

UPDATE IN STROKE: Southeastern Strokebelt Consortium Meeting

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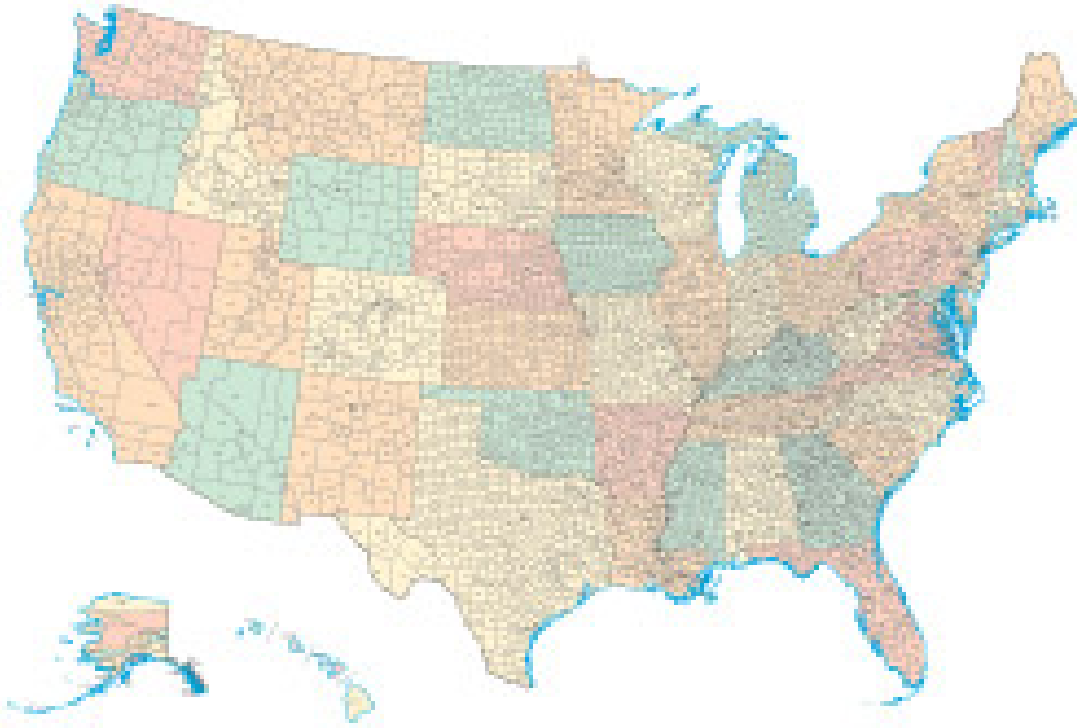
Berbecker Distinguished Professor of Rural Medicine

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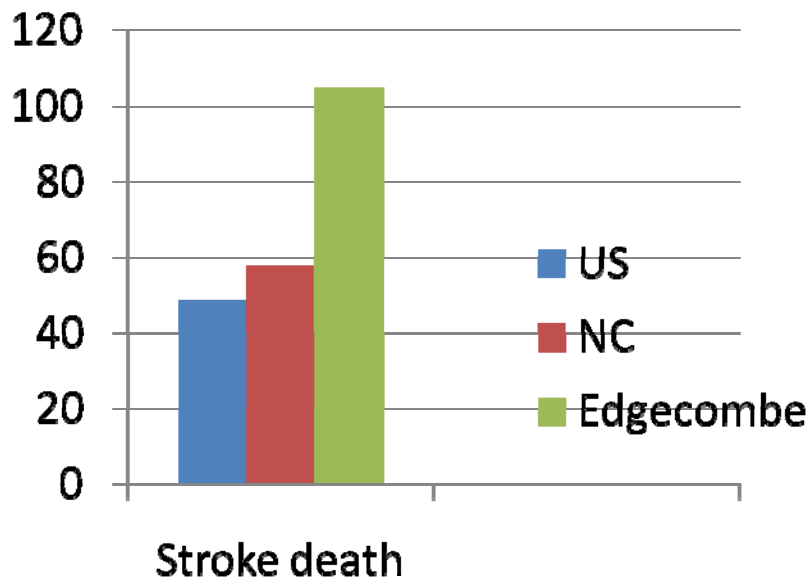
East Carolina University, Brody School of Medicine &
Eastern AHEC



Stroke Mortality Rates



Which United States
County has the highest
Stroke Mortality rate??



Racial Disparity in Stroke Mortality Worse in Southeastern US

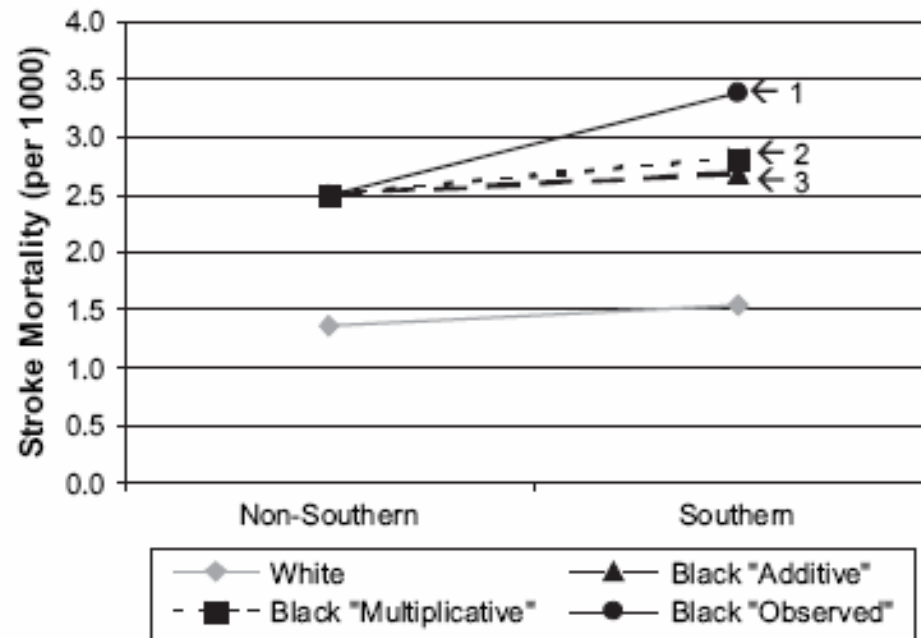


FIGURE 3. Observed stroke mortality for white men 65 to 74 years of age (gray). Observed (1, solid black line) and expected (2 and 3) mortality rates are shown for black men aged 65 to 74. Expected rates are shown if the pattern was similar to the pattern for whites on a multiplicative or relative scale (2: square and short dashed line) or on an additive scale (3: triangle and long dashed line).

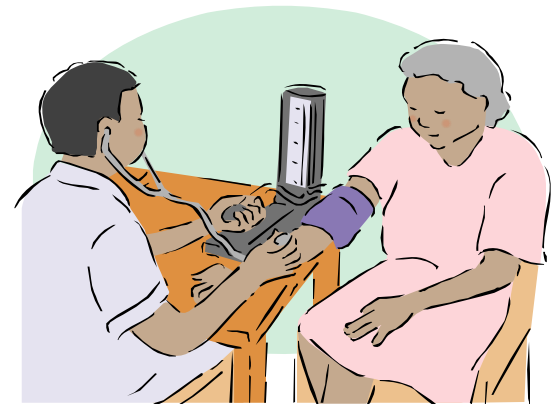
Seeking Care for Stroke Symptoms: Message Still not “Out There”



- Evaluated care-seeking behavior for 3,668 people reporting stroke, TIA, or symptoms in REGARDS study, 2003 -7
- Only approximately **HALF** (49%) of people w/o previous symptoms sought medical care
- Seeking care not different by age, race, sex
- Higher income (> \$75K) folks were 40% more likely to seek care while those with heart disease or diabetes mellitus were 20% more likely

Risk Factors Remain Important

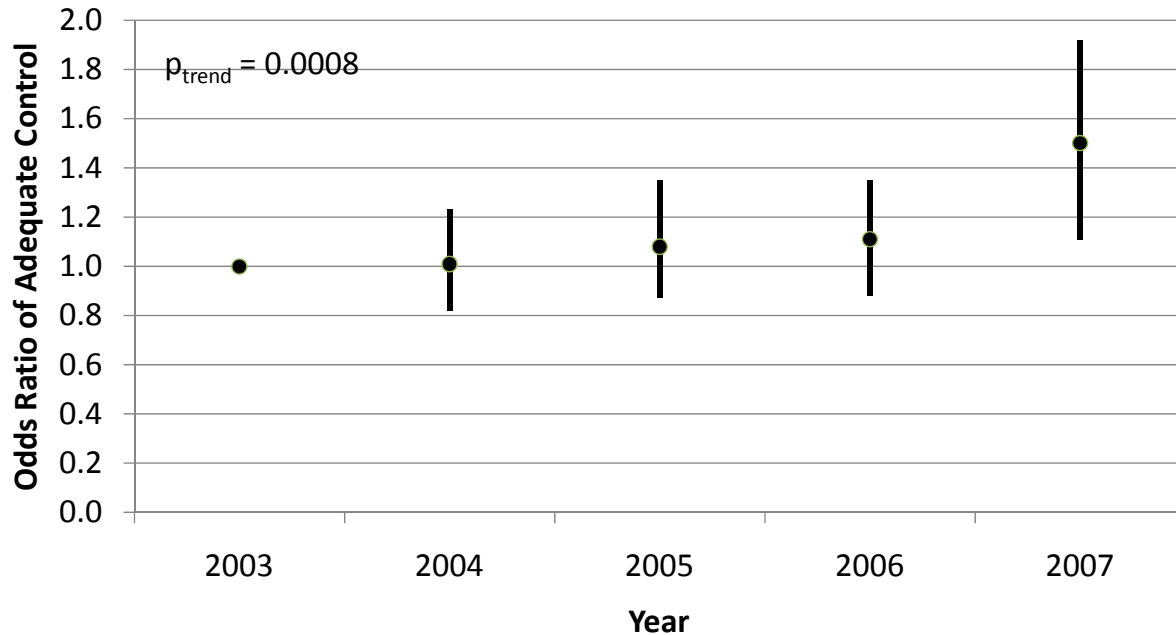
- In REGARDS study of 14,566 subjects, stroke symptoms and cognitive impairment were studied.
- Odds ratio of experiencing a stroke symptom and having cognitive impairment increased **35% for EACH** of 5 modifiable risk factors:
 - Hypertension
 - Diabetes
 - Smoking
 - Lack of exercise
 - Depression



Making Progress – BP Control in DM

Odds of Hypertension Control among Hypertensive Diabetic Participants

(Odds ratio and 95% confidence intervals; n = 4,054; 2003 reference year)



Adjusted for race, sex, age, region, BMI, weekly exercise income, education, insurance availability, adherence to treatment, smoking, total cholesterol, and high-density cholesterol

Designation as Stroke Center Makes a Difference, New York data

Table 3 Performance of designated vs nondesignated centers by measurement period

Time intervals, min	Baseline							Remeasurement							
	Designated*			Nondesignated				p	Designated*			Non-designated			
	n	Median	Range	n	Median	Range	n		Median	Range	n	Median	Range	p	
Door to MD assessment	193	25.0	(0-321)	205	21.0	(0-348)	0.94	278	10.0	(0-1,460)	146	25.0	(0-371)	<0.001	
Door to CT performed, potential t-PA candidates	80	49.0	(2-266)	88	92.0	(11-519)	0.02	156	30.5	(3-775)	41	40.0	(5-853)	0.25	
Door to t-PA administration	12	115.0	(67-180)	6	105.5	(45-275)	0.85	32	95.0	(40-165)	6	115.0	(97-140)	0.047	

To be a primary stroke center does NOT require a neurologist – an ER physician or primary care physician with the training and experience will suffice. Bottom line: **Being a center seems to improve the quality of stroke care.**



JCAHO Accreditation For Primary Stroke Center, Updated 10/08



- new data abstraction definitions/guidelines, that take effect on 01/01/09
- http://www.jointcommission.org/CertificationPrograms/PrimaryStrokeCenters/stroke_pm_edition_2_ver_2a.htm.

Brief update on ICD/CPT coding

- “Critical care evaluation” coding now allowable for stroke evaluation (↑ reimbursed)
- Initial evaluation includes telemetry, MRI or CT to r/o bleeding
- New codes for “remote” telemedicine evaluation
- New “V” codes for “drip & ship” for tPA in last 24 hrs



Transport of Stroke Victims

- 3 hour window for evaluation and treatment
- Policy development
- Hospital capacity 24/7?
- What if ER is full?
- What if CT scanner is down?

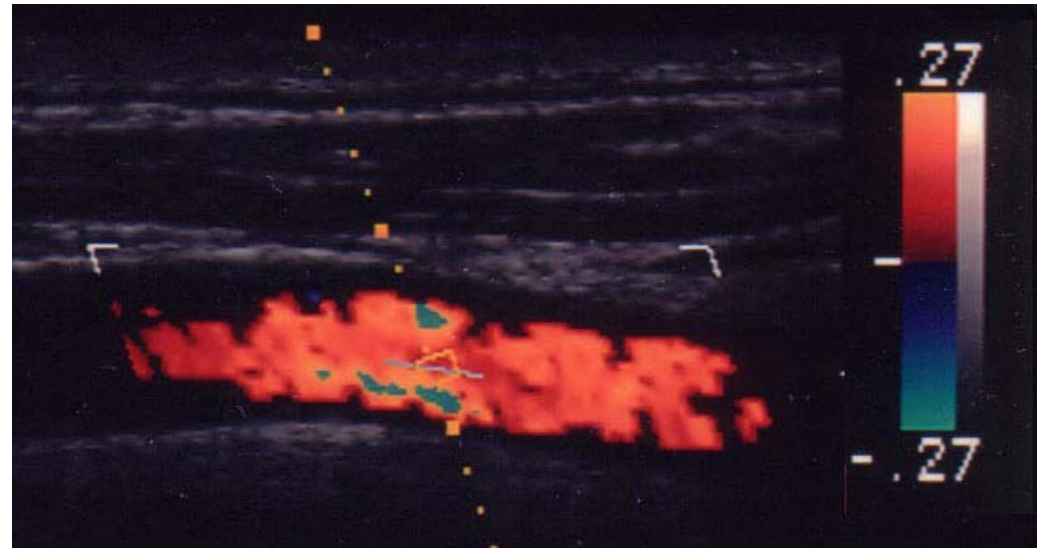




- See www.hearthealthystrokefree.org
- 7th national forum for heart disease & stroke prevention planned
- March 19th & 20th at George Washington University, Washington, DC
- www.7thNationalForum.com



Community-based Prevention and Risk Assessment: role of Doppler



Telemedicine Stroke Care



- Not enough neurologists
- MUSC – fixed connection to 6 hosp; have given tPA to 146 pts w/ defined protocol; good results
- University of Louisville uses robot to go to pt. room.
- Drip/keep vs. drip & ship?

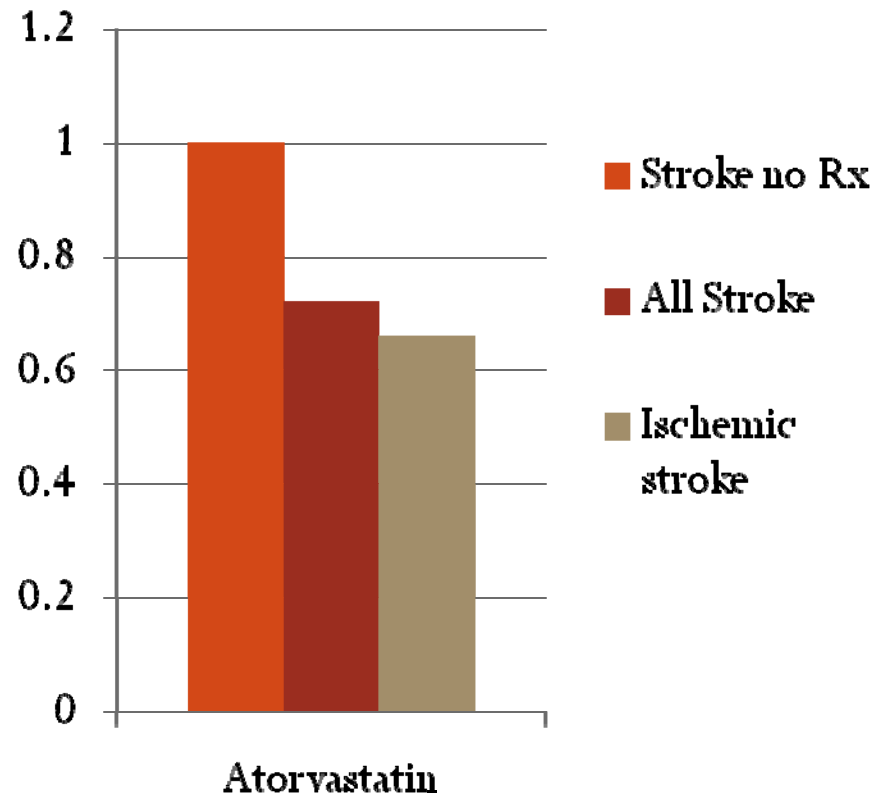
Anti-Thrombotic Therapy for Secondary Stroke Prevention

- Existing data suggests that ASA/Dipyridamole may be preferable over ASA after 1st event
- No benefit of adding Plavix to ASA
- No difference between Plavix and Aggrenox
- Instrument to measure ASA resistance at the pt of care; resistance has worse outcomes; no evidence yet that correcting resistance makes a difference
- New agents coming that may replace Coumadin



Lipid-lowering Therapy for Stroke Prevention

- Effective for 2^o prevention of ischemic stroke w/ previous stroke/TIA
- Those on high dose with largest reductions in LDL cholesterol had biggest response.



Invasive Therapies

- ICH – risk of herniation
- Removal of brain flap to allow brain expansion
- Endarterectomy – reserve for symptomatic pts with extensive carotid narrowing
- Carotid stenting being advocated. Little data yet.



Gabriel David Cummings

