

# **The Ochsner TeleStroke “Hub and Spoke” Program: The “Hub” Perspective**

## **Ochsner Health System – New Orleans, LA**

### **Background**

According to the Centers for Disease Control and Prevention, stroke is the fourth leading cause of death in the United States, killing nearly 130,000 Americans each year. When stroke occurs, time is of the essence. Given the shortage of some medical specialties in rural America, local specialty care is not always possible. Telehealth connects rural providers and their patients to services at a distant site, enabling patients to receive care in their communities and avoid long travel times. Ochsner Health System had been providing telehealth solutions since 1998 with remote imaging of patients in distant hospitals. In 2009, Ochsner started its first live consultation telehealth program: TeleStroke.

### **Program Overview**

Through Ochsner Health System’s TeleStroke program, emergency department physicians in rural and urban hospitals have the ability to consult immediately with Ochsner vascular neurologists 24 hours a day, 7 days a week, 365 days a year using telemedicine equipment to determine the best treatment options for stroke patients. Since August 2009, Ochsner Medical Center was the first hospital in Louisiana to use telemedicine to treat stroke and has become one of the fastest growing networks in the country with 34 active spoke hospitals across Louisiana and Mississippi.

With Ochsner Medical Center in New Orleans functioning as the “hub,” TeleStroke links specially trained vascular neurologists to “spoke” hospitals 24/7 for collaborative care. Via Ochsner CareConnect 360, Ochsner stroke neurologists are present virtually at 34 hospitals. Through secure wireless data and video communication, Ochsner’s stroke team partners with on-site clinicians to evaluate, diagnose and direct care for patients, as well as to ensure that timely thrombolytic therapy is administered when appropriate.

### **Impact**

Since its inception, the Ochsner TeleStroke Program has provided care for more than 6,000 patients across the region. The network is part of the Ochsner CareConnect 360 program, a comprehensive clinical solution designed to complement and enhance the patient care provided by on-site physicians as opposed to a purely physician coverage model.

The National Institute of Neurological Disorders and Stroke found that stroke patients who received tissue plasminogen activator (t-PA) within three hours of the beginning of stroke symptoms were more likely to recover from their stroke with little or no disability. Because Ochsner’s Telestroke neurologists are able to see patients as they arrive in their local hospitals, they are able to evaluate and prescribe t-PA treatment more quickly. This timeliness has resulted in a Telestroke t-PA utilization rate more than four times the national average and a reduced complication rate.

“Through Ochsner’s acute stroke program and telemedicine program, we have been able to provide much needed specialized care to patients across the region in many underserved areas,” said Gabriel A. Vidal, M.D., director of Ochsner Medical Center’s Comprehensive Stroke Center. “We have improved the use of tPA across the entire network and have been able to touch the lives of over 6,000 patients with acute strokes. We will continue to strive to provide this care for the people of Louisiana and the Gulf South.”

### **Lessons Learned**

In many cases, a TeleStroke consultation will allow patients to stay at their local hospital. In more complicated cases, the patient may need to be transferred to Ochsner or another facility for specialized treatment. Currently, more than 70 percent of patients are able to remain in their local health care facility, compared with an average of less than 15 percent before TeleStroke. Telestroke is still beneficial when a transfer is needed, because the neurologist will have already met and started treatment on the patient.

### **Future Goals**

Today, the CareConnect 360 program consists of more than 30 telehealth solutions to provide all-around care ranging from the acute care setting to the clinic. Collaboration to utilize this high-quality health care delivery tool can expand the depth of patient management options. Ochsner is committed to leveraging telehealth to allow its partners to keep patients local. In 2015, the Ochsner team completed more than 135,000 telemedicine consults with other hospitals, providing stroke care, cardiac care, high-risk women’s services, and advanced interpretation services – among other capabilities that other hospitals may not have locally.

The CareConnect 360 program is pushing the Centers for Medicare and Medicaid, and Congress to removing the arbitrary restrictions that limit telehealth coverage, so that all beneficiaries can receive this great benefit.

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