Chapter 5.12
Telepractice:
A 21st Century Model of Health Care Delivery

Thomas W. Miller
University of Connecticut, USA

Jennifer A. Wood
VA Texas Valley Coastal Bend Health Care System, USA

ABSTRACT

Telehealth is viewed as the removal of time and distance barriers in the provision of health care and patient education to underserved populations. Examined is a twenty first century clinical consultation model of healthcare. Offered are specific applications within a broad spectrum of services utilizing telehealth technology. Important technology shifts for administrative paradigms, clinical models, and educational information technology for healthcare services through telehealth technology are examined. The future of telehealth and its interface with various critical components of society needs to examine the potential benefits over risks in providing healthcare consultations and services through the educational settings available. Addressed is a technology model, which demonstrates the capability of reducing time and distance barriers in the provision of health care and education through telehealth technology. The use of telehealth technology in rural settings is seen as a viable medium for providing needed diagnostic and clinical consultation for underserved and rural.

INTRODUCTION

The purpose of this chapter is to examine contemporary applications of telepractice within a rural community setting.. A brief review of current data regarding the impact of telepractice upon access and satisfaction with clinical care is provided. A clinical telepractice consultation model is outlined along with illustrative vignettes. Readers are also provided with suggested clinical practice guidelines and practical considerations for telepractice implementation. Telehealth, or the use of telecommunication technology to provide access to health assessment, diagnosis, intervention, consultation, supervision, education, and information across distance, has become a well recognized vehicle for delivering services and disseminating information to a variety of consumer populations as well as professionals and practitioners (Nickelson, 1998; Miller & Hutchins 2008). Given its ability to transcend many of the economic, cultural, and geographic barriers that often prohibit or restrict the provision of health care, the use of telehealth has reshaped traditional systems of care. Moreover, due to its unique capacity to negate many of the traditional obstacles in service delivery, telehealth is often a desirable option for the provision of health care to rural, confined, underserved or isolated groups (Miller & Holcomb 2007).

As a result, a large proportion of telehealth studies have focused on evaluating the effectiveness of telecommunications technology in delivering health services to rural and specialty populations (Wood, 2000). Numerous studies suggest that telehealth can be successfully utilized to improve access to health care services amongst underserved populations and that the quality of care delivered via telehealth is similar to or surpasses that of face-to-face services (Bischoff, Hollist, Smith, & Frank, 2004; Miller, Miller, Kraus, & Sprang, 2003; Norman, 2006) while maintaining a high degree of satisfaction

Since its inception, one of the primary advantages of telepractice has been its ability to improve access to health care services for people living in rural or remote areas where health care professionals are often scarce or absent. In the words of Nickelson (1998), "Telehealth is simply a tool that…makes it easier to practice already established professional skills across distance and to serve individuals and organizations who may not, but for telehealth, have access to such services" (p. 527). This ability to transcend geographic barriers has been the basis for three decades worth of demonstration projects targeted at rural populations. The use of telepractice to improve access to mental health care has since expanded to include other isolated groups, such as inner city families (Yellowlees, 2005; McLaren, Blunden, Lipsedge, & Summerfield, 1996; Straker, Mostyn, & Marshall, 1976), prison inmates (Ax et al, 2007), and homebound elderly (Maheu, Whitten, & Allen, 2001). Overall, these projects suggest that the use of telepractice is an effective means of improving access to both health care services as well as improving the exchange of information between providers (Blackmon, Kaak, & Ranseen, 1997). Efforts to assess the quality of telepractice care compared to traditional face-to-face services indicate that there is little difference in diagnostic and assessment outcomes across the two treatment modes (Ball & Puffett, 1998; Biggins, 2000; Zarate, et al., 1997 and that telehealth applications may serve to enhance the continuity and efficiency of care (Ghosh, McLaren, & Watson, 1997).

Research assessing patient and provider satisfaction with telecare services reveals uniformly positive results (Miller, 2006; Morgan, Patrick, & Magaletta, 2008; Wood, 2006). In one of the earliest studies of patient satisfaction with telepractice, Solow, Weiss, & Bergen (1971) reported that patient acceptance was impressively high even among highly paranoid patients. Since that time, further research has indicated that satisfaction with telepractce care remains high even when patients are acutely or chronically psychotic or

Related Content

Strategic Fit in the Healtcare IDS

Evelyn H. Thrasherand Terry A. Byrd (2011). *Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 1461-1469).*

www.irma-international.org/chapter/strategic-fit-healtcare-ids/53659

ISO 27000 Information Security Management System

Carrison K.S. Tongand Eric T.T. Wong (2009). *Governance of Picture Archiving and Communications Systems: Data Security and Quality Management of Filmless Radiology (pp. 28-40).*

www.irma-international.org/chapter/iso-27000-information-security-management/19320

Issues and Techniques to Mitigate the Performance Gap in Content-Based Image Retrieval Systems

Agma J. M. Traina, Caetano Traina, Robson Cordeiro, Marcela Ribeiroand Paulo M. Azevedo-Marques (2011). *New Technologies for Advancing Healthcare and Clinical Practices (pp. 60-83).*

www.irma-international.org/chapter/issues-techniques-mitigate-performance-gap/55137

Techniques for Medical Image Segmentation: Review of the Most Popular Approaches

Przemyslaw Lenkiewicz, Manuela Pereira, Mário M. Freireand José Fernandes (2011). *Biomedical Diagnostics and Clinical Technologies: Applying High-Performance Cluster and Grid Computing (pp. 1-33).*

www.irma-international.org/chapter/techniques-medical-image-segmentation/46686

Patient Journey Record Systems (PaJR) for Preventing Ambulatory Care Sensitive Conditions

Carmel M. Martin, Rakesh Biswas, Joachim P. Sturmberg, David Topps, Rachel Ellawayand Kevin Smith (2011). *Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 2153-2172).*

www.irma-international.org/chapter/patient-journey-record-systems-pajr/53704