Telestroke program enables emergency video consults with UCLA experts

The UCLA Telestroke Network Partner Program gives Emergency Departments at community hospitals the opportunity for direct, immediate video consultation with stroke neurology experts at the UCLA Stroke Center, one of the world’s leading stroke treatment centers. UCLA neurologists are available to provide collaborative-care recommendations to emergency physicians on patients with acute stroke, transient ischemic attack (TIA), and stroke-like conditions. The UCLA team works in collaboration with local neurologists, covering time periods when local specialists are not available, up to 24 hours a day, 365 days a year.

This program is a major developmental advance of the well-established UCLA Stroke Hotline in which UCLA has been working with emergency physicians and neurologists throughout L.A. County and beyond to provide the best medical care to acute stroke patients for over a decade.

Stroke treatment

Stroke is the third-leading cause of death and the leading cause of serious, long-term disability in the United States. It is a highly treatable emergency condition, but approved treatment to restore blood flow is most effective when administered as soon as possible after hospital arrival by physicians skilled in emergency management of cerebrovascular conditions.

UCLA transmits expertise to community

“Telestroke evaluation by live, two-way video conferencing shows excellent comparability to in-person evaluation,” explains Latisha Ali, M.D., director of UCLA’s Telestroke Network Partner Program. “Such collaborative management can substantially improve patient outcomes.”

In controlled trials, telestroke consultations within an organized system of care have been shown to improve the outcome of ischemic and hemorrhagic stroke patients receiving supportive care, as well as to allow the safe administration of recanalization agents to appropriate patients. Teleconsultation provides patients and families with definitive stroke expert opinions without the logistic difficulties of patient transfer.

UCLA’s Telestroke Network Partner Program brings the expertise of UCLA stroke neurologists to geographically distant hospitals via secure electronic image transfer and video consultation. Emergency Department physicians and neurologists at the referring hospital have direct access to UCLA experts, who can provide diagnostic consultation and treatment planning.
Most strokes are ischemic strokes — the result of a blood clot that has traveled from elsewhere in the body and become lodged in a blood vessel in the brain, blocking blood flow. Acute stroke is best managed by neurologists and emergency physicians working closely in tandem.

Tissue plasminogen activator (tPA), a thrombolytic (clot-busting) agent, is the only drug currently approved by the U.S. Food and Drug Administration (FDA) for the acute treatment of ischemic stroke. When used appropriately, tPA can dissolve the clot and restore blood flow, improving the final outcome in one of every three patients treated. Because tPA carries a small but significant risk of complications, including bleeding into the brain, the decision to use tPA requires resources that some hospitals do not have available at all times.

How the program works

When a possible acute stroke patient is evaluated in a network partner hospital and telestroke consultation is desired, the emergency physician contacts the UCLA Stroke Hotline. Within 15 minutes, a UCLA stroke neurologist can be interviewing and counseling the patient and family and performing the stroke-specific neurologic exam through a two-way video connection. The UCLA stroke specialist can also view local CT and other diagnostic images as needed.

Based on this information, the UCLA physician can offer a definitive expert opinion on the correct diagnosis and most advisable treatment plan. Management recommendations may include supportive care, additional diagnostic tests, the use of tPA, or, if available, use of FDA-approved acute endovascular interventions, such as mechanical clot retrieval (Merci Retrieval System) or clot aspiration (Penumbra System). A consultation report is immediately completed by the UCLA neurologist and entered into the patient’s local medical record.

UCLA Stroke Center

The UCLA Stroke Center is recognized as a world-leader in the management of cerebral vascular disease. UCLA was the first center certified as a Primary Stroke Center in Los Angeles County by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and is the only center in Los Angeles County funded by the National Institutes of Health to perform translational research to develop new diagnostic and therapeutic approaches to stroke care. The UCLA Stroke Center provides state-of-the-art care for a full range of central nervous system vascular disorders, including ischemic stroke, TIA, carotid stenosis, intracranial vascular stenosis, stroke in the young, intracerebral hemorrhage, subarachnoid hemorrhage and moyamoya disease. Network partner institutions reap the full benefit of UCLA’s reputation in this demanding field of medicine.