



## The Society for Cardiovascular Angiography and Interventions

### SCAI President's Page

## American Healthcare's Dirty Little Secret

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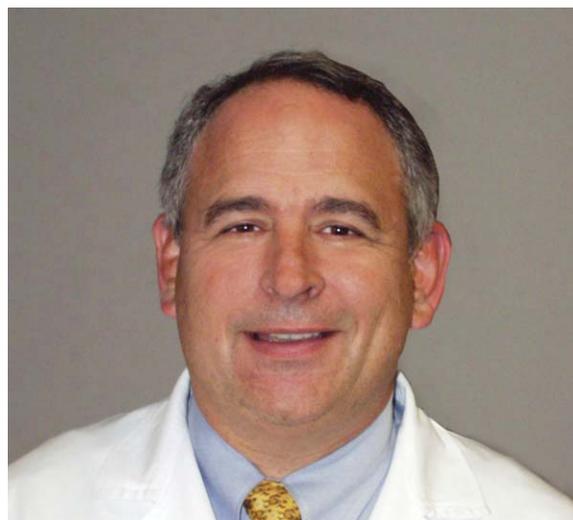
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The “dirty little secret” of American healthcare is that fewer than 2% of acute stroke patients in the United States receive any form of reperfusion therapy and, sadly, little is being done to remedy this problem [1]. Acute ischemic stroke is a leading cause of death and disability, and it will impact three-quarters of a million Americans this year alone [2,3]. The therapeutic goal for acute stroke therapy, as with acute myocardial infarction (AMI), is early reperfusion (intravenous thrombolysis or catheter-based reperfusion) to minimize end-organ damage.

The national quality mandate for 90-minute door-to-balloon (D2B) time has revolutionized AMI care, and public reporting of results allows patients to compare hospitals' treatment outcomes for AMI on Medicare's website. Cardiologists can and should be very proud of having met this challenge to improve patient care. Over the past several years, I've seen roadside billboards touting hospitals' acute stroke treatment programs, while physicians in the community know it is very unlikely that a stroke patient will actually receive reperfusion therapy. Where can patients go to see the comparative performance and outcomes for their local hospitals with regard to stroke therapy?

Frustratingly, even among the select centers participating in the Get With The Guidelines-Stroke (GWTG-Stroke) registry, fewer than one-third meet the goal of “door to needle time” of  $\leq 60$  minutes [4]. Despite the fact that acute stroke patients may present



too late ( $> 3$  hrs - 4.5 hrs) or are poor candidates for IV thrombolysis, many could still receive “on-demand” catheter-based reperfusion therapy IF an interventional stroke team were available [5–7]. Compared to the widely available access for AMI reperfusion therapies, few hospitals offer “on-demand” catheter-based stroke therapy.

A significant barrier to conventional on-demand stroke reperfusion treatment is a shortage of interventional neuroradiologists [8]. The need for more stroke interventionalists relates to on-call coverage. An average hospital's demand for elective neuroradiology procedures may be easily met with a single neuroradiologist, but that single individual cannot be on call every night for stroke coverage. This reality largely explains the difference between availability of early

DOI 10.1002/ccd.23442

Published online in Wiley Online Library (wileyonlinelibrary.com).

catheter-based reperfusion therapy for AMI and the lack of on-demand catheter-based reperfusion therapy for stroke patients who are poor candidates for IV t-PA.

But this is not a necessary reality. There is a solution that would enable acute stroke patients to access timely catheter-based reperfusion therapy: The pool of stroke interventionalists can be expanded by recruiting carotid artery stent (CAS)-capable physicians (i.e. cardiologists, radiologists, vascular surgeons, and neurosurgeons) to join stroke teams [7,9,10]. These CAS-capable physicians are competent to safely gain catheter access to the cervical vessels, and they are familiar with cerebrovascular anatomy, as they routinely perform cerebral angiography. CAS interventionalists perform rescue procedures for embolic complications, a former fruste of stroke intervention. CAS-capable interventionalists can effectively expand the stroke on-call coverage by spreading it across a larger number of qualified providers.

Stroke patients should not be held hostage by neuro-radiologists who, depending on their availability, are unable to provide on-demand stroke intervention but who repeatedly raise the specter of poor outcomes if non-traditional providers treat stroke patients. Instead, CAS-capable interventionalists, neurointerventionalists and neurologists should be working together to build stroke teams [11]. There are multiple examples of non-traditional stroke interventionalists providing desperately needed on-demand stroke therapy [6,7,9,10].

The time has come to create a patient-centered national quality mandate to improve access for on-demand stroke reperfusion therapy. CAS-capable interventionalists should be invited to join multispecialty stroke teams, thereby enlarging the provider pool to improve access for on-demand stroke reperfusion therapy. In 2011, no one questions the mantra "time is brain." The question is whether physicians from multiple specialties can come together, putting

our patients' interest first, to make on-demand stroke therapy a reality.

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