

CASE STUDY:

DeSoto Memorial Hospital

BACKGROUND

DeSoto Memorial Hospital (DMH) is a 49-bed independent rural hospital in Arcadia, Florida. The hospital serves a community of roughly 35,000 residents, with a population that is roughly 70 percent English speaking and 30 percent Spanish speaking. A nurse-driven stroke program, with bedside nursing leadership shaping workflow from the ground up, is central to how DMH operates.

THE CHALLENGE

Before partnering with TeleSpecialists, DMH had no structured pathway for treating stroke patients on site. The hospital transferred 98 percent of all stroke patients prior to 2021. That pattern delayed treatment, separated patients from their families during a critical care illness, and left little room to develop local clinical expertise or a sustainable stroke program.

THE SOLUTION

DMH partnered with TeleSpecialists in August 2018 and built a digital healthcare neurology program in deliberate stages, pairing virtual neurologist access with hands-on training and disciplined workflow design.

Program Timeline

- August 2018: Partnership with TeleSpecialists begins
- 2021: TeleNeuroHospitalist Rounding and TeleStroke services launched
- 2022: Primary Stroke Certification achieved
- 2025: TeleEEG Services implemented

Workflow and Training

DMH worked with TeleSpecialists to design workflows built around proven clinical practice. The hospital trained EMS, nursing, and physician teams on the Miami Emergency Neurologic Deficit (MEND) tool, creating one consistent language for assessing stroke symptoms from the field through the emergency department and into inpatient care. Every registered nurse and physician completes eight hours of stroke education each year, keeping clinical skill current as staff and best practices evolve.

Takeaways

- DeSoto Memorial Hospital reduced its patient transfer rate from 98 percent to five percent, replacing a near-total reliance on transfer with a dependable, locally delivered standard of stroke care.
- A twenty-five-minute average door-to-needle (DTN) time and a three-minute door-to-initial-response window reflect the discipline of a program built on standardized workflow, consistent training, and tight EMS coordination.
- Primary Stroke Certification achieved in 2022. TeleEEG services now in development, establishing a replicable model for independent rural hospitals seeking to expand specialist care.

Stroke Response Sequence

- EMS provides advance notification ahead of patient arrival
- An E-Alert notifies the TeleSpecialists team immediately
- A designated EMS pitstop accelerates the handoff from ambulance to care team
- The neurologist conducts the initial evaluation directly in the CT room
- Vitals and monitoring continue in the CT room without delay
- The care team administers thrombolytic and anti-hypertensive medications in the CT room when indicated

Ongoing Quality Oversight

DMH and TeleSpecialists hold monthly quality meetings to review performance metrics and dashboards, identify improvement opportunities, discuss staff education needs, and address any concerns in real time. This consistent cadence keeps the program accountable and gives both teams a clear view of what is working and what requires attention.

Community Education

DMH worked with TeleSpecialists and local community leaders to develop education programs on stroke recognition and risk factors, extending the partnership's impact into prevention and earlier recognition across DeSoto County.

THE OUTCOMES

By 2025, DMH had transformed its stroke response from a near-total reliance on transfer to a program capable of treating and retaining 95 percent of stroke patients on site.

25 MINS

Average
DTN time

9 MINS

Door to
notification

10 MINS

Door to
assessment

3 MINS

Door to
initial
response

8 MINS

Assessment to
thrombolytic
decision

5%

Patients
transferred for
higher level of
care

The five percent transfer rate reflects a fundamental shift in what DMH can safely manage within its own facility. Before the partnership began, that figure stood at 98 percent.

IMPACT

The partnership created meaningful impact across three dimensions: for patients, for the hospital, and for the broader rural community it serves.

Patient Impact

- Specialist-level neurological evaluation within minutes, without transfer
- Patients receive care in their own community, near family and familiar providers, during a critical recovery window

Operational Impact

- A nearly complete reliance on transfers, replaced by a dependable, locally delivered standard of care
- Every registered nurse and physician maintains annual stroke education requirements
- Monthly quality reviews sustain performance accountability across both teams

Community Impact

- Patients in DeSoto County now receive specialist-level stroke evaluation without leaving their community
- DMH has established a replicable model for independent rural hospitals seeking to build sustainable specialty care programs

INDUSTRY ACCOLADES

- AHA 2026 GWTG Gold Plus, Target: Stroke Honor Roll Elite Plus and Type 2 Diabetes Honor Roll

LOOKING AHEAD

DMH and TeleSpecialists are preparing to add supplemental TeleEEG services (POC and Pediatric), extending the partnership's clinical reach beyond stroke and continuing the hospital's pattern of measured, evidence-based growth.

WHY IT MATTERS

Rural hospitals are often told that specialist-level care requires size, infrastructure, or geography that smaller facilities simply do not have. DMH's experience challenges that assumption directly.

A 49-bed independent hospital in a rural Florida county built a Primary Stroke Certified program from the ground up, reduced its transfer rate from 98 percent to five percent, and established the clinical infrastructure to keep expanding. It did not happen through a single technology purchase or a one-time initiative. It happened through a structured partnership, a disciplined training program, and a deliberate approach to workflow design sustained over years.

That model is replicable. Any rural hospital facing the same gap between the care its community needs and what it can currently deliver has a documented road map in what DMH built. The clinical outcomes are specific to DeSoto County. The approach is not.