Increasing hospital participation in the Tennessee Stroke Registry will produce a more accurate picture of stroke outcomes and care in Tennessee. Currently, six hospitals in the state report data to the registry. Check with your local AHA Get With the Guidelines representative (contact information on page 2) to see how your hospital can enroll in the GWTG-Stroke program. Information for enrolling in GWTG can also be found on the website listed at the end of this article. Once enrolled, you will have the option to grant ETSU COPH viewable access to your data and must do so to be included in the Tennessee Stroke Registry. If your hospital is already participating in GWTG, we encourage you to contact us to check your TSR reporting status.

Current in Stroke Literature: “Optimization modeling to maximize population access to comprehensive stroke centers”

ABSTRACT:

Objective: The location of comprehensive stroke centers (CSCs) is critical to ensuring rapid access to acute stroke therapies; we conducted a population-level virtual trial simulating change in access to CSCs using optimization modeling to selectively convert primary stroke centers (PSCs) to CSCs.

Methods: Up to 20 certified PSCs per state were selected for conversion to maximize the population with 60-minute CSC access by ground and air. Access was compared across states based on region and the presence of state-level emergency medical service policies preferentially routing patients to stroke centers.

Results: In 2010, there were 811 Joint Commission PSCs and 0 CSCs in the United States. Of the US population, 65.8% had 60-minute ground access to PSCs. After adding up to 20 optimally located CSCs per state, 63.1% of the US population had 60-minute ground access and 86.0% had 60-minute ground/air access to a CSC. Across states, median CSC access was 55.7% by ground (interquartile range 35.7%–71.5%) and 85.3% by ground/air (interquartile range 59.8%–92.1%). Ground access was lower in Stroke Belt states compared with non–Stroke Belt states (32.0% vs 58.6%, p = 0.02) and lower in states without emergency medical service routing policies (52.7% vs 68.3%, p = 0.04).

Conclusion: Optimal system simulation can be used to develop efficient care systems that maximize accessibility. Under optimal conditions, a large proportion of the US population will be unable to access a CSC within 60 minutes.


For access to this article, visit Neurology.org or contact TSR.