



## PSYCHIATRY AND STROKE CARE

# How Southern Illinois Healthcare Used Telemedicine to Transform Care in the Emergency Department

### Background

Southern Illinois Healthcare (SIH) is a not-for-profit system with over 3,000 employees serving 16 counties. Its flagship hospital, Memorial Hospital of Carbondale, offers nearly 40 specialty services.

The SIH telehealth mission is to improve the health and well-being of the people in the communities they serve by improving the availability and provision of healthcare services in rural and underserved areas of Illinois.

### Challenge

As with most rural areas, the shortage of mental health providers is a significant barrier to care. Southern Illinois experienced a serious mental health shortage: only one psychiatrist was available to serve 1.5 million patients.

#### As a result, emergency departments were presented with unique challenges:

- Long wait times caused patients to leave against medical advice
- Patients with mental issues went undiagnosed
- High readmissions due to patients not having a mental health diagnosis

SIH also sought to leverage telemedicine to reach new milestones in its delivery of stroke care, and established a goal of minimizing the time from door to needle to less than one hour.

SIH's telemedicine program has resulted in:

Neurology length of stay reduced to

**2.5 days**

TPA administered in

**19 minutes,**  
door-to-needle

Psychiatric ER discharge reduced to

**2 hours**

**50% fewer**  
psychiatric patients leaving  
the ER without care



## Solution

Southern Illinois Healthcare selected the American Well 300 Telemedicine Cart and Horus Scope to build its telepsychiatry and telestroke programs.

---

“The reliability and mobility of the 300 made it our ideal solution. Its minimum weight and footprint make it easy to maneuver in tight hospital corridors and rooms.”

**Catherine Hungate, Telemed Coordinator, Southern Illinois Healthcare**

---

## Success

Through the use of telemedicine, SIH hospitals and clinics are collaborating with specialists and community organizations to improve access to quality care. A full-time telemedicine coordinator manages the program, assisted by two full-time telemedicine medical directors for neurology and psychiatry.

Discharge for psychiatric patients has been reduced to two hours, and the number of patients leaving the ER without psychiatric care has reduced to fifty percent.

One neurologist is now able to serve three hospitals. By utilizing telemedicine technology, an ED doctor connects with the neurologist, and is able to see the patient, access images and patient records, and advise in the proper diagnosis and treatment. The average length of stay for stroke patients has reduced to 2.5 days. Additionally, TPA is now administered within 19-minutes of the patient arriving to the hospital.

The initial success of the SIH telemedicine program has supported its expansion to include maternal fetal medicine and their Congestive Heart Failure program. Additionally, SIH was awarded a grant from the USDA to expand its telemedicine program across seven additional sites.