

Mobile Telestroke Solution

Preliminary Findings of Mayo Clinic Trial

TRIAL BRIEF
Telestroke Trial



CAPABILITIES OF THE HUB AND SPOKE HOSPITALS

The Mayo Clinic Stroke Telemedicine for Arizona Rural Residents (STARR) Network gives rural Arizona residents who suffer a stroke access to the latest stroke care. The program connects rural hospital emergency rooms with stroke specialists at Mayo Clinic Hospital in Phoenix via telemedicine. Five Mayo Clinic board-certified vascular neurologists share the Telestroke on-call duties (24 hours per day 7 days per week). A dedicated toll-free telestroke hotline and group paging system is available for the spoke hospital to alert the on-call stroke neurologist.

Using a digital video camera and Internet telecommunications, vascular neurologists at Mayo Clinic can quickly perform live, real-time audiovisual consultations on patients who have suffered acute strokes, increasing the likelihood that clot-dissolving therapies (thrombolytics) can be delivered in time to reduce stroke disability.

STARR operates on a hub and spoke system. Mayo Clinic Hospital is a primary stroke center and telemedicine hub. The spoke hospital in the TEST - iT trial is Yuma Regional Medical Center (YRMC) located in Yuma, Arizona. YRMC, located 180 miles west of Phoenix, is a 333 bed Joint Commission on Health Care Organizations (JCAHO) accredited facility serving a population of approximately 193,000.

EXISTING STROKE PROTOCOL AND TELESTROKE SOLUTIONS

In a telestroke alert, brain attack cases present to the spoke hospital emergency department and undergo a remote stroke assessment by a vascular neurologist at Mayo Clinic, the hub hospital, or from any mobile location. Telemedicine audiovisual equipment transmits information in real-time between the spoke and hub. The vascular neurologist remotely interacts with patients, their families, and emergency department staff and is able to observe diagnostic brain imaging using ResolutionMD™, cardiac monitors, and patients' performance on a structured neurological examination (the National Institutes of Health Stroke Scale). The vascular neurologist, informed of all pertinent information, then advises the emergency department physician on the best treatment course for the patient.

ESTIMATED NUMBER OF STROKE EXAMS PERFORMED TO DATE

Exams	Test-iT Data	
	Test-iT Spoke Site	Remaining Spoke Sites
Number of Cases	21	16
Intracerebral Hemorrhages	4	-
Brain Neoplasm	1	-
Ischemic Stroke	16	-
Technical Problems	1*	10
* Patient name did not appear for review, but was later located using Search feature. Note: ResolutionMD used on all cases of Test-iT Spoke Site. Not used at remaining Spoke Sites. Note: Data is from a 2-month period.		

ANONYMOUS USER COMMENTS BEST EXPRESSES THE IMPRESSION OF THE MOBILE PRODUCT.

"ResolutionMD is the favored modality for CT brain viewing in the telestroke network"

"ResolutionMD Mobile worked flawlessly."

"The ResolutionMD app consistently works well."

"I appreciate the speed and reliable performance of the ResolutionMD app."