long distance testimony. The time involved in traveling and sitting around the courtroom is expensive, and a cost that is often absorbed by the state or the family. The second problem is that both health-care and mental health professionals find the courtroom atmosphere undesirable and, therefore, are not willing to testify in these cases. The videoconferencing via a regular telephone line (POTS) provides a medium where courtroom testimony can occur at a designated time, thereby saving travel time, preventing the wasted time in the courthouse, and providing a comfortable atmosphere for the expert.

The mental health expert can be deposed or give actual testimony during courtroom proceedings via this relatively inexpensive technology. Experts have found it to be expedient in terms of time and personal expense and, more importantly, it has been well received by the courts. It has proven to be an effective

way to give testimony over long distances and thus remove one of the barriers to willingness to testify in difficult abuse cases.

PROVIDING MENTAL HEALTH SERVICES TO FORENSIC AND CORRECTIONAL POPULATIONS

Until recently, many youth in detention centers and juvenile justice facilities have had poor access to needed specialized mental health services. Assessments conducted in other facilities have not always been optimal. The need for increased accessibility and quality of service to youth in such facilities became more apparent when the Department of Juvenile Justice received a consent decree to improve psychiatric services to these youth. Providing services to youth in remote locations presented several problems. Few psychiatric services were available in these areas. The expense and travel time were prohibitive factors to those interested in providing such services. Around 2000, a program was begun to provide psychiatric consultation to a juvenile justice facility located in a remote part of the state. Services provided include evaluations, medication assessment, follow-up medication management, and treatment coordination. The patient receives rapid access to tertiary care, which facilitates prevention, early diagnosis and treatment, and enhanced continuity of care.

ISSUES IN VIDEOCONFERENCING TECHNOLOGY

Videoconferencing technology involves a spectrum of interactive video transmission modes. Currently, transmission modes include analog and digital. The analog mode, transmitted in the form of waves, is the technology of broadcast television on the high end of the scale, and the regular telephone line on the lower end of the scale. Among its advantages are the transmission of high resolution video images, via high bandwidth capacities such as satellite, microwave, T-1, or slower speed video and still images via lower bandwidth capacities of a phone or fax line, and its familiarity. Disadvantages with interactive video transmission include industry standards, the expense associated with transmission, and the complexity of the hardware in high bandwidth modes, to the jerky video or delayed audio at lowest bandwidth rates.

The working components of interactive video transmission include image/data capturing and transmission. Critical in this transformation is the CODEC, which is an acronym for coder-decoder. This equipment transforms the analog to a digital signal at one end of the network, and back again at the other. To transmit live video images, a video camera is needed at each site. It is augmented by microphone to pick up speech and other audible information so that those on each end can see and hear what is being sent to each site by the other.

The digital mode takes advantage of developments in computer science and transmits in the form of a digital byte-stream of zeros and ones. Its advantages are lower transmission costs, reduced equipment size, simplicity of operation for computer literates, easy interface with computers and with computerized systems, and non-degradation of the video image. Some relative disadvantages of the digital system include industry standards, the so-called echoes of motion that appear at slow

transmission speeds, large image file sizes, which could incapacitate a network, access to technology, and privacy and confidentiality issues.

DISCUSSION

Video teleconferencing has impacted the delivery of health-care, psychiatry and clinical services, education, supervisory consultation and continuing education and training for forensic application in the behavioral sciences and psychiatry. Its application in forensics to child and family services, the education system, and the justice system hold great promise (Miller, 2006). Few studies have emerged to assess the effectiveness of these initiatives. Efforts to date have included using closed circuit television to bring educational programs, clinical supervision, and treatment to distance sites a few miles away, as well as using satellite links to provide education and training to international sites (Ghosh, McLaren, & Watson, 1997; Stamm, Friedman, Schnurr, Hsieh, Rudolph, & Millman, 1998).

Videoconferencing services through a forensic clinic offer a visionary method of providing standardized and universal coverage to all children by linking metropolitan and flagship university medical centers and specialist services with rural school districts. As an alternative way of providing traditional health services, video teleconferencing is considered by some to be a solution to America's toughest health- and mental-health-care challenges, including increasing access to psychological service programs involving health-care experts, while decreasing the costs involved in providing quality care (Office of Rural Health Policy, 1994).

The future of video teleconferencing and the use of telemetry in provision of forensic services utilizing interactive television must address a spectrum of issues, including confidentiality and licensing for service provision (American Psychiatric Association, 1997; American Psychological Association, 1997). While the day may come when teleconferencing technology is utilized for a variety of uses, all decisions about such interventions must be informed decisions by the consumer. Legislative issues related to the spectrum of interventions will have to be addressed with respect to the licensure of professionals in providing these services in areas outside the geographic domains of the licensed professionals. Psychology, psychiatry, and social work must address the complex issues confronting national health care through teleconferencing technology (DHHS, 2000). Practitioners and researchers must encourage policymakers to account for the special needs of behavioral health records and services when developing national health information privacy policy. Research efforts should focus on which privacy conditions may encourage or discourage patients from seeking treatment through teleconferencing technology.

There are licensure requirements, as an impediment to interstate teleconferencing practice, that are also frequently cited as a major barrier to the development of health based teleconferencing systems (Nickelson, 1996). For several professions, obtaining and maintaining multiple licenses is a significant burden, which falls particularly hard on rural providers who incur heavy travel, lost work, and other costs in complying with the multiple application and continuing education requirements. In an effort to stave off anticipated legislative changes and to respond to larger health-care marketplace pressures, both physicians and nurses have begun to develop alternative licensure schemes for their professions (Federation of State

Medical Boards, 1994). Similarly, examining standards of care becomes critically important, and the issue of standards for videoconferencing is complex. Policy-makers and administrators, seeking to protect consumers while responding to the marketplace demand for clinically appropriate and cost-effective teleconferencing interventions, are beginning to clamor for both clinical and technological standards (Bureau of National Affairs, 2007).

Clinically, the issue of how any health-care professional is to provide clinical service is best left to the profession itself. Nonetheless, federal and state governments, acting to protect patients while increasing the acceptance of teleconferencing practice, have recently proposed that governmental groups explore clinical teleconferencing guidelines for various services. The need for standards will continue and professional psychology will likely be called on to develop models for its clinical providers. If the profession does not pursue such development of guidelines, it risks having the government or perhaps another provider group develop such standards, by which psychology would be required to abide.

The impact of cost on the provision of standard-based clinical services must be evaluated through clinical research and outcome studies to assess the effectiveness of the use of teleconferencing in the provision of such clinical services (Ghosh *et al.*, 1997). Teleconferencing and its adaptability to clinical services offer new avenues for provision of clinical care in the areas of consultation, diagnosis, and treatment services to underserved populations. Herein described has been another model where video teleconferencing can provide innovation in assessing human factors in the delivery of comprehensive standards of care to populations in need of such services. When crossing of state lines occurs in court testimony, different state laws come into play. It is important to consider these differences as well as differences in rules of evidence. What is clear is that video teleconferencing services, care consultation, and education are an emerging and useful ingredient in the delivery of a spectrum of forensic services that the medical, scientific, and behavioral sciences are providing in the first decade of the 21st century.

ACKNOWLEDGEMENTS

Authorship represents equal contribution to the completion of this article. The authors wish to acknowledge the assistance of Tag Heister, MLS, the Telepsychology Working Group, Pat DeLeon, Marty Seligman, Gary VandenBos, Toni Anker, Beth Stamms, Kathleen MacNamara, Leigh Jerome, David Nickelson, George Taylor, Linda Brown, Amy Farmer, Amy Pierce, Miranda Rogers, and Brenda Frommer in the completion of this manuscript.

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