

QUALITY OF CARE AND OUTCOMES ASSESSMENT

COST-EFFECTIVE PRIMARY PREVENTION OF CORONARY HEART DISEASE IN INTERMEDIATE RISK PATIENTS: UNIVERSAL ASPIRIN AND STATINS IS SUPERIOR TO PREVENTION GUIDED BY STRESS TESTING

ACC Poster Contributions Georgia World Congress Center, Hall B5 Sunday, March 14, 2010, 3:30 p.m.-4:30 p.m.

Session Title: Economic Outcomes Abstract Category: Outcomes Assessment Presentation Number: 1082-156

Authors: <u>Benjamin Z. Galper</u>, Andrew Moran, Mark J. Pletcher, Pamela Coxson, Lawrwence Lazar, Y. Claire Wang, Paul Heidenreich, Lee Goldman, Columbia University Medical Center, New York City, NY, University of California San Francisco Medical Center, San Francisco, CA

Background: It is unclear if stress testing followed by targeted aspirin and statin therapy in intermediate risk persons is more cost-effective than no-test strategies.

Methods: Stress test results were incorporated into The CHD Policy Model by assuming higher CHD risk in test+ persons. Stress ECG with nuclear stress was assigned sensitivity 88%, specificity 70% and stress ECG alone sensitivity 68%, specificity 77% for identifying high risk persons. Testing all intermediate risk persons with intensification of statin and aspirin treatment in test+ persons was compared with current aspirin and statin use (base case) and to treatment of all intermediate risk persons. Twenty year costs, CHD events, and quality-adjusted life years (QALYs) were projected.

Results: Treatment targeted by stress ECG was more effective and less expensive than base case, but treatment of all patients without testing was the most effective strategy and relatively affordable (incremental cost-effectiveness ratio \$16,700/QALY vs. stress ECG with 100% medication adherence.) Sensitivity analysis with varied adherence (Figure) found nuclear stress testing to be more effective only if testing + led to increased medication adherence (>80% vs. 40% in no-test treat all strategies).

Conclusions: Unless testing itself substantially boosts medication adherence, treating all intermediate risk persons with generic statins and aspirin is more cost-effective than targeting treatment to intermediate risk persons with + stress tests.

