Psychiatrists evaluate patients through video uploads

August 6 2010

(PhysOrg.com) -- Psychiatrists can accurately assess a patient's mental health by viewing videotaped interviews that are sent to them for consultation and treatment recommendations, according to a new study by researchers at the UC Davis School of Medicine.

The approach, called asynchronous telepsychiatry, uses store-and-forward technology, in which medical information is retrieved, stored and transmitted for later review using e-mail or Web applications. It has been used extensively for specialties like dermatology, with photos of skin conditions sent to dermatologists, or x-rays sent to radiologists for assessment.

However, the current study is the first to examine store-and-forward technology for psychiatry, said Peter Yellowlees, professor of psychiatry and behavioral sciences and the study's lead author. "A Feasibility Study of the Use of Asynchronous Telepsychiatry for Psychiatric Consultations" is published in the August issue of the journal Psychiatric Services.

"We've demonstrated that this approach is feasible and very efficient," said Yellowlees, who is an internationally recognized expert in telepsychiatry. "Using store-and-forward technology allows us to provide opinions to primary-care doctors much more quickly than would usually be the case."

The researchers conducted the study to determine the effectiveness of

asynchronous telepsychiatry for patients in Tulare County, a rural county in California's San Joaquin Valley. Sixty male and female patients between the ages of 27 and 64 who had mostly mild-to-moderate mental-health disorders were included in the study.

Researcher Alberto Odor, associate adjunct professor of anesthesiology and [pain medicine](), conducted 20- to 30-minute structured videotaped interviews at a community-based primary-care clinic. The videos were then uploaded to UC Davis' specially designed Web-based telepsychiatry consultation record. Yellowlees and Donald Hilty, professor of psychiatry and behavioral sciences, reviewed the videotapes and provided psychiatric evaluations to the patients' community-based primary-care physicians.

Fifty-one percent of patients received diagnoses of mood disorders, 19 percent received diagnoses of substance use disorders, 32 percent received diagnoses of anxiety disorders and 5 percent received other diagnoses -- including kleptomania, schizophrenia and parasomnia. Five patients also were diagnosed with disorders such as borderline personality disorder, obsessive-compulsive disorder or personality disorder. Some of the individuals had multiple diagnoses.

One patient was referred for a face-to-face consultation with a psychiatrist because of the possibility of a diagnosis of early psychosis. The psychiatrists recommended additional laboratory evaluations for more than 80 percent of patients and made recommendations for medication changes in 95 percent of patients. In instances where medication changes were recommended, physicians also received long-term treatment plans. A variety of psychotherapies, such as individual and cognitive-behavioral therapy, were recommended for many of the patients. Community-based primary-care physicians said they found the practice worked well, the study says.

The consulting psychiatrists provided feedback to referring physicians within two weeks, but asynchronous telepsychiatry could occur within 24 hours if it were to become a regular service, Yellowlees said.

Asynchronous telepsychiatry should not take the place of face-to-face psychiatric evaluations and is not suitable for patients with urgent psychiatric conditions, he said. But there are a number of circumstances in which it would be helpful in providing more primary-care physicians greater access to psychiatric consultations.

"There is a substantial shortage of psychiatrists," Yellowlees said. "Asynchronous telepsychiatry would allow us to have better access to information about patients being referred by primary providers and to provide more comprehensive opinions. This approach could be used by the military and in many different rural and metropolitan settings. It signals the beginning of the true multimedia electronic medical record with clinical video recordings becoming part of the data set."

Provided by UC Davis