

## **Telepsychiatry History and Overview**

### **Background**

In November of 2007, The Duke Endowment (TDE) awarded DMH a \$3.8 million grant to SC DMH to design and implement a statewide telepsychiatry consultation service for emergency departments (ED) in local hospitals. The stated goals for the patient and ED included a timely assessment, early initiation of treatment, reduction in the lengths of stay, potential savings to hospitals and improved community discharge planning for both outpatient and inpatient follow-up services as needed.

The initial, primary partners in this endeavor were TDE, the SC Department of Health and Human Services (SC DHHS) and the SC Hospital Association (SCHA).

DMH designed and contracted for an innovative hub-and-spoke telemedicine model composed of a mobile high-definition video cart, two-way audio, remote-controlled pan/tilt/zoom enabled camera, self-powered and running on a secure private network to meet all confidentiality standards. The initial, executed three-year contract whereby hospitals participated in receiving telepsychiatry consultation services included video equipment, warranties, and technical support from DMH (and the vendor) during each subsequent contract period.

The first cart was installed and activated at Baptist Easley Hospital, on March 27, 2009. To this day, Baptist Easley continues to be a significant user of the telepsychiatry consultation service.

In August 2009, an electronic medical record (EMR) – provided via DMH – became an important feature, which is now currently available to all local participating hospitals. To date, DMH has not identified any other state-run program providing similar telepsychiatry consultation service on a statewide basis with or without an EMR.

## **Telepsychiatry History and Overview**

The development of satisfaction surveys culminated in the distribution of the first versions to participating hospital ED physicians, patients and ED staff, September 2009. The surveys reflected both acceptance and relief at having the DMH Telepsychiatry Consultation Program available. Satisfaction continues to improve as familiarity with the equipment and interest in the program grows.

On December 14, 2009, a demonstration of “open platform” connectivity was conducted at the Marion Medical Center. “Open platform” refers to an alternative method to the T-1 line for securely connecting to the telepsychiatry consultation service using the Internet. The video cart connects to the service via a T-1 line (and fiber optic, via the Palmetto State Providers Network, or PSPN) to accommodate the large electronic volume and ensure overall reliability.

The program ended 2009 with 15 participating hospitals and 1,227 consults attempted within the calendar year.

Effective June 2010, The Duke Endowment re-funded the program for an additional two years (2010-2012); and additional revenue streams began to be established in order to sustain this effort thereafter.

Recognition of telepsychiatry consultation as a seamless process has resulted in its first international award. In June 2010, the program placed as “Finalist” in the Non-Profit Organization category of The Computerworld Honors Program in Washington D.C. Mr. Spencer was present to accept the award on behalf of the program and the agency.

In July 2010, the SCHA – in partnership with the SC Medical Association (SCMA) – began a project to establish a statewide, initial, web-based, medical staff credentialing application. The application became known as the SC Uniformed Credentialing Application for Physicians (SC UCAP).

## **Telepsychiatry History and Overview**

Participation was scheduled to be phased in, starting with telepsychiatry and offered to small hospitals to pilot for hospital-wide implementation, beginning with hospitals located in the rural, Pee Dee region of South Carolina.

December 2010 saw the advent of a CEO satisfaction survey by which the senior leaders of each of the participating hospitals could give indications as to the program's effectiveness in the areas of quality of care, lengths of stay and discharge planning – like the similar measures gleaned from the surveys continually in use by the ED physicians and staff. Additionally, the CEOs were (and still are) solicited for their perspective of a return on investment, ED operating costs and likelihood to recommend the program to peers.

In 2010, DMH completed providing the needed software to several of the earlier participating hospitals that chose to use the new “open platform,” at no cost to them. All subsequent practitioner carts came already capable of utilizing the “open platform” – giving local participating hospitals the ability to connect to each other for other medical specialty consultations on the same cart.

DMH also received continuation funding in the form of a second – and unprecedented – grant from TDE in 2010. Sustainability models were developed using multi-source revenue streams upon the final expenditures of the grant-only dollars, projected to start in the summer of 2012.

The program ended 2010 with 19 participating hospitals and 3,436 consults attempted within the calendar year.

Recognition of the DMH Telepsychiatry Consultation Program came again in October 2011, when the program placed “Silver” at the 2011 APA Conference, San Francisco, CA. The state agency director accepted the award on behalf of Mr. Spencer and the agency.

## **Telepsychiatry History and Overview**

The program ended 2011 with 23 participating hospitals and 9,224 consults attempted within the calendar year.

## **Ongoing Efforts**

PSPN has been working diligently to connect the majority of South Carolina's most rural hospitals and other medical entities by means of fiber optic lines. Fiber optic lines have a ten-fold greater capability over the T-1 line in the amount of data that can be transmitted simultaneously. Access via this electronic environment is available to 138 health care sites across the state and has created interest in moving toward an "open platform" connectivity model. General agreement was that the demonstration was a success and "open platform" was preferred to T-1 line.