Are Quality Improvements Associated with the AHA Get With The Guidelines-Coronary Artery Disease (GWTG-CAD) Program Sustainable Over Time? A Longitudinal Comparison of GWTG-CAD Hospitals vs. non-GWTG-CAD Hospitals

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Background: Get With The Guidelines-Coronary Artery Disease (GWTG-CAD) is a national initiative of the AHA to improve guideline adherence for patients hospitalized with CAD. We assessed the sustainability of quality improvement over 3 consecutive 12-month periods and performed a head-to-head comparison of adherence measures by GWTG-CAD hospitals vs. non-GWTG-CAD hospitals in each concurrent time frame. Methods: We used the Centers for Medicare and Medicaid Hospital Compare database to examine six heart attack adherence measures (aspirin and beta blocker on arrival/discharge, ACE inhibitor or ARB for left ventricular systolic dysfunction (LVSD), and smoking cessation counseling). The differences in performance between the GWTG-CAD hospitals and non-GWTG-CAD hospitals were evaluated for each 12-month period. A mixed effects model adjusting for hospital size, ownership, location, region and teaching status was fitted to explore the differences in site performance (GWTG vs. non-GWTG) over time. Results: Data from 2878 hospitals (440 GWTG and 2438 non-GWTG) were collected from Q4.2004 through Q3.2007. GWTG-CAD hospitals showed higher guideline adherence (%) in 5 of 6 six measures as compared with non-GWTG-CAD sites. The observed differences were sustainable over each of the 3 consecutive 12-month periods. Except for ACEI/ARB for LVSD and smoking cessation counseling, the adjusted differences were statistically significant after adjusting for potential confounders. Conclusions: GWTG-CAD hospitals demonstrated superior performance against non-GWTG-CAD hospitals for most measures. Higher guideline adherence seen in GWTG-CAD hospitals was generally sustained over time and independent of baseline hospital characteristics.

<table>
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<th>Performance Measures</th>
<th>Time*</th>
<th>Adherence GWTG Hospitals (N=440)</th>
<th>Adherence non-GWTG Hospitals (N=2438)</th>
<th>Observed Difference between GWTG and non-GWTG Hospitals</th>
<th>Adjusted Difference between GWTG and non-GWTG Hospitals</th>
<th>p value (adjusted)</th>
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*Time refers to consecutive 12-month periods.*
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Disclosure Block:

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