

2414 Bull Street/P.O. Box 485, Columbia, SC 29202

FOR IMMEDIATE RELEASE

February 18, 2015

Contact: DMH Office of Public Affairs

Phone: (803) 898-8392

E-mail: TLL06@scdmh.org

SC Mental Health Program Recognized as 2015 Harvard Ash Center Bright Idea in Government

Columbia, SC – The Ash Center for Democratic Governance and Innovation at the John F. Kennedy School of Government, Harvard University has recognized the South Carolina Department of Mental Health’s (DMH) Emergency Department Telepsychiatry Consultation Program as part of the 2015 Bright Ideas program. This year’s list includes 124 programs from all levels of government that are at the forefront in innovative government action.

With initial funding from The Duke Endowment and under the leadership of State Director John H. Magill, DMH launched Telepsychiatry Consultation Program in April, 2009. This innovative program utilizes real-time, state-of-the-art video-and-voice technology that connects DMH psychiatrists to hospital emergency departments throughout the state to address the critical shortage of psychiatrists in South Carolina’s underserved areas and assists hospital emergency rooms to provide appropriate treatment to persons in a behavioral crisis.

Since its inception, The Program has provided more than 20,000 psychiatric consultations in emergency departments across South Carolina and has received numerous awards for innovation, including the American Psychiatric Association’s Silver Award (2011), and the South Carolina Office of Rural Health’s Annual Award (2012).

The Program currently provides psychiatrist consultations to emergency departments in 20 hospitals in South Carolina. Independent studies have shown that the Program is improving patient care and reducing costs. Expert assessment and timely treatment speed patient recovery and length of stay, substantially lowering hospital costs.

“The Bright Ideas program demonstrates that often seemingly intractable problems can be creatively and capably tackled by small groups of dedicated, civic-minded individuals,” said Stephen Goldsmith, director of the Innovations in Government Program at the Ash Center. “As exemplified by this year’s Bright Ideas, making government work better doesn’t always require massive reforms and huge budgets. Indeed, we are seeing that, in many ways, an emphasis on efficiency and adaptability can have further-reaching effects than large-scale reforms.”

This is the fourth cohort recognized through the Bright Ideas program, an initiative of the broader Innovations in American Government Awards program. For consideration as a Bright Idea, programs must currently be in operation or in the process of launching and have sufficient operational resources and must be administered by one or more governmental entities; nonprofit, private sector, and union initiatives are eligible if operating in partnership with a governmental organization. Bright Ideas are showcased on the Ash Center’s Government Innovators Network, an online platform for practitioners and policymakers to share innovative public policy solutions.

The Ash Center for Democratic Governance and Innovation advances excellence in governance and strengthens democratic institutions worldwide. Through its research, education, international programs, and government innovations awards, the Center fosters creative and effective government problem solving and serves as a catalyst for addressing many of the most pressing needs of the world’s citizens. For more information, visit www.ash.harvard.edu.

The South Carolina Department of Mental Health’s mission is to support the recovery of people with mental illnesses, giving priority to adults with serious and persistent mental illness and to children and adolescents with serious emotional disturbances. The Agency serves approximately 100,000 citizens with mental illnesses, approximately 30,000 of whom are children and adolescents, and provides outpatient services through a network of 17 community mental health centers and numerous clinics. It also operates four hospitals, one community nursing care center, and three veterans’ nursing homes.

###

SCDMH Emergency Department Telepsychiatry Consultation Program – Background

Program URL: <http://www.state.sc.us/dmh/telepsychiatry/index.htm>

Like many states, the emergency departments in South Carolina's hospitals see a large number of patients experiencing a behavioral health crisis. Due to a shortage of psychiatrists, especially in rural areas of the State, patients may wait days in an emergency department for a psychiatric assessment and recommended treatment. Beyond the adverse impact on the patients themselves, the cost to South Carolina hospitals of dozens of behavioral health patients waiting days for an assessment and appropriate treatment in their emergency departments was serious, especially for smaller hospitals. "That was a real issue because many of those hospital emergency departments have limited bed capacity," says Ed Spencer, Program Director of the South Carolina Department of Mental Health's (DMH) Telepsychiatry Consultation Program. "They are not staffed nor designed to care for patients in a behavioral health crisis for days on end."

Something Had to be Done to Address this Problem

In the spring of 2007, South Carolina Department of Mental Health (DMH) State Director John H. Magill met with staff from The Duke Endowment (TDE), located in Charlotte, NC to explore whether TDE would be willing to assist DMH addressing this difficult issue. The Duke Endowment is a foundation that funds projects in North and South Carolina, and health is one of the areas in which they specialize. DMH joined with the South Carolina Hospital Association and the South Carolina Department of Health and Human Services in a project known as "Partners in Behavioral Health Emergency Services," and submitted a grant application to TDE.

In December, 2007, the project was funded by The Duke Endowment with a substantial grant. The project's goal is to increase the quality and timeliness of psychiatric assessment and initial treatment of patients in community hospital emergency departments. Timely psychiatric assessment and consultation provides Emergency Department staff with treatment recommendations that can often reduce the patients' length of stay in emergency rooms, to the benefit of both the patients and the participating hospitals. The means selected to reach that goal is to make a psychiatric consultation available Statewide from a DMH psychiatrist by using innovative HD video technology.

Building a Solution

With the grant from TDE, DMH developed an implementation plan. DMH searched for best practices in other states but did not find one. So DMH staff created their own. They looked at other states, researched current technology options available in terms of cost value ratio and applied a good bit of local creativity. DMH secured some vendor input and put out a bid for the program's equipment. AVI Group was selected to install Polycom equipment. The state-of-the-art high definition video/audio equipment selected allows DMH psychiatrists to see, speak with and evaluate the patients in real time, as well as speak to Emergency Department staff. The high-tech wireless video cart functions on a secure network meeting all privacy standards.

The first wireless video cart was activated in a hospital emergency department on March 29, 2009. The patient sees the psychiatrist on 26 inch high definition flat screen located on a wireless HD Polycom mobile practitioner cart in the privacy of the patient's room. The distant DMH psychiatrist, in real time, views the patient on Polycom's desktop system HDX4000 from their office. With the clarity of a high definition picture and with pan, tilt and zoom cameras that the doctor can manipulate remotely, bringing minute visual elements, such as eye contact, pupil dilation or tics, into view, as well as clear audio, the psychiatrist conducts an assessment with the quality of a "face to face" encounter, just as in the doctor's office.

A typical assessment may take some 20-30 minutes between the psychiatrist and the patient. Hospital medical professionals are allowed to participate in the assessment process with the patient's approval. Prior to the video exchange, the psychiatrist secures and reviews available medical record information including laboratory results from the hospital. The assessment is concluded with written recommendations made to the patient's physician in the hospital.

Recommendations may range from psychiatric medication, individual and/or family counseling, discharge to a specific community referral for continuing treatment or transfer to a longer term psychiatric bed for inpatient treatment.

When the assessment is concluded, the psychiatrist completes an electronic medical record with treatment recommendations, affixes an electronic signature and sends a confidential copy to the local hospital for inclusion in the patient's medical record. A copy also goes to the nearest DMH mental health center for follow up care.

"Our goal is to increase quality care and to reduce the number of patients waiting in ERs", Dr. Brenda Ratliff, Program Medical Director. "The video equipment allows the DMH practitioners to see the smallest details, which are critical when treating someone with mental health impairment or a substance abuse problem. The camera may be used to zoom in and clearly examine the patient's pupils to determine whether the person may be under the influence of drugs or a psychotic episode."

The benefits were immediate. With videoconference-based behavioral assessments, 39% of the patients assessed are being discharged from the hospital and returned to their families and to their lives on the same day they were assessed, cutting lengths of stay substantially. For those patients who can be safely discharged from the emergency room, but who are in need of aftercare at a mental health center, the DMH psychiatrist supplies the patient and Emergency Department staff with information about the local mental health center and other local resources, reducing the risk of a future crisis. The mental health center is able to immediately access the electronic record of the psychiatrist's assessment and recommendations. For those patients who were retained, treatment recommendations from the consulting psychiatrists generally improved the quality of care they were receiving.

Eighteen hospitals are currently participating (July, 2013), and they are scattered around the state. Since March 2009, when DMH completed its first consult, nearly 16,000 consultations have been completed. Being a fairly small state, the program has made a substantial impact.

According to DMH State Director John H. Magill, "The program has helped patients more quickly re-integrate to their daily lives in their community, and has resulted in a high follow-up treatment adherence rate and a reduction in the rate of re-hospitalization for patients seen in the program."

Three DMH IT staff members support the program. The statewide program is centered in Columbia, South Carolina, which is conveniently located in the center of the state. Unlike other states, DMH IT staff are only two and half hours from the farthest point because of their location - in the center of the state. That cuts down on the response time and gets malfunctioning equipment back in service fairly quickly. The decision to use a single equipment vendor also improves efficiency. The IT staff works closely with the hospitals' IT staff.

Bandwidth Costs and How to Address Them

There were program costs other than the cost of equipment and of the consulting psychiatrists. South Carolina has 26 phone companies and service costs vary greatly statewide. The cost of a T1 line could range from \$600 to as much as \$1700 per month.

The program team knew that educational institutions were using the Internet 2 Network, a next generation form of the Internet run by a not-for-profit networked consortium (FRC, LLC) that is private to education, research and government agencies. The Medical University of South Carolina (MUSC) approached the FCC and received permission for a subset of Internet 2 devoted solely to health care institutions. In South Carolina, this subset is called the Palmetto State Providers Network (PSPN). PSPN is a 10Mb fiber-optic network, which is faster and offers more through-put (traffic) than a T1 line. Because tax dollars already help support it, it is generally less expensive than a T1 line.

Outcomes

A major study of the program's effectiveness is being conducted with funding from the National Institute of Mental Health (NIMH) and the National Institutes of Health (NIH). The researchers, Dr. Meera Narasimhan, Chairman,

Department of Neuropsychiatry and Behavioral Science, University of South Carolina School of Medicine, and Dr. Benjamin Druss, used propensity score matching to identify a comparable group of patients not exposed to telepsychiatry. Matching characteristics included age, gender, race, mental disorder, medical comorbidity, recent mental health treatment, and urban/rural status of the ED. A total of 6,053 matched pairs were studied.

The following short-term outcomes were identified:

1. Length of ED visit: Length of the initial ED visit was reduced for the patients seen in the telepsychiatry program as compared with controls (2.9 days versus 3.6 days);
2. Inpatient admission following ED visit: There were 1731 inpatient admissions through ED visits. The telemedicine group had fewer than half the number of inpatient admissions (11.5% vs. 23.0%) as matched controls;
3. 30-day follow-up with a mental/substance abuse professional: the telemedicine group had significantly higher rates of 30-day follow-up than the matched sample (43.6% vs. 30.2%).
4. ED recidivism for MH/SA problem within 30 days: rates of ED recidivism for mental diagnoses were significantly lower for the case group than the control group (13.3% versus 14.7%).
5. 30-day total costs after the intervention were substantially and significantly lower in the telepsychiatry than the control group (\$9,429 vs. \$11,133 at 30 days; $p < 0.0001$ for both)

The program is very effective both clinically and in terms of cost-savings. The consultations provided by program psychiatrists significantly improve outcomes for the patients and save participating hospitals and the public service providers in their communities' substantial costs: over \$27 million to date based on the average cost savings per episode of care calculated in the study.

To our knowledge, South Carolina remains the only state in the nation to design and implement a statewide comprehensive emergency department psychiatric consultation program. This innovative program came about because of the start-up funding provided by The Duke Endowment.

Partnerships

In the end, the statewide program would not have come about without the support of the Department's partners. SCDMH's primary partners on the project are The Duke Endowment, Charlotte, North Carolina, the South Carolina Department of Health and Human Services (Medicaid agency) and the South Carolina Hospital Association.

Due to the cooperation of the Medicaid Agency, DMH psychiatrists conducting the assessments have access not only to any existing DMH electronic medical records about the patients, but to the State's database of delivered health care services. The psychiatrist's assessment and recommendations, including a summary of a patient's past episodes of treatment contained in DMH and State databases, are transmitted to the Emergency Department. Many of these patients are Medicaid patients or Medicaid eligible. To begin to put the program on a path to sustainability it was necessary to engage the Medicaid agency to authorize Medicaid reimbursement of the psychiatric assessments conducted via telemedicine. The partnerships with the Hospital Association and the State's Medicaid agency have been very important in the implementation of the program, but it has been the funding from The Duke Endowment which enabled the program to get started, and which has sustained it during its first several years in operation. Recently, appropriations from the South Carolina General Assembly and modest user fees from the participating hospitals are also helping to support the program.