

Strategic Collaborations

University of Texas Medical Branch – Galveston Brookwood Community Telehealth Partnership

Rockwell Fund, Inc. (RFI) has committed \$212,604 over five years, beginning August 1, 2006 to the *University of Texas Medical Branch's* (UTMB) Electronic Health Network (EHN) for the development and implementation of an exciting telehealth pilot program, which will include implementation of electronic medical records and provision of telemedicine services to the residents of the *Brookwood Community*.

Established in 1891, UTMB is the world's largest provider of telehealth patient encounters. Since 1994, it has provided more than 220,000 telemedicine consultations, more than four times the world's second largest program. Through telemedicine, UTMB is making possible the wide-scale application of distance technologies to provide health care to remote, rural and underserved populations.

Located in rural Brookshire, Texas, the Brookwood Community is a 475-acre residential campus for adults with functional disabilities. Today, more than 100 citizens live in homes at Brookwood, work in one or more of several on-site enterprises, exercise and play in the indoor swimming pool and gymnasium, worship at the community's inter-faith center and, when necessary, receive care in the facility's clinic. This project aims to serve the adult residents at Brookwood, and there is anticipation that the project can expand to also serve Brookwood's staff.

Through the partnership, UTMB uses telemedicine (advanced videoconferencing technologies) to connect the Brookwood Community both to primary care physicians as well as to physicians in 26 medical specialties and sub-specialties. UTMB's professionals work directly with patients while consulting with the Community's nine-member nursing and medical support staff. The arrangement helps to overcome many barriers associated with providing Brookwood's citizens with quality care. For instance, having onsite care through telemedicine avoids the anxiety persons with mental retardation and intellectual disabilities can face when pulled out of their routine.

Logistically, telemedicine offers the benefit of time and cost savings to the Community – rather than losing half a day and a tank of gas taking clients into town for appointments in Houston, the care is brought to them. Additionally, many of Brookwood's citizens require bariatric care, as they are often overweight due to their conditions. So, trips into town would normally require two staff and special transportation.

“Telemedicine is proving to be a valuable tool that is helping us meet the special health care needs of Brookwood Community members, as well as making compassionate care accessible to medically underserved populations across the country and the world,” said Dr. David Callender, President of UTMB.

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To date, UTMB and Brookwood have begun work on implementing an effective electronic medical record (EMR) system, which will transfer patient information into electronic form, making this information both more secure and more easily accessible to the health care professionals who need it. Physical medical care will begin once the EMR system is finalized.

In the meantime, the EHN team has successfully trained the Brookwood clinic staff on the telemedicine cart and all its applications and peripherals, and mock patient simulations have occurred. Psychiatric consultations also have begun, with UTMB providing both primary and secondary opinions.

Because adults with functional disabilities have a 1 in 3 chance of developing co-morbid mental health/mental retardation conditions (the presence of more than one diagnosis occurring in an individual at the same time) versus the general population's 1 in 10, access to psychiatric expertise has been invaluable. Staff and citizens meet with UTMB's psychiatric staff every other week via videoconference, presenting cases and challenges. At this time diagnoses and recommendations are provided. These sessions bring everyone – from case manager to nurses to clients – together as to treatment plans, resulting in a useful, collaborative teaching forum.

When asked how Brookwood's residents react to the novelty of telemedicine, Rick DeMunbrun, Director of Community and Citizen Programs replied, "Everyone wants to do it! The advanced videoconferencing technologies provide a picture-in-picture screen, so the client can see both the doctor and themselves. They feel they are on TV and react very positively."

While Brookwood's citizens appear to have fully embraced this innovative technology, the hope is for others to be able to adopt this approach. UTMB and Brookwood anticipate "soft publishing" case studies, and since Brookwood is internationally known, they intend to share what they learn from this pilot with others working in the same industry, particularly those in under-resourced areas serving similar populations. DeMunbrun shared an example of a group working in a remote region of Mexico, where families often take four hours out of their day just to get their special needs family member to treatment, and even then, lack access to the full spectrum of medical specialties.

The overall goal of the project is to build a model for accessible, cost effective preventive and long-term care for Brookwood Community's residents, faculty and employees. This project is also a chance to evaluate how well telemedicine works in providing care to special needs populations. If both the lessons and technologies from this initiative can be shared with others, the effects of this collaboration would be immeasurably multiplied.

More information on UTMB's Electronic Health Network can be found at <http://ehn.utmb.edu/>.
Or, to learn more about the Brookwood Community, visit www.brookwoodcommunity.org.

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