CONNECTING WITH COMMUNITIES THROUGH TELEMEDICINE

WITH A LACK OF NEARBY MENTAL HEALTH CARE PROVIDERS, ONE RURAL COUNTY SOUGHT THE COLLEGE'S HELP IN PROVIDING TELEPSYCHIATRY TO CHILDREN IN THE COMMUNITY

By Brett Bralley Jaillet

Before the summer of 2010, a child in rural DeKalb County, Alabama, who needed to see a psychiatrist had one local option: to try to get an appointment with a doctor at the nearby community mental health center in Fort Payne. However, the psychiatrist there was available only once a week and often completely booked weeks in advance. Anything that demanded more urgent attention required a longer

drive outside of the county. And with the cost of fuel and time needed for the drive – and with required follow-up visits – the costs could quickly add up.

Today, children in the community have another option: a visit to the DeKalb County Youth Service Center. Two Tuesday afternoons a month, young patients are assessed by Lloyda Williamson, MD, a

Lloyda Williamson conducts a telepsychiatry session with a patient.

child and adolescent psychiatrist and associate professor in the College's Department of Psychiatry and Behavioral Medicine.

And Williamson doesn't need to leave her Tuscaloosa office. She communicates from the College with the young patients through video conferencing equipment that is located in a small room at the DeKalb County Technical Center, a school just a parking lot away from the youth service center. With each assessment, Williamson recommends treatment plans, medication

to the child's pediatrician, if necessary, and schedules a follow-up appointment, if needed.

Providing health care through telemedicine is not new to the College. Rural areas often are not able to attract the needed number of physicians to their communities, plus the often limited resources of community residents make it challenging for them to travel to the nearest physicians available. So the College,

through the use of telemedicine, provides telepsychiatry and diabetes education services to a number of rural communities across the state, with plans to expand to even more locations.

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A key part of the College's mission is to help improve the health of individuals and communities in rural Alabama.

The College's telemedicine efforts

began in 2007 when it partnered with the Alabama Department of Mental Health, the West Alabama Mental Health Center in Demopolis and others on a \$1.2 million grant awarded by the Bristol-Meyers Squibb Foundation with the goal of improving mental health care in the state's rural and impoverished Black Belt region. With the grant, the College provides telepsychiatry care in five rural West Alabama counties, including Choctaw, Green, Hale, Marengo and Sumter.

The College's Institute for Rural Health Research

was awarded a nearly \$100.000 grant in 2009 from the U.S. Department of Agriculture's Distance Learning and Telemedicine Grant Program. The funding allowed the College to purchase video conferencing equipment, including cameras and monitors, for the clinics in rural Alabama with which the Institute had partnered on the grant. These clinics include the Capstone Rural Health Center in Walker County, Pickens County Medical Center in Pickens County and Monroeville Primary Care in Monroe County.

Last year, a nearly \$20,000 gift from the Verizon Foundation enabled the College to expand its

program in Tuscaloosa that teaches diabetic patients how to better manage their disease. (See story on page 10.) The College's Diabetes Self-Management Education Program is now offered via telemedicine at the Sumter County Health Center in York, Alabama, and the Pickens County Medical Center in Carrollton, Alabama. The College plans to further expand the diabetes education program in the state and is beginning efforts to offer the program in Livingston in Sumter County, as well as at sites in Clarke, Lamar and Walker counties.

College Connections

What was rather new to the College in its work in DeKalb County was that a rural community identified a specific need for telepsychiatry and approached the College to help meet that need. There is no full-time psychiatrist in the county of 70,000 and no one close by with experience in child psychiatry.

The first connection from DeKalb County was made by Angela Wilson, a local activist who is passionate about mental health care. Wilson had long researched the topic of local mental health care options by contacting social service agencies in her area.

"What my research showed was that the void in our community was access to quality psychiatric care," she says. "We had social workers — and we do need more counseling services available — but we really needed someone who could make quality assessments, prescribe the proper medications, if necessary, and then follow up on a consistent basis."

Wilson saw the need for both children and adults alike, and she also recognized a particularly great need



Thomas Whitten and Amelia de los Reyes with telemedicine equipment at the DeKalb County Technical Center.

with those who were incarcerated. But she first decided to address the lack of a child and adolescent psychiatrist in the community. To do that, she joined with Thomas Whitten, MSW, a licensed clinical social worker and director of the DeKalb County Youth Services.

Whitten works with at-risk children and adolescents who have had behavioral issues in school. Some even have juvenile charges. There was a great need for a psychiatrist to assess and diagnose these youth, he says.

Wilson and Whitten needed to determine how they could bring a psychiatrist or psychiatric care to these children in need. Through Wilson's time spent

on a state subcommittee examining mental health in Alabama, she had become familiar with the idea of telemedicine. She was able to see a demonstration of how the technology worked at a conference she attended.

"I thought, 'We have got to have that, but how can we do it?" Wilson recalls. "Then I thought of The University of Alabama."

TELEMEDICINE SERVICES AT A GLANCE

The College provides telepsychiatry and diabetes education services to a number of rural areas across the state. Here's a quick glance at where:

Telepsychiatry:

- DeKalb County Youth Services in Rainsville
- West Alabama Mental Health Center, with sites in the counties of
 - Marengo
 - Choctaw
 - Greene
 - Hale
 - Sumter

Diabetes Self-Management Education Program:

- Sumter County Health Center in York
- Pickens County Medical Center in Carrollton
- Efforts underway to expand the program to Clark, Lamar and Walker counties

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Wilson had already learned about the College's work with the West Alabama Mental Health Center. So she drove from Fort Payne to Tuscaloosa one day to make face-to-face contact.

First Wilson met with Thad Ulzen, MD, chair of the Department of Psychiatry and Behavioral Medicine at the College and associate dean for Academic Affairs. Ulzen recognized her goal, Wilson says, and he connected her with Amelia de los Reyes, RN, the coordinator of the College's telemedicine program. The two women worked together to find both the right space and equipment to provide telepsychiatry services to DeKalb County.

Finding those two items at remote locations can prove to be difficult, de los Reyes says, as she had plenty of experience with these factors at the other clinics where the College provides telepsychiatry services. But when Wilson, while visiting the technology school, stumbled upon an empty break room that was being used more as an "overflow" room for storage and that had video conferencing equipment, she knew she had found the right place — especially since it was just a parking lot away from the DeKalb County Youth

Thomas Whitten prepares for a patient telepsychiatry session at the DeKalb County Technical Center.

Services Center and would provide easy access for Whitten.

De los Reyes says the equipment was given to the tech school a few years prior as part of the federal No Child Left Behind legislation, which meant the school was also equipped with its own broadband. This allowed even more flexibility in the details of setting up teleconferences with the College.

Physician Connections

The final step was to work with a physician at the College, and when Ulzen introduced Williamson to the project, she was immediately on board.

"Telemedicine definitely improves access for individuals in rural areas, particularly those who don't



Kelley Parris-Barnes, former executive director of the West Alabama Mental Health Center, confers via a telemedicine system with Thad Ulzen, professor and chair of the College's Department of Psychiatry and Behavioral Medicine.

have the means to travel or take time away from work," Williamson says. Both Williamson and Ulzen provide assessments to patients.

Williamson says typically, Whitten is involved in patient appointments. He meets with patients to do a screening evaluation, and he may speak with Williamson beforehand to offer any thoughts or observations. Communicating with patients via video conferencing equipment can at times have its challenges, Williamson says, but having Whitten present on the other end helps.

"He's able to note subtle shifts with the patient and call my attention to that afterwards," she says.

But apart from that, any challenges in communicating with the patient are the same ones she would face if the children were in her office.

"The conversations (with the patients) have flowed very easily," she says. "There have been a few children who were hesitant to speak up at first, but soon warmed up. But those are some of the same things you'd experience face-to-face. Some literature shows that people are more comfortable talking in this setting because they are less likely to run into me in their community."

Since late summer of 2010, more than 200 patients have been assessed by Williamson, some with occasional follow-ups. Others are also being seen by Marisa Giggie, MD, an assistant professor in the College's Department of Psychiatry and Behavioral Medicine who specializes in forensic psychiatry.

Whitten says the program has made a tremendous impact on the children and adolescents at the youth services center as well as throughout the community. While some children he sees may have the resources to

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LLOYDA WILLIAMSON

find a psychiatrist elsewhere, many of them would not have any other option.

"Most of these cases are children and adolescents who would not otherwise be served," he says. "We've been able to intervene on several cases where adolescents needed to be evaluated for ADHD or depression or some other disorder."

Williamson says the ultimate goal for the College is to create an entire telemedicine department.

"As we look to expand telemedicine services at the College, we need to determine which methods to use to assess the needs of various communities in our state," she says.

To further explore the options of telemedicine, Williamson visited the University of Kentucky in Lexington with the help of a \$2,500 Southeast Conference Visiting Faculty Travel Grant. She met with administrators and physicians involved in the school's telemedicine program, visited clinics and learned about the program's overall structure. (See story on page 11.)

"In order for the goal of a telemedicine department at the College to become a reality, funds will need to be obtained to assist in establishing a strategic plan for developing, staffing and sustaining a telemedicine department," Williamson says.

And Wilson also has future plans. Now she is the chair of her local mental health center, the CED Mental Health Center, and one of her primary goals, in addition to utilizing telemedicine in more capacities, is establishing a crisis care center. Such a center would create a place for those who need urgent attention, instead of rotating them through an emergency room at a hospital, she says.

But in the meantime, she is proud of what the telepsychiatry program in DeKalb County has accomplished.

"Not to mention the impact of knowing that one of the finest educational institutions is helping us in these efforts – I mean, what is that worth?" she says. "My prayers have been answered."

LESSONS IN TELEPSYCHIATRY

Three faculty members of the College published a paper that describes the real-life successes and challenges of the partnership of a community practice and a community-based mental health clinic in providing telepsychiatry services to underserved areas in Alabama.

The paper was published in the *Community Mental Health Journal* this year and online in 2012. The paper is co-authored by: Thad Ulzen, MD, professor and chair of the College's Department of Psychiatry and Behavioral Medicine; Lloyda Williamson, MD, an associate professor in the Department of Psychiatry and Behavioral Medicine; Pamela Payne-Foster, MD, an associate professor in the College's Department of Community and Rural Medicine; and Kelley Parris-Barnes, director of the Alabama Department of Child Abuse and Neglect.

Telepsychiatry provides access to patients in underserved areas by using remote computer technology as an alternative to office visits, allowing a psychiatrist to interview and evaluate patients directly or consult with the patient's primary care physician.

The paper offers lessons learned for mental health practitioners who may be considering the benefits and challenges of forming a similar telepsychiatry program.

In addition to psychiatry, the College uses telemedicine technology to provide a diabetes education program to rural clinics. The College plans to expand its telemedicine services.

EXPANDING ACCESS TO DIABETES EDUCATION

By Leslie Zganjar

The College is expanding, through telemedicine, a program that teaches diabetic patients how to better manage their disease.

The College's Diabetes Self-Management Education Program is now provided to the Sumter County Health Center in York, Alabama, and the Pickens County Medical Center in Carrollton, Alabama, via the College's

telemedicine program.

The College plans to further expand the diabetes education program and has begun efforts to offer the program, via telemedicine, in Clarke, Lamar and Walker counties.

Funding to expand the program is being provided in large part by a nearly \$20,000 gift from the Verizon Foundation. The expansion is a partnership of the Verizon Foundation, the College, MedNet West and Whatley Health Services.

Telemedicine is a rapidly developing application of clinical medicine where information is transferred through interactive audiovisual media for the purposes of consulting and conducting remote medical examinations or providing health education to patients.

For rural populations that are geographically isolated, and for rural patients who are physically or financially unable to travel long distances, telemedicine can improve access to care. The Sumter County Health Center and Pickens County Medical Center are located in rural areas and were chosen for the diabetes education program because of a high incidence of diabetes there.

The Diabetes Self-Management Education Program at the two centers consists of three classes a month, with each class lasting three hours. The program emanates from the College and is conducted by health-care providers there – a physician, nurse practitioner, pharmacologist, nutritionist and social worker.

Patients in York and Carrollton were recruited into the program through referrals from area physicians who care for Medicaid patients. The program is currently open only to Medicaid recipients. The first class was held at the Sumter County Health Center in January and there are 19 patients participating. Classes began at the Pickens County Medical Center in Carrollton in August.



From left, Cynthia Tyler, Angela Hammond and Kim McMillan conduct a Diabetes Self-Management Education Program class via telemedicine with the Sumter County Health Center in York, Alabama.

Diabetes is the sixth leading cause of death for Alabamians, according to the American Diabetes Association. Diabetes-related deaths in rural Alabama are as much as 18 percent higher than in the state's urban areas, and are as much as 44 percent higher than diabetes-related deaths in the United States, the ADA says.

Self-management education is an essential component of diabetes treatment, according to the ADA. Patients in ADA-recognized and similar programs are taught self-care skills that promote better management of diabetes treatment regimens. With increased knowledge, patients can assume a major part of the responsibility for their diabetes management and possibly prevent some of the acute and chronic complications of diabetes.

"Our staff works diligently every day to provide the best education possible to our patients," says Angela Hammond, CRNP, CDE, a nurse practitioner at

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University Medical Center who teaches in the program. University Medical Center is part of the College.

The College's diabetes education program earned national recognition from the ADA last year for providing high-quality education services to patients. (See story on page 12).

"We firmly believe that utilizing technology and resources like this program will help address a rapidly growing epidemic, and we applaud The University of Alabama for leading the way," says Jonathan LeCompte, president of the Georgia/Alabama region for Verizon Wireless.

PROVIDING SPECIALTY CARE IN RURAL AREAS

Telemedicine is a key component to providing specialty care in rural areas, says Lloyda Williamson, MD, an associate professor in the College's Department of Psychiatry and Behavioral Medicine.

Medical services in rural counties are generally provided by primary care physicians, says Williamson, who also directs the College's telemedicine program. Rural patients needing specialty services often have to drive to larger medical centers.

"People in rural Alabama often have difficulty with transportation, so they may not be able to access those larger facilities, or they might put off obtaining those services until their illness becomes more severe, and they end up dealing with complications," she says. "If someone was able to go to a physician's office or a community hospital and have access not only to that primary care physician, but also one or more specialists via video conferencing, it just simplifies the process."

With the help of a \$2,500 Southeast Conference Visiting Faculty Travel Grant, Williamson had an opportunity to see how telemedicine programs work in other places. She selected the University of Kentucky in Lexington because the school's program has been established for many years. For three days in April, Williamson met with administrators and physicians involved in the school's telemedicine program, visited the telemedicine clinics and learned more about the program's financial, organizational and technical structure.

"Telemedicine can be used multiple ways – providing clinical services, providing education and support to individuals in rural Alabama and providing education to medical students and clinicians," she says.

Telemedicine services not only increase access to specialists but are also cost effective. An individual



Lloyda Williamson

spends more time and money each time he or she leaves rural Alabama to go to a larger city to have an appointment with a specialist.

The College, which also functions as a regional campus for medical students at the University of Alabama School of Medicine, provides telemedicine services in psychiatry and diabetes education in a number rural areas, including Greene, Hale, Sumter, Marengo, Choctaw, Pickens and DeKalb counties. The goal is to expand telemedicine at the College to become a "true department," Williamson says.

"We have to figure out what the needs are in rural Alabama, how to connect with people, both clinicians and individuals, what services we should provide and how we involve specialists in Tuscaloosa to partner with us to provide those services," she says. Collaboration may also occur with specialists outside of Tuscaloosa, she says.

By Kim Eaton