Relationship of Race/Ethnicity With Door-to-Balloon Time and Mortality in Patients Undergoing Primary Percutaneous Coronary Intervention for ST-Elevation Myocardial Infarction: Findings From Get With the Guidelines—Coronary Artery Disease. Matthew A. Cavender, MD, MPH; Andrew N. Rassi, MD; Gregg C. Fonarow, MD; Christopher P. Cannon, MD; W. Frank Peacock, MD; Warren K. Laskey, MD, MPH; Adrian F. Hernandez, MD; Eric D. Peterson, MD, MPH; Margueritte Cox, MS; Marie Grau-Sepulveda, MD; Lee H. Schwamm, MD; Deepak L. Bhatt, MD, MPH. Clinical Cardiology. DOI:10.1002/clc.22213

Key Points:

Previous studies have found that African-Americans and patients of Hispanic ethnicity have significantly higher door-to-balloon time and mortality from acute myocardial infarction. The authors sought to determine if previously described disparities in door to balloon time and mortality from acute myocardial infarction have improved after there has been increased focus on door-to-balloon time and other quality improvement measures.

Key Points:

- White patients were older and less likely to be uninsured or insured with Medicaid. African-Americans were more likely to have had a prior myocardial infarction, chronic kidney disease, heart failure, hypertension, CVA/TIA, and to smoke.

- There were no differences in the median door-to-balloon time between groups: Whites (74 minutes), African-Americans (77 minutes) and Hispanics (75 minutes, p=0.13)

- After adjusting for confounders, African American race was associated with lower odds of DTB ≤ 90 min (OR, 0.84; 95% CI, 0.70, 0.99; p=0.04). This association was seen in African American males (OR 0.66; 95% CI 0.55, 0.80) but not African American females (OR 1.27; 95% CI 0.96, 1.68).

- Hispanic ethnicity was not associated with a difference in DTB ≤ 90 min (OR 0.98, 95% CI 0.77, 1.25; p=0.88); although Hispanics males did have a slightly longer median DTB compared with Whites.

- The proportion of patients with DTB ≤ 90 min increased for all groups, and mortality was similar between groups (White 3.8%, African-American 3.0%, Hispanic 4.1%, p=0.62).

Thus, small differences in DTB times were present in different races/ethnicities between 2006-2009. However, the proportion of patients achieving DTB time ≤90 minutes has increased substantially for all patients over time and there is no association between race/ethnicity and in-hospital mortality.

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