American Heart Association/American Stroke Association
Latest Quality Research


- There is growing interest in reporting outcomes for Medicare beneficiaries hospitalized with acute ischemic stroke. Risk adjustment is critical for accurately assessing and reporting clinical outcomes.

- Stroke severity on admission is a powerful determinate of functional outcomes in acute ischemic stroke. The NIHSS scale, which is a validated tool for assessing the initial stroke severity, has been shown to predict mortality in acute ischemic stroke in several prior studies. However, these studies have generally been confined to small number of patients from single centers, select patients enrolled in randomized clinical trials, studies outside the US, or limited to evaluating in-hospital mortality.

- In assessing the relationship of the NIHSS to 30-day mortality after acute ischemic stroke among 33,102 GWTG-Stroke Medicare beneficiaries, this study finds that NIHSS is a very strong discriminator of mortality risk. There is a graded near linear relationship between first recorded NIHSS and higher 30-day mortality risk.

- This study also demonstrates that with categorization of NIHSS into 3 or 4 groups, acute ischemic stroke patients can be readily identified as being at low, medium, or high risk for 30-day mortality, even in the absence of any other demographic or clinical variables. NIHSS as a continuous variable or in categories resulted in far better discrimination of 30-day mortality risk then a clinical model not including stroke severity.

Key Points:

These findings highlight the importance of a valid specific measure of stroke severity as a determinate of mortality after acute ischemic stroke for Medicare beneficiaries. Further this study suggests that it may be vital for optimal discrimination to include stroke severity for risk stratification and risk adjustment in acute ischemic stroke.

News release
http://newsroom.heart.org/pr/aha_/prv-american-heart-association-launches-229260.aspx

JAHA article
http://jaha.ahajournals.org/content/1/1/42.full

Slides
http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/@gwtg/documents/downloadable/ucm_436974.pdf

Gregg C. Fonarow, MD, FACC, FAHA
Dr. Gregg C Fonarow is the Eliot Corday Professor of Cardiovascular Medicine and Science at UCLA. He serves as Director of the Ahmanson-UCLA Cardiomyopathy Center, Co-director of UCLA's Preventative Cardiology Program, and Co-Chief, UCLA Division of Cardiology. He attained the rank of Professor of Medicine, Geffen School of Medicine at UCLA in 2003. His research interests center on acute and chronic heart failure, acute coronary syndromes, preventative cardiology, stroke, quality of care, outcomes, and implementing systems to improve clinical outcome. Dr. Fonarow has published over 400 research studies and clinical trials in heart failure, disease management, acute coronary syndromes, preventative cardiology, stroke, and quality of care and outcomes research in leading journals like New England Journal of Medicine, Lancet, JAMA, and Circulation. New therapies and management strategies for heart failure and research into the pathophysiology of this disease are conducted at UCLA under his direction. He has also developed and successfully implemented a comprehensive atherosclerosis treatment program at the Ronald Reagan UCLA Medical Center (Cardiovascular Hospitalization Atherosclerosis Management Program: CHAMP) which served as the model for the American Heart Association's Get with the Guidelines program. Dr. Fonarow is immediate past chair of the steering committee for the AHA’s Get With The Guidelines Program. He is co-chair of IMPROVE-HF and chair of the steering committee for the ACC ACTION Registry-GWTG Program. He is on the steering committee and serves as an investigator for a number of ongoing randomized clinical trials. He serves as a reviewer and on the editorial boards of a number of cardiovascular journals. Dr. Fonarow received the outstanding UCLA Cardiology Faculty Teaching Award in 1997 and was honored by the American College of Cardiology with the W. Proctor Harvey Young Teacher Award in 1998. He received an AHA Award of Meritorious Achievement in 2004. He received the Raymond D. Barr Award of Excellence in 2009. He was awarded the Eliot Corday Chair in Cardiovascular Medicine and Science in 2003.

Are you a healthcare provider who needs more information about the NIH Stroke Scale (NIHSS)? The American Heart Association/American Stroke Association Professional Education Center is now offering a computer and mobile version of the NIHSS. This is a CME/CE certified program for healthcare professionals on how to administer the NIHSS, a critical component of acute stroke assessment. Please click the link: http://learn.heart.org/ihtml/application/student/interface.heart2/nihss.html