

# Telepsychiatry Solutions White Paper

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## What Is the Market Opportunity?

### *Prevalence of Mental Illness*

Mental illness is a common problem in the United States. One in every four American adults, ages 18 and older (or 58 million people), experiences a mental illness or substance-related disorder each year. Approximately 10 percent of these Americans suffer severe, chronic, and debilitating conditions including schizophrenia, bipolar disorder, depression, anxiety, and drug addiction.<sup>1</sup>

### *War on Terrorism*

According to a recent study by the RAND Corporation, one in five U.S. soldiers who have returned from Iraq or Afghanistan report symptoms of post-traumatic stress disorder or major depression. This represents approximately 320,000 of the 1,600,000 service men and women who have been deployed over the last five years. Fewer than half of them have received any form of mental health or transitional support.<sup>2</sup>

### *Health Professional Shortage Areas*

According to the U.S. Department of Health and Human Services, sixty percent of rural Americans live in designated mental health professional shortage areas where many communities have limited or no access to psychiatrists, psychologists, and social workers. These communities are forced to pay exorbitant costs for mental health professionals to travel from urban centers to outlying rural hospitals, clinics, and community centers.<sup>3</sup> Frequently, rural Americans suffering mental illnesses go untreated, experience higher rates of suicide and homicide, and increasingly rely upon emergency services, hospitalizations, and placement in mental health institutions.

## What Is Telepsychiatry?

Telepsychiatry is a form of tele-mental health that is widely regarded as one of the most promising telehealth applications. It enables qualified mental health providers to remotely deliver mental health services to individuals living in underserved communities or to individuals with limited access to healthcare services due to mobility problems, poverty, or incarceration.

Mental health providers can use video conferencing over a broadband network connection to conduct 'virtual consultations' with individuals and groups co-located at different healthcare settings, including:

- Hospital emergency rooms
- Community health centers
- Clinics
- Physician offices
- Nursing homes
- Schools
- Prisons

Telepsychiatry enables mental health providers to extend health services to underserved areas, reduce travel time and costs, and improve communications and collaboration with patients, their families, and their local providers. These services include:

- Patient diagnosis and assessment
- Medication monitoring
- Individual and group therapy
- Forensic and legal evaluations

## Is Telepsychiatry Clinically and Financially Effective?

A number of peer reviewed articles has been published demonstrating the clinical and financial efficacy of telepsychiatry solutions.

### *Accurately Diagnose and Treat Patients*

St. Joseph's Healthcare System in Ontario, Canada, demonstrated that telepsychiatry can accurately diagnose and effectively treat mentally ill patients using interactive video conferencing.

Researchers examined a total of 495 patients referred to the psychiatric clinic by their family physician. Patients were randomly assigned to be examined face-to-face (N = 254) or by telepsychiatry (N = 241). Psychiatrists had the option of providing monthly follow-up appointments for up to four months. The study tested the equivalence of the two forms of service delivery on a variety of outcome measures. Psychiatric consultation and follow-up delivered by telepsychiatry produced clinical outcomes that were equivalent to those achieved when the service was provided face to face.<sup>4</sup>

### *Reduced Healthcare Delivery Costs*

Texas Technical University Health Sciences Center demonstrated that telepsychiatry can produce a significant cost savings for the Texas state prison system. They were contracted by Texas Department of Criminal Justice to provide medical care to approximately 33,000 inmates incarcerated within 26 adult prisons in western Texas. One-third of the 2,000 telemedicine consultations conducted each year were focused on telepsychiatry.

Telepsychiatry enabled mentally ill inmates residing in rural and remote areas to be treated within the four walls of the prison leveraging a closed-circuit, interactive video conferencing system. This obviated the need to transport inmates to other facilities to see medical specialists where transportation costs could easily run between \$200 and \$1,000 per trip.<sup>5</sup>

#### *High Patient and Clinician Satisfaction*

University of Arizona Telepsychiatry Program was started in 1998 to provide remote psychiatric services for individuals living in rural and remote parts of Arizona. The telepsychiatry program conducted more than 1086 teleconsultations with more than 206 patients. This included 159 adult (77 percent) and 47 pediatric patients (23 percent).

Adult patients completed 81 satisfaction surveys (51 percent) and psychiatrists completed 47 (23 percent). The responses showed that providers and patients found the telepsychiatry services satisfactory. The continued use of the services suggests that the telepsychiatry program fills a service gap in rural areas of the state.<sup>6</sup>

## Is Payer Reimbursement Available for Telepsychiatry?

More and more healthcare payers, including Medicare, Medicaid, and commercial third-party insurers, are providing reimbursement for telepsychiatry to compensate mental healthcare providers for their time and professional services rendered. Reimbursement Policy has expanded with Medicare now including outpatient mental health facilities as originating sites. State Medicaid and private payers have increased expansion of payment for Telepsychiatry services, but each state Medicaid and private insurer develops their own policy unless legislatively mandated.

Many commercial third-party insurers will provide reimbursement for telepsychiatry if the patient resides in a rural area and does not have convenient access to a local mental healthcare provider. An increasing number of states have established legislative mandates for Telehealth reimbursement which includes coverage of Telepsychiatry

Integrating telepsychiatry and other forms of telemedicine into the U.S. medical system will require consistent, comprehensive reimbursement policies on a state and federal level.<sup>7</sup>

## How Can Polycom Support Your Telepsychiatry Initiatives?

Polycom offers a wide range of standards-based voice and video solutions to support your organization's telepsychiatry initiatives.

#### *For the Patient Side*

Healthcare organizations can use the Polycom® Practitioner Cart™ unit which provides mobile high definition video conferencing capabilities on a cart that can be moved around to support multiple functions within a healthcare organization. It can support wireless communication, on-board PC applications, and with its built-in battery, it can be moved the patient location. Other options from Polycom include the Polycom HDX® 6000 Video Media Center™ which is a table-top system with a 42-inch monitor that is great for small group settings.

#### *For the Mental Health Provider Side*

Physicians can select from several desktop options including the Polycom HDX 4000 series and the Polycom CMA™ Desktop PC-based product. These solutions provide personal video conferencing capabilities while still allowing you access to your Microsoft® Windows® personal computer applications. This means that the physician can access his or her PC browser-based applications like Electronic Health Record while simultaneously conducting a live patient encounter.

With the Polycom RSS™ 2000 recording and streaming server and the Polycom Video Media Center™ (VMC) 1000 video content management solution, mental healthcare providers can securely record video conferences with patients that are available for on-demand playback.

Polycom also provides powerful desktop collaboration tools enabling mental healthcare providers to share relevant patient information with a patient's healthcare team to provide more effective care. They can discuss and coordinate patient care plans through the dissemination of the electronic health record, DICOM images, presentations, graphics, spreadsheets and multimedia files.

## Resources

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<sup>1</sup> National Institute of Mental Health, “The Numbers Count: Mental Disorders in America,” 2008

<http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml> .

<sup>2</sup> *The New York Times*, “Nearly a Fifth of War Veterans Report Mental Disorders, a Private Study Finds,” April 18, 2008.

<sup>3</sup> Dr. Jason Cafer, MD, “Integrating Telepsychiatry with Electronic Medical Record Technology for Improved Rural Mental Health Care,” February 5, 2009.

<sup>4</sup> O'Reilly R, Bishop J, Maddox K, Hutchinson L, Fisman M, Takhar J. “Is telepsychiatry equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial,” *Psychiatric Service*, June 2007.

<sup>5</sup> Council of State Governments, *Criminal Justice / Mental Health Consensus Project*, June 2002

<sup>6</sup> Cruz M, Krupinski EA, Lopez AM, Weinstein RS, “A review of the first five years of the University of Arizona telepsychiatry program, *Journal of Telemedicine and Telecare*,” 2005

<sup>7</sup> *Telemedicine Reimbursement Report*, Office for the Advancement for Telehealth, October 2003.