

**POSTER ABSTRACTS**  
**8th Annual HMO Research Network Conference**  
**April 9-10, 2002 Long Beach, CA**

**Cost Effectiveness**  
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**Cost-effectiveness of echocardiographic imaging strategies among  
ischemic stroke patients**

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**Background:** Stroke is the third leading cause of death in the U.S., and its economic burden is substantial-\$51.3 billion in 1999. However, considerable controversy exists over the appropriate use of imaging procedures to target stroke treatments such as anticoagulant therapy to those most likely to benefit. This study evaluates the cost-effectiveness of imaging strategies for evaluating and managing new stroke patients, specifically transthoracic echocardiography (TTE) and transesophageal echocardiography (TEE) used to identify a cardiac stroke source.

**Methods:** Decision-analytic semi-Markov model in DATA 4.0 using input parameters obtained from an associated evidence review of the effectiveness of echocardiographic testing in lowering the risk of recurrent stroke through appropriate targeting of anticoagulant therapy. Nine different selective and sequential testing strategies were evaluated.

**Results:** Only the strategy of using TEE to test stroke patients with a history of cardiac disease was undominated, but even it still appears cost-ineffective (\$122,000/QALY relative to standard treatment). Results were sensitive to level of treatment benefit and prevalence of thrombus among cardiac patients, but remained relatively cost-ineffective in virtually all cases.

**Conclusions:** Cost-effectiveness cannot be currently used as a justification for widespread use of TEE. Future research should verify the true benefits of anticoagulation among stroke patients with an identified thrombus as well as the potential benefits of testing and treatment for other cardiac abnormalities.