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CAD

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HF



American Heart Association[®]

American Stroke Association[®]

Learn and LiveSM

- CVDs continue to be the leading cause of mortality and morbidity for American men and women.
- Patients hospitalized with a cardiovascular event are at particularly high risk for recurrent events, hospitalizations, and cardiovascular death.

Fortunately, there are a number of evidence-based and highly effective therapies which can significantly improve acute long-term care outcomes and reduce recurrent events.

While the American Heart Association (AHA), American College of Cardiology (ACC), and American Stroke Association (ASA) Guidelines provide evidence-based recommendations for cardiovascular care, adherence to these guidelines is both incomplete and highly variable.²⁻⁷

To **improve** the **quality** of care for patients hospitalized with cardiovascular disease, the American Heart Association launched the **Get With The Guidelines** (GWTG) Program in the year 2000.

The GWTG Program was developed to provide hospitals with a systemic approach to **measure** and **improve** the **quality** of care providing evidence-based tools to help ensure that patients are initiated and discharged on appropriate medications and with risk modification counseling.

- GWTG facilitates hospital teams to create **blameless processes** and **systems of care** which are refined with the plan, do, study, act cycle for continuous quality improvement, resulting not in cookie-cutter medicine, but rather increased adherence to the basic tenants of consensus-built, evidence-based medicine

- Modules focus on patients with:
 - Coronary Artery Disease
 - Action Registry GWTG
 - Cerebral Vascular Disease
 - GWTG-stroke, and
 - Heart Failure
 - GWTG-HF

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From inception to August 8, 2007 there have been over **1400 unique, US hospitals** participating in one or more GWTG Program modules and over **one million patients** entered.

- GWTG facilitates performance improvement using:
 - a hospital-based system,
 - a web-based Patient Management Tool (PMT)TM (Outcome, Cambridge, MA), and,
 - collaborative learning sessions in which hospital teams exchange best practices and learn rapid cycle improvement strategies.^{8,9}

- GWTG provides the opportunity for:
 - concurrent data collection.
 - decision support and,
 - real-time quality reporting.

Intuitive, Dynamic Point-and-Click Interface
(Palm™ data entry also available)

Physician/Service: <input type="text" value="-- select one --"/>	Admit Date: <input type="text" value="08"/> / <input type="text" value="08"/> / <input type="text" value="2003"/>
Location: <input type="text" value="--select one--"/>	Discharge Date: <input type="text"/> / <input type="text"/> / <input type="text"/>
Demographics	Arrival Mode to your hospital: <input type="text" value="--select one--"/>
	EMS to your hospital pre-notification? <input type="radio"/> Yes <input type="radio"/> No/ND <input type="radio"/> N/A
	Age: <input type="text"/> years
	Gender: <input type="radio"/> Male <input type="radio"/> Female <input checked="" type="radio"/>
	Race: <input type="text" value="White/Caucasian"/>
Pre-admission Rankin Scale Score prior to stroke:	<input type="text" value="--select one--"/>
Stroke Diagnosis	Primary Stroke Diagnosis: <input type="text" value="--select one--"/>
	Ischemic stroke subtype of (if applicable, select only): <input type="text" value="--select one--"/>
	Primary Stroke ICD-9: <input type="text" value="--se"/>
Discharge Status(functional):	<input type="text" value="--select one--"/>

OS Physician Studies List - Microsoft Internet Explorer

Address: https://dev.medpad.com/rul_html_physdata.cgi

[Data Entry](#)
[Review Data](#)
[Email Us](#)
[Home](#)

Anti-hypertensives:	<i>(Hold down the "Ctrl" key t</i> ACE Inhibitors Beta Blockers Ca++ Channel Blockers Diuretic
Cholesterol Reducer:	<i>(Hold down the "Ctrl" key t</i> None None-Contraindicated Lescol (Fluvastatin) Lipitor (Atorvastatin)
Other Meds at Discharge:	<input type="checkbox"/> taking prior to admis None Ca++ Channel Blockers Other Anti-hypertensive Nitrates
Referred to Rehabilitation Program?	<input type="radio"/> In-patient <input checked="" type="radio"/> Out-pati
Risk Intervention:	<input type="checkbox"/> smoking cessation <input type="checkbox"/> <input type="checkbox"/> low cholesterol diet (<

Additional Comments:

Instructional Guidelines - Microsoft Internet Explorer

Recommended Guidelines:

Blood Pressure Control:
 Goal is SBP < 140 mmHG and DBP < 90 mmHG or SBP < 135 mmHG if target organ damage is present. Recommend lifestyle modification and medications.

Smoking Cessation:
 Goal is smoking cessation. Strongly encourage patient and family. Provide counseling, nicotine replacement, and formal programs.

Lipid Management:
 Goal is LDL < 100 mg/dL; HDL > 35 mg/dL; TC < 200 mg/dL; TG < 150 mg/dL. Starting AHA Step II diet: <=30% fat, < 7% saturated fat, < 200 mg/d cholesterol and emphasize weight management and physical activity. If target goal not achieved with these measures, add drug therapy (e.g. statin agent) if LDL > 130 mg/dL and consider drug therapy if LDL 100-130 mg/dL.

Physical Activity:
 Goal is 30-60 minutes of activity at least 3-4 times per week. Moderate exercise is recommended. Medically supervised programs are recommended for high-risk patients (e.g. cardiac disease) and adaptive programs depending on neurological deficits are recommended.

Weight Management:
 Goal is <= 120% of body weight for height. Recommend diet and exercise.

Carotid Endarterectomy:
 Carotid endarterectomy of definite benefit if done with acceptable morbidity and mortality. Antiplatelet agents.

Atrial Fibrillation:
 If nonvalvular atrial fibrillation is the source of embolism, then recommend oral anticoagulation unless contraindicated. INR 2-3 (target 2.5) lifelong therapy.

Checks patient information against applicable AHA/ASA Guidelines (Stroke and CAD)

Current User: AHA Test4

Taskbar: Start, Inbox - Microsoft..., StrokeTool, OS Physician Studi..., https://dev.medpa..., Instructional Gui..., 10:17 AM

POINT Electronic Data Capture System - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Links Address

Data Entry Review Data

Anti-hypertensive Tx	ACE Inhibitors ARB Taking any anti-h
Cholesterol Reducing Tx	None prescribe None - contraind Statin Fibrate Taking any chole
Diabetic Tx	None prescribe None - contraind Insulin Oral agents Taking any diabe
Anti-Smoking Tx	None prescribe None - contraind Counseling Anti-Smoking M
Other Lifestyle Interventions	Reducing weight
Additional Comments	

Note Guidelines Patient Education

[Complete Form](#): Check to mark this form as complete.

Update Record

Microsoft Internet Explorer

Microsoft Internet Explorer

Patient Education Information

The following Patient Education forms will be printed:

- Antiplatelets and Anticoagulation
- Changes after stroke
- Children and Stroke
- Driving
- Hemorrhagic stroke
- Ischemic stroke causes
- Risk factors
- Stroke diagnosis
- Stroke rehab
- Stroke feeling tired
- Quit Smoking
- Carotid endarterectomy
- Atrial fibrillation
- Complications
- Emotional changes
- High blood pressure
- Life styles
- Aphasia
- Stroke family caregiver
- Stroke living at home
- Warning signs of stroke

Get PDF

Automate education efforts:
PMT collates and provides Patient Education materials, customized to the patient's condition

POINT Electr... https://gol.medpad.com/build_note/build_note.cgi?te...

File Edit View

Data Entry

- Anti-hypertensive Tx
- Cholesterol Reducin
- Diabetic Tx
- Anti-Smoking Tx
- Other Lifestyle Inter
- Additional Comments

Stroke Patient Referral Note

You may edit the note below and then click on the "FAX" button to send the note to the physician you have specified in the 'Name, 'Fax' and 'Phone' fields. Use the buttons on the bottom of this page to view the note before faxing it, print the note or open your consulting physicians address book.

01/12/2004:

Re: Stroke Referral Note
Patient: ecpmoh03

The patient was admitted to our facility on 08/08/2003. The patient's medical history includes the following factor(s) which may increase stroke risk:
Atrial Fib

The following data were collected:
Height = 62 inches; Weight = 200 pounds. Body mass index = 36.64kg/m2.

The patient was discharged on the following medications for secondary prevention:

Name: Fax: Phone:

Edit View Print Fax Address Book Close

Note Guidelines

Complete Form: Check to mark this form as complete.

Update Record

Links Address

Internet

Improve Communication,
Reinforce Intervention
Print Notes and Fax Letters to
Referring Physicians automatically

Select any of 30 measures to review

Data Entry
Review Data
Contact Us
Logout

Track hospital performance thru multiple parameters, and download hospital data on demand into Excel compatible format

[Return to Report List](#)
[Measures Interface - User Manual](#)

Time Period:	Interval: <input type="text" value="Quarterly"/>	From: <input type="text" value="2004"/> <input type="text" value="Q1"/>
		To: <input type="text" value="2004"/> <input type="text" value="Q1"/>
Filter by:	Diagnosis: <input type="text" value="All Diagnoses"/>	
	Department: <input type="text" value="All Departments"/>	
	<input type="checkbox"/> Include Only Complete Records	

Build the Report

Report 1:	Measure: <input type="text" value="AcuteDoorToCT*"/>	Benchmarking/Comparison Group: <input type="text" value="individual hospital"/> <input type="text" value="all hospitals"/> <input type="text" value="MA Stroke Pilot"/>	AcuteDoorToCT*: Time from triage (ED arrival) to initial imaging work-up for acute ischemic stroke or TIA patients
	Format: <input type="text" value="Bar Chart"/>		
	<input type="checkbox"/> Display Baseline <input type="checkbox"/> Display Excluded Patient List		
<input type="button" value="+ Add New Report"/>		<input type="button" value="Remove this Report"/>	

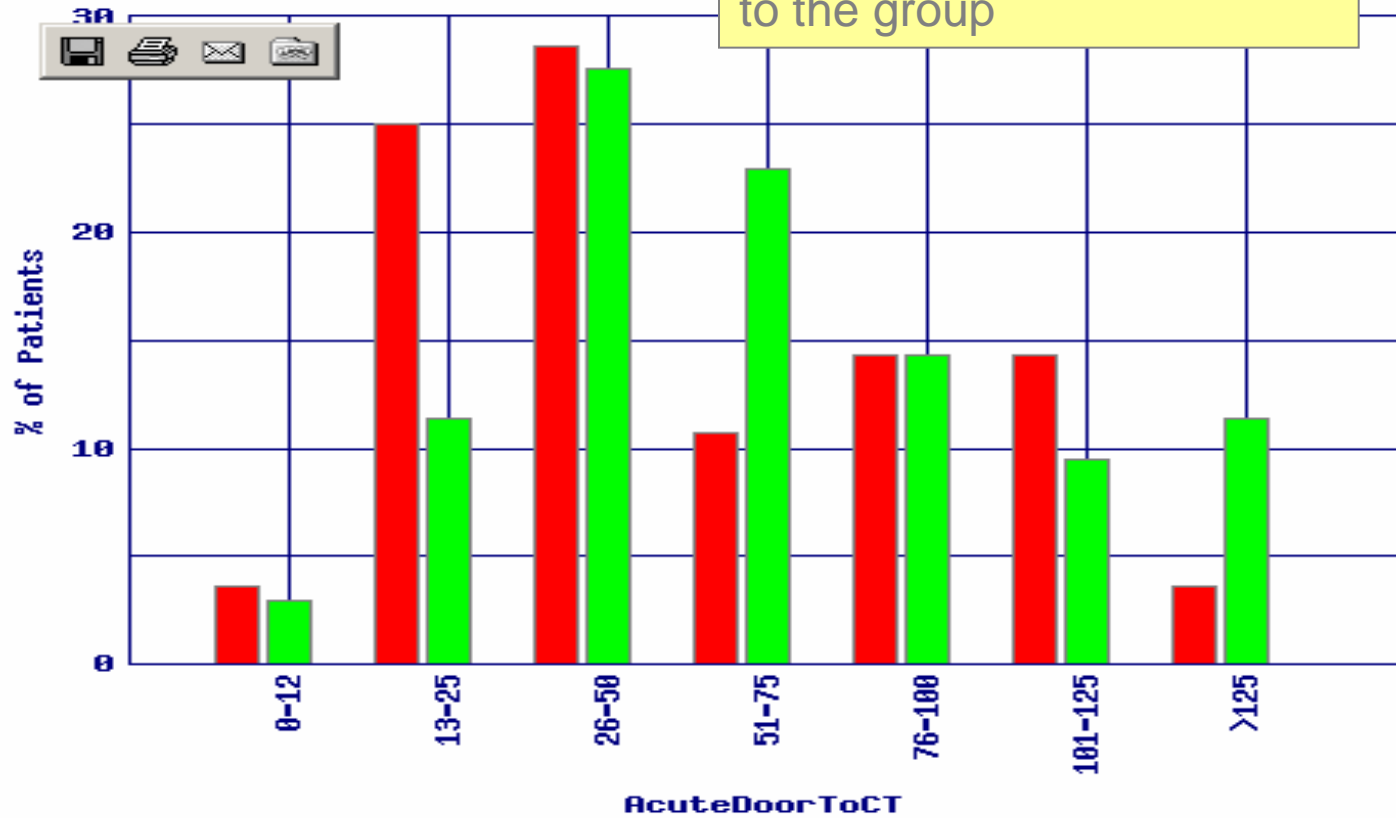
Select Display Options

Display:	<input type="checkbox"/> 95% Confidence Interval
Plot control options:	<input checked="" type="checkbox"/> Similar measures on the same graph
	<input type="checkbox"/> One benchmark group per graph
<input type="button" value="Generate Reports"/>	

- Online, on-demand reports provide:
 - continuous quality improvement feed-back to the participating institutions and
 - permit hospitals to **benchmark** their respective performance measure improvement with that of other hospitals.

Time Period: Q1 2004

Compare your performance to the group



GWTG Workshops & Webinar



- collaborative learning sessions in which hospital teams exchange best practices and learn rapid cycle improvement strategies.^{8,9}
- **AHA/ASA** represents neutral ground and a safe place for healthcare professionals, representing competitive agencies, in pursuit of improved patient care, to **share successes & best practices** around performance measures.

Implementation Steps



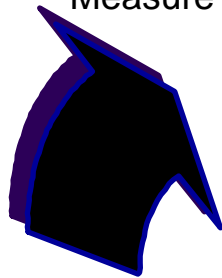
1. Review guidelines and treatment systems
2. Designate a champion from your hospital
3. Recruit your care team for implementation
4. Enter your baseline data into the Patient Management Tool (*this requires entering data from 30 consecutive patients.*)
5. Institute care paths, standing orders and discharge protocols that are consistent with the ASA/AHA guidelines
6. Utilize the Patient Management Tool to record and improve patient care.

Find and Support a Champion



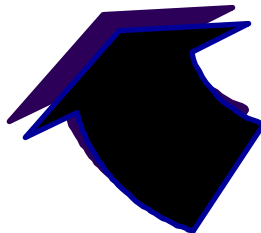
Assess Stroke Treatment Rates

Measure current treatment rates and process-of-care indicators



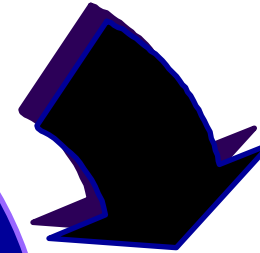
Implement Refined Protocols

Hospital team coordinates implementation of refined protocols



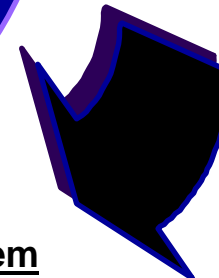
Refine Protocols – Blameless System

Hospital team identifies areas for improvement



Evaluate Assessment

Hospital team reviews summary reports and current protocols



- Studies of each of the GWTG modules have suggested that this **collaborative approach** and **internet tool** extend the significant improvement seen in the previously reported CHAMP program.¹³
- And, at a rapid pace in a variety of hospital settings, and to multiple hospitals simultaneously.

- Participation in GWTG has been associated with statistically significant and clinically relevant improvements in the use of key evidence-based medications
 - including aspirin, beta-blocker, angiotensin converting enzyme inhibitor (ACE)/angiotensin receptor antagonist, and statin use
- in all 3 modules

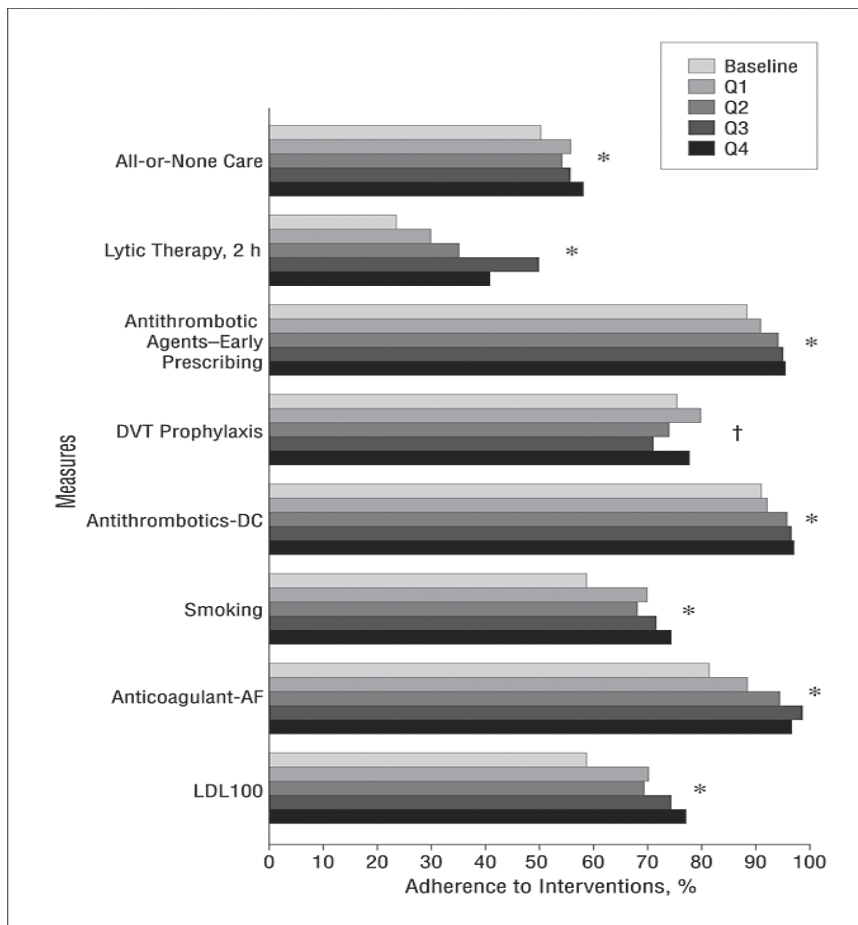
GWTG Stroke Program Initial Results

- Analysis includes first 99 GWTG-Stroke hospitals
- 18,410 Stroke/TIA patients
- Hospitalizations from April 2003 – March 2004
- Baseline data collection (30 charts) done prior to the initiation of the QI intervention.
- Geographic regions include: Georgia, Ohio, Massachusetts, Michigan, Florida, Arizona, northern California, and southeastern Pennsylvania.

GWTG Stroke Program Initial Results

Intervention	Baseline %	Q4 %	Baseline to Q4 Change
All or none care	50.2	58	7.8
Rt-PA, within 2 hrs.	23.5	40.8	17.3
Rt-PA contraindication. doc	64.0	86.2	22.2
Rt-PA complications	9.3	3.4	-5.9
Antithrombotics early	88.2	95.2	7.0
DVT prophylaxis	75.4	77.5	2.1
Antithrombotics at DC	91.0	96.9	5.9
Smoking cessation counsel	38.8	54.5	15.7
Anticoagulation for Afib	81.4	96.1	15.1
RX for LDL >100	58.7	77.0	18.3
LDL measured	43.2	58.1	14.9
Lipid Rx	29.7	51.1	21.4
Weight management	33.7	43.4	9.7
DM management	63.9	83.5	19.6

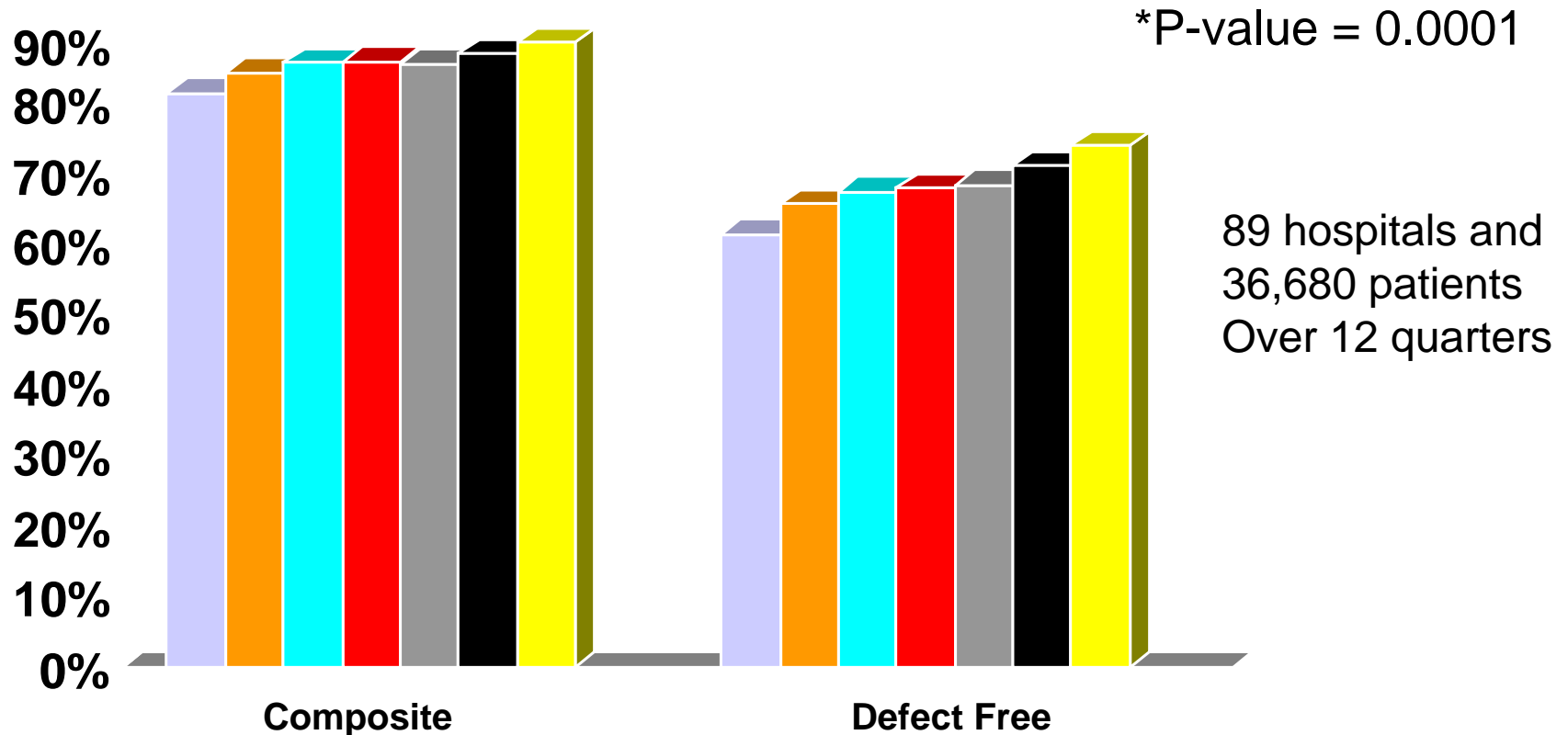
GWTG Stroke Program Initial Results



Statistically and clinically significant improvement in 11 of 13 measures for the treatment of 18,410 patients hospitalized with cerebrovascular disease were seen in 99 participating hospitals in the GWTG-Stroke program.

*p<0.0001

Improvements in Stroke Care Quality over 12 Quarters with the GWTG-Stroke Program



GWTG Stroke Works!

- Significant level of improvement in 11 of 13 quality measures analyzed in first 4 quarters.
- Improvement in composite and defect free performance measures
- Sustained quality improvements over more than 3 years
- Now close to 1000 hospitals participating & over 500,000 patients entered into the PMT

- Improvements in care have been observed in:
 - both men and women,
 - older and younger patients, and
 - in all major categories of race/ethnicity.⁸
- Analyses of GWTG data have shown similar improvements among participating hospitals which are:
 - large and small,
 - teaching and non-teaching, and
 - in all regions of the country.

- It is important to note that GWTG hospitals were self-selected and may represent hospitals that are more committed to quality improvement.
- There is an improvement associated with other quality improvement efforts in cardiovascular medicine

- GWTG have demonstrated greater adherence to national guideline-recommended therapies compared to other US hospitals publicly reporting data simultaneously.
- Hospital teams are facing an ever increasing array of data which they need to collect and report
 - duplicate entry must be addressed.

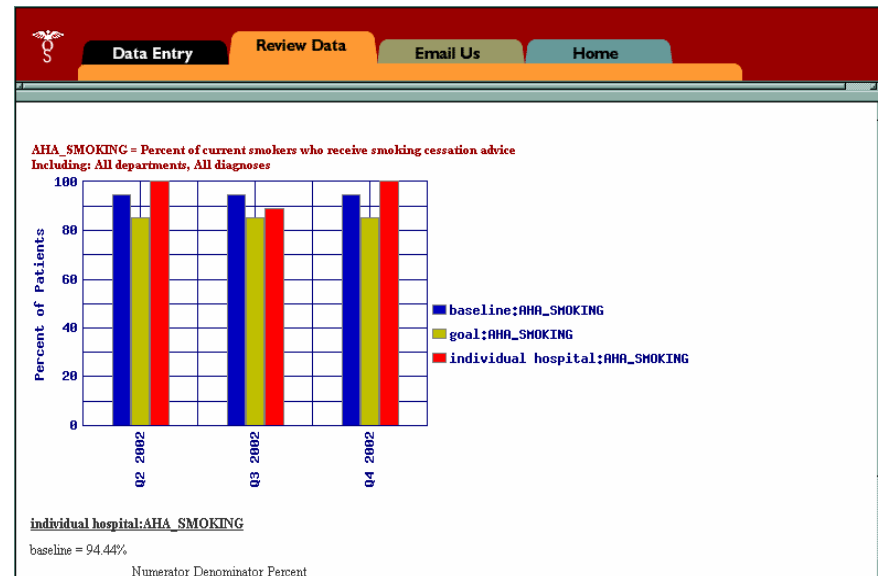
Important Note



- Hospitals volunteer to participate in GWTG
- GWTG is a relatively low-cost program
- Commitment to quality improvement and a culture of excellence in patient care
- Recognition

Share the Success with Your Colleagues

Post the reports illustrating your success at nursing stations, conference rooms and coffee rooms or insert a write-up in your hospital's newsletter



- A hospital seeking approval of Participating GWTG Hospital level of recognition must meet:
 1. Identification of a champion within a hospital
 2. Identification of a hospital GWTG team
 3. Development of new or revision of existing standing orders and/or protocols in accordance with the GWTG Performance Measures
 4. Submission of baseline data via Outcome Sciences from at least 30 consecutive patients
 5. Submission of a signed check-list indicating implementation of above and that prospective data collection is ongoing

Recognition



- Bronze
 - 3 consecutive months >85% compliance on performance measures
- Silver
 - 12 consecutive months > 85% compliance on performance measures
- Gold
 - 24 consecutive months > 85% compliance

Recognition (examples)



- Internal recognition
- Press releases
- Scientific Sessions
- International Stroke Conference
- U.S. News & World Report Annual

American Stroke Association GWTG-Stroke Program



Performance indicator	Baseline	GWTG
IV tPA in patients who arrived <2 hr after symptom onset*	23.5%	63.3%
IV tPA in patients who arrived <3 hr after symptom onset	-	51.5%
Documentation of ineligibility (why no tPA)	64.0%	93.0%
Rate of symptomatic brain hemorrhage after tPA	9.3%	4.4%
Antithrombotics <48 hr after admission *	88.2%	95.3%
DVT prophylaxis by second hospital day *	75.4%	83.1%
Antithrombotics at discharge*	91.0%	97.6%
Anticoagulation for atrial fibrillation at discharge*	81.4%	97.6%
Therapy at discharge if LDL >100 mg/dL or on therapy at admit*	58.7%	81.6%
Counseling for smoking cessation*	38.8%	83.8%
Lifestyle changes recommended for BMI > 25 kg/m ²	33.7%	42.3%
Composite quality of care measure**	81.5%	90.1%

American Heart Association GWTG-HF Program



Performance indicator	Baseline	GWTG
Complete set of discharge instructions*	69.6%	79.4%
Measure of LV function *	90.6%	94.2%
ACE or ARB at discharge for patients with LVSD, no contraindications*	83.3%	85.9%
Smoking cessation counseling, current smokers*	74.3%	91.4%
Beta blockers at discharge for patients with LVSD, no contraindications*	86.5%	89.4%
Anticoagulation for atrial fibrillation or atrial flutter, no contraindications	61.3%	67.3%

Performance indicator	Baseline	GWTG
Aspirin at admission	76.4%	94.7%
Aspirin at discharge *	89.9%	94.1%
Beta blocker at discharge *	75.0%	92.5%
ACE inhibitor at discharge for AMI patients *	64.5%	72.8%
ACE inhibitor in LVSD patients	74.3%	80.3%
Lipid therapy at discharge	58.5%	84.6%
Lipid therapy at discharge if LDL >100 mg/dL *	60.4%	88.9%
Blood pressure control (to <140/90) at discharge	65.9%	53.8%
Smoking cessation counseling *	58.7%	94.1%
Referral to cardiac rehabilitation	59.0%	72.9%
Composite quality of care measure**	77.0%	89.1%

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Cardiovascular Education

Carondelet St. Mary's Hospital

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