

The Frontline Reports column features short descriptions of novel approaches to mental health problems or creative applications of established concepts in different settings. Material submitted for the column should be 350 to 750 words long, with a maximum of three authors (one is preferred) and no references, tables, or figures. Send material to Francine Cournos, M.D., at the New York State Psychiatric Institute (fc15@columbia.edu) or to Stephen M. Goldfinger, M.D., at SUNY Downstate Medical Center (smgoldfingermd@aol.com).

Cross-Lingual Asynchronous Telepsychiatry: Disruptive Innovation?

Most X-rays are no longer physically taken by radiologists. Instead, the images are taken by a highly trained radiology technician and then sent to radiologists who write diagnostic reports that are returned to the referring physicians, often with advice on treatment or recommendations for further investigation. This process of asynchronous medical reporting and decision making has become common in a number of specialties, including radiology, pathology, cardiology, dermatology, and ophthalmology.

Similar to the way X-rays are now processed, we believe that video recordings could assist in the evaluation of psychiatric patients, especially now that digital recordings are so easy to create and upload. Recordings could be made in primary care clinics, patients' homes, or other environments and used as clinical data, sent to experts for evaluation. Specialty providers, such as psychiatrists, neurologists, pediatricians, and geriatricians, could evaluate the video data and provide asynchronous consultation and reporting. This approach is an improved version of the traditional "curbside consultation" that many specialist physicians are accustomed to providing for colleagues, whereby a video of the patient could be reviewed

instead of a description of symptoms presented in a phone call or a hallway conversation. Video data could be combined with other electronic data, such as patient history or clinical notes, and transferred between providers through an electronic medical record (EMR), an excellent clinical example of improving health information exchange. The asynchronous platform could expand access to care for underserved individuals by making some specialist consultations more available, efficient, and relevant for referring providers.

To test this approach with psychiatric consultations in primary care, we conducted a study of asynchronous telepsychiatry (ATP) with a sample of 127 English- and Spanish-speaking patients in 2008–2009. We set out to examine the use of the ATP platform to provide language translations. Our goal was to show that, if feasible, ATP with language translation could expand the range of evaluating providers, thereby increasing access to care for non-English-speaking patients. We developed a secure ATP technical platform similar to an EMR, with the added capability of supporting video data. The ATP data sets, clinical interview video, and patient history were uploaded and reviewed by a psychiatrist who wrote a report containing a diagnostic assessment and treatment plan for the referring doctor to implement if he or she wished. The Spanish-speaking patients were interviewed in Spanish and assessed by Spanish-speaking psychiatrists and, after translation of the ATP data sets from Spanish to English through medical interpreters, by English-speaking psychiatrists. Inter-rater reliability between the English- and Spanish-speaking psychiatrists was acceptable. We concluded that ATP is a feasible clinical process and has a unique advantage over real-time care in that the patient's data can be altered (that is, via language translation) en route to the specialist, thereby broadening the scope of providers who can evaluate the data and presenting it to the reporting provider in a more focused way.

The final part of this first study of ATP was a cost-benefit analysis, where we demonstrated that ATP, using our model, was indeed a "disruptive innovation." In other words, we changed the process of care in a way that was more cost-effective than either in-person psychiatric consultations or traditional real-time (synchronous) telepsychiatry consultations.

Further studies are needed to replicate these results and fully examine the feasibility, reliability, and validity of this process in larger samples and in nonresearch clinical settings. The ATP consultation process is ripe for research initiatives. Clinical outcome studies are needed, as is further examination of the best clinical and technological means of undertaking cross-language consultations. For instance, subtitles instead of an audio file translation, as we used, may be a better approach to language translation and could also be applied to sign language translation for deaf and hard-of-hearing individuals. We also predict that ATP could be available on portable devices (such as smartphones and computer tablets) to increase access to expert opinions anytime, anywhere. This is an exciting area for further research and clinical development and challenges the traditional paradigms of in-person psychiatric care by promoting the asynchronous consultation model of care in an online environment. It is our view that ATP is a disruptive health care process that has the potential to markedly change the way we deliver mental health care, to diminish language barriers and expand access to care.

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Treating Culturally and Linguistically Isolated Koreans via Telepsychiatry

The Center for Pan Asian Community Services (CPACS), a community organization that provides culturally competent social and health services to immigrant, refugee, and racial-ethnic minority populations, identified a treatment gap within the population they serve. Korean clients with limited English proficiency experienced significant difficulty in accessing appropriate mental health services in the Atlanta area. CPACS approached the National Center for Primary Care at Morehouse School of Medicine to address this health care access problem. Barriers to providing treatment included a lack of Korean-speaking providers in the Atlanta area, which led to out-of-state collaborations using telepsychiatry services. Financial instability was another major barrier to the success of the program. We secured a grant from the Atlanta Clinical and Translational Science Institute (ACTSI) to test the feasibility of this project.

Sixteen participants were recruited by CPACS in 2010 and 2011 to participate in this pilot program. The success of the program depended on strong collaborations with CPACS, which provided a culturally and linguistically competent facilitator trained to interact with program participants, and with the Asian Community Mental Health Services (ACMHS) in Oakland, California, which provides multicultural and multilingual behavioral health services to vulnerable community members in California. ACMHS offered a culturally and linguistically competent psychiatrist, who provided treatment via teleconferencing equipment.

All participants received an initial telepsychiatry diagnostic assessment,

followed by treatment recommendations that were given to the patient and the facilitator by the telepsychiatrist. Ongoing follow-up sessions were recommended by the telepsychiatrist at her clinical discretion. The number and frequency of the additional sessions were determined on the basis of individual needs of the participants, and the overall pilot program lasted for 20 weeks. The facilitator was available by telephone to any participants who needed assistance outside of the established telepsychiatry clinic hours.

A majority of patients were female, married, and college educated. Most participants had lived in the United States for over ten years and described their physical health status as poor to fair. Patients showed improved outcomes in depression and anxiety. For example, a 43-year-old Korean female presented to the program with an eight-year history of anxiety complicated by complex psychosocial stressors related to her marriage and emigration to the United States. After engaging in treatment via telepsychiatry and receiving psychoeducation regarding mental health treatment options, she responded well to antidepressant medication and supportive therapy provided in the telepsychiatry sessions and reported a dramatic decrease in overall anxiety symptoms. Similarly, there was a significant reduction in psychological distress, anxiety, and depression for the majority of patients who participated in the program.

This project was designed to provide mental health services to a population that underutilizes and often avoids seeking such treatment. The preliminary findings are promising, despite the small sample. The significant improvement in symptoms of depression, anxiety, and psychological distress suggests that culturally informed telepsy-

chiatry may be an effective method to increase utilization of mental health services in traditionally underserved minority populations.

Although the findings are encouraging, there were some challenges in the implementation of this project. For assessment of language proficiency, many patients appeared to have greater English proficiency than they reported on initial assessment. These individuals with greater English proficiency may have continued in the program because they valued culturally competent providers in addition to language-proficient providers. Participants expressed greater comfort talking to an ethnically matched provider, even if they themselves spoke in English fluently. Furthermore, all screening tools used to evaluate treatment responses were self-report measures. It is possible that social desirability bias and other cultural factors influenced the patients, causing them to report greater symptom improvement than they actually experienced.

Nevertheless, our findings show that there may be efficacy in treatment when issues of cultural competence and accessibility are appropriately addressed in mental health service provision to an underserved, minority population. In the future, we hope to expand these findings to larger populations and evaluate this model among other populations with unique cultural and linguistic needs.

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