

IMPLEMENTATION OF GET WITH THE GUIDELINES - STROKE at Forest Hills Hospital, New York

Ruban Dhaliwal M.D, Ami Patel M.D, Mandeep Saluja M.D,
Brenda Mendez R.N, Mohammad Sheikhai M.D



Background

Get With The Guidelines is an in-hospital quality improvement program initiated by American Heart Association/American Stroke Association that provides consistent guidelines-based care for acute treatment and secondary prevention in stroke patients.

Forest Hills Hospital implemented the ASA's Get With The Guidelines-Stroke (GWTG-Stroke) Program to strengthen the stroke service delivery infrastructure and improve overall patient care and secondary prevention for stroke.



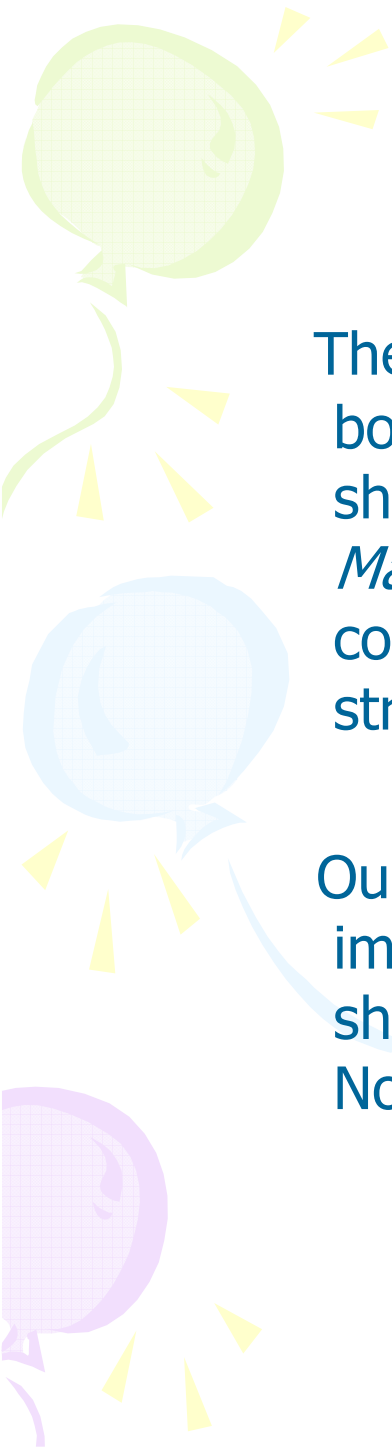


Methods

After collection of baseline stroke treatment rates, GWTG-Stroke was implemented starting in March 2006 using, the GWTG web-based **Patient Management Tool TM** (Outcome, Cambridge, MA) and our Stroke forms.

The "**Stroke Code Flow sheet**" is utilized by the ED physician to initiate the GWTG-based acute treatment and a "**Stroke Survey Form**" is utilized as a guide by our residents, to adhere to the seven performance measures of GWTG-Stroke program and to maintain compliance with the stroke indicators.





The Stroke Code Flow sheet and the Stroke survey form, both are mandatory part of the medical record. The flow sheets are reviewed by the *Department of Quality Management* weekly with the ED Medical Director for compliance issues and incomplete documentation to assure strict adherence.

Our **Multidisciplinary Stroke Team** helps identify the improvement goals on a regular basis and statistics are shared over intranet with other hospitals that are a part of North Shore-LIJ health system.





Analysis

Stroke treatment rates were compared for the period before and after GWTG-Stroke was implemented. Data was collected for the time period of December 2007 through February 2008.

Comparisons were analyzed with composite and defect free measures. The **Composite quality of care measure** indicates a hospital's performance for all patients for selected elements of care. The composite performance is the mean percentage of eligible measures received by each patient.

The **Defect free care** measure shows the percentage of patients who received all eligible interventions, i.e. patients who received all the appropriate care, where 100% equals defect-free.



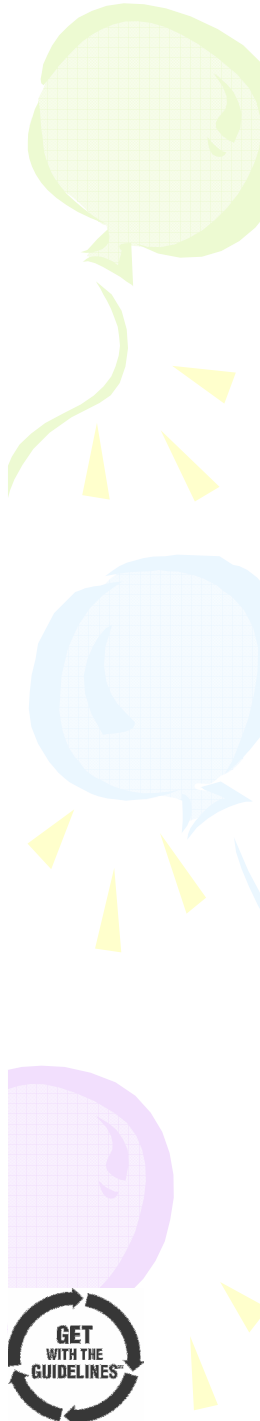
Results

For the total number of patients discharged with the principal diagnosis of stroke, 49.2 % of all stroke were ischemic in etiology, 3.2 % were hemorrhagic, 41.3% were diagnosed as TIA and 6.3% were diagnosed as of uncertain/other etiology.

Total patients discharged with a principal diagnosis of Ischemic Stroke and TIA during this reporting period = 57

Measure	Pre-GTWG	Post-GTWG
Composite score (currently defined as Stroke Composite under the Stroke Performance Measure Set on PMT reporting interface)	67.7%	97.2%
Defect Free score (currently defined as Stroke Defect-Free under the Stroke Performance Measure Set on PMT reporting interface)	44%	91.2%





Seven Performance Indicators	Pre-GTWG	Post-GTWG
Percent of acute ischemic stroke patients who arrive at the ED within 120 minutes of onset of stroke symptoms who receive IV t-PA within 180 minutes of onset of stroke symptoms (LyticAcute-2 hr)	0%	100%
Percent of ischemic stroke or TIA patients who receive antithrombotic medication within 48 hours of hospitalization (%RxASA48)	57.1%	98.1%
Percent of ischemic stroke or TIA patients discharged on antithrombotics (e.g. warfarin, aspirin, other antiplatelet drug) (WAR-ASA-Rx-DC)	100%	100%
Percent of ischemic stroke or TIA patients with atrial fibrillation who are discharged on anticoagulation therapy (warfarin/Coumadin or heparin/heparinoids) unless an absolute or relative contraindication exists (WAR-AF-Rx-DC)	100%	100%
Percent of patients at risk for DVT who received DVT prophylaxis by the 2nd hospital day (DVT-RISK)	73.9%	100%
Percent of ischemic stroke or TIA patients with LDL>100 mg/dL OR on cholesterol reducer prior to admission who are discharged on cholesterol reducing drugs (LDL100-Rx-DC)	80%	90.5%
Percent of smokers who receive smoking cessation advice or medication (e.g. Nicoderm or Zyban) at discharge (SMOKE-Rx-DC)	0%	100%



Conclusion

Statistically, significant improvement in quality improvement measures for secondary prevention of stroke in patients hospitalized for cerebrovascular disease was seen with adherence to GWTG-Stroke and implementation of GWTG-Stroke at Forest Hills Hospital was associated with improved stroke treatment rates compared to conventional care.





Continuous Initiatives For Better Outcomes

- Education for nurses and physicians
- Complete documentation
- Concurrent data entry
- Stroke discharge package
- Progress reports
- Timely record review

