



## Get With The Guidelines™

### Stroke Registry

#### OVERVIEW

Stroke is the fifth leading cause of death and a leading cause of disability among adults in America.<sup>1,2</sup> In an effort to reduce the burden of stroke by improving the quality of care delivered to stroke patients, stroke registries measure and track acute stroke care. The Get With the Guidelines (GWTG)<sup>®</sup> Stroke registry by the American Heart Association/American Stroke Association combines clinical registries and databases of health information on specific clinical conditions, procedures or populations, and captures data on clinically important events relevant to a particular population or condition. The data can be integrated into electronic health records (EHRs) to directly support evaluation of care delivery and patient outcomes.<sup>3</sup>

GWTG-Stroke collects patient level data on characteristics, diagnostic testing, treatments, adherence to quality measures, and in-hospital outcomes in patients hospitalized with stroke and transient ischemic attack (TIA). Collection of comprehensive, continuous stroke data supports data analysis and the development of interventions to improve stroke care. Currently, over 2,000 hospitals participate in GWTG-Stroke, and data has been collected from over 5 million patient encounters for stroke.<sup>3</sup>

The primary goal of the GWTG-Stroke program is to improve the quality of care and outcomes for patients hospitalized with stroke and TIA.<sup>4</sup> The GWTG-Stroke registry helps achieve this goal in a variety of ways, including:

- Enabling high caliber stroke research;
- Promoting stroke center designation;
- Supporting hospital level quality improvement; and
- Driving the creation of regional stroke systems.

#### ENABLING STROKE RESEARCH

The GWTG-Stroke registry is an important scientific resource for stroke research, as it improves data available on quality of care and outcomes for stroke patients for use in studies.<sup>4</sup> As a result of its size, scope, duration, and prospective collection of patient level data, the GWTG-Stroke registry allows for the investigation of diagnosis and care outcomes and data on contraindications to recommended therapies, which improve research quality. As of 2018, researchers had published almost 600 peer-reviewed studies using the GWTG-Stroke registry database.<sup>5</sup> Additionally, the data collected by GWTG-Stroke is largely representative of the general population, making research conducted using the registry applicable to populations in non-participating hospitals.<sup>6</sup>

#### PROMOTING STROKE CENTER CERTIFICATION

The Joint Commission's (TJC's) Stroke Center Certification programs, developed in collaboration with the American Heart Association/American Stroke Association, recognize centers that have made exceptional efforts to foster better outcomes for stroke care. Primary Stroke Center designation, beginning in 2003, identifies facilities that deliver care based on Brain Attack Coalition recommendations, support patient self-management, tailor treatment to individual needs, follow evidence-based guidelines, support the flow of information across care settings, and continually improve care. Participation in GWTG-Stroke supports stroke centers' efforts to continually improve by allowing them to analyze data on care processes and patient outcomes. GWTG-Stroke participation also fulfills certification requirements for stroke centers looking for designation as a Primary or Comprehensive Stroke Center.

#### SUPPORTING QUALITY IMPROVEMENT

By providing hospitals with timely feedback on their stroke care performance, data from the GWTG-Stroke registry allows hospitals to pursue quality improvement efforts by identifying problems with their stroke care, developing quality improvement interventions based on the identified problems, and monitoring progress after implementation of a chosen intervention. As a result, hospitals participating in the GWTG-Stroke program show improvement in adherence to stroke performance measures.<sup>7</sup>

In addition to supporting overall stroke care quality improvement, the GWTG-Stroke registry can help hospitals reduce disparities in stroke care. Evidence suggests that not only are individuals from minority communities at higher risk of suffering a stroke, but they also receive lower quality of care and have worse health outcomes.<sup>8</sup> Hospitals participating in GWTG-Stroke improved care for black, Hispanic, and white patients, though racial disparities still exist.<sup>6,8</sup>

## **FACT SHEET: Get With The Guidelines – Stroke Registry**

The GWTG-Stroke registry also helps hospitals fulfill the Centers for Medicare and Medicaid Services' (CMS) requirements for quality improvement. CMS requires hospitals submitting Medicare claims for stroke to report whether they participate in a database registry for stroke care.<sup>89,910</sup> Reporting stroke care quality measures to CMS, such as those in GWTG-Stroke, has been required of Medicare-participating hospitals since 2015.<sup>11</sup>

### **DRIVING STROKE CARE SYSTEMS DEVELOPMENT**

The GWTG-Stroke registry can support and catalyze regional or statewide change. The registry can help policy makers analyze stroke outcome measures and aid in the creation of policies to support an EMS stroke diversion policy. Such policies could require the EMS to take suspected stroke patients to the nearest designated stroke center.<sup>12</sup> Stroke registries can provide data to catalyze diversion policy implementation, increase understanding of stroke outcomes in hospitals and regions, support the hospital designation process, and monitor the effects of a diversion policy on stroke outcomes.

The GWTG-Stroke registry also supports the work of stroke advocates. The registry's data can show the need for stroke program funding, illustrate problems that require government action, or more generally, underscore the importance of a state's policy agenda.

### **PARTICIPATION VARIES BY STATE**

Participation in stroke registries like GWTG-Stroke varies substantially by region. Low participation in some areas reflect a variety of factors including a lack of state-level support, a competitive or autonomous health care culture, and financial barriers. Wider implementation of GWTG-Stroke and other stroke registries will support improved stroke care across the country.

### **THE ASSOCIATION ADVOCATES**

The American Heart Association/American Stroke Association supports the use of registries to improve the quality of stroke care and to help identify risk factors for the disease. Specifically, we:

- Encourage policy makers to use patient-centered, evidence-based, broadly-adopted stroke registries like GWTG-Stroke to meet the quality improvement and reporting requirements of federal programs and those enacted in healthcare reform.
- Encourage state officials to establish stroke registries to support high quality stroke systems of care and mandate reporting to stroke registries.

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9 Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2010 Rates; and Changes to the Long-Term Care Hospital Prospective Payment System and Rate Years 2010 and 2009 Rates. 74 Fed. Reg. 43866 (August 27, 2009).

10 CMS to Focus on Stroke Care in U.S. Hospitals. Healthcare Finance News. August 28, 2009, available at:

<https://www.healthcarefinancenews.com/press-release/cms-focus-stroke-care-us-hospitals>

11 Fact sheet CMS to Improve Quality of Care during Hospital Inpatient Stays. CMS. <https://www.cms.gov/newsroom/fact-sheets/cms-improve-quality-care-during-hospital-inpatient-stays>. Published August 4, 2014. Accessed December 23, 2020.

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