Top Ten Things To Know
Quality Outcomes of Hospital Angioplasty Volume in STEMI

1. Previous research has shown an inverse relationship between hospital primary angioplasty volume and mortality in STEMI patients.

2. Hospital participation in quality improvement programs may influence the association between the number of angioplasties performed in 1 year and patient outcomes.

3. The purpose of this study was to assess the relationship between hospital primary angioplasty volume and outcomes and quality of care measures in patients presenting with STEMI using data from the GWTG-CAD national database.

4. Data were collected from the GWTG-CAD database to analyze 29,513 patients presenting with STEMI and undergoing primary angioplasties between July 2001 and December 2007 at 166 angioplasty-capable hospitals. Hospitals were divided into 3 segments based on their annual primary angioplasty volume (<36 procedures per year, 36-70 procedures per year and >70 procedures per year).

5. Compared with low- and medium-volume centers, high-volume centers had a higher median DTB time (98 vs. 90 vs. 88 minutes, p <.001).

6. The proportion of patients meeting the ACC/AHA guidelines of DTB time of 90 minutes or less was highest in the high volume centers (44% vs. 50% vs. 53%, p<.001).

7. There was no difference in length of stay or adjusted in hospital mortality between low, medium and high volume primary angioplasty hospitals.

8. High volume centers were more likely than low volume centers to follow evidence based guidelines at discharge.

9. Medium volume hospitals performed as well as high volume hospitals for all quality care measures assessed.

10. The GWTG-CAD registry of STEMI patients indicates that compared with lower volume centers, high volume primary angioplasty hospitals were associated with shorter DTB times and greater use of evidence based therapies.