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## QUALITY OF CARE AND OUTCOMES ASSESSMENT

## DO CRITICAL ACCESS HOSPITALS DELIVER POOR-QUALITY CARDIAC CARE?

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Monday, April 04, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Clinical and Financial Implications of Complications

Abstract Category: 44. Quality of Care

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Improving patient outcomes for common cardiovascular diseases such as acute myocardial infarction (AMI) and heart failure (HF) is a critically important clinical and policy goal. One key part of any improvement strategy is to understand why some hospitals perform well while others struggle. Critical Access Hospitals (CAH) are a particularly vulnerable group. Located in rural areas more than 35 miles from the nearest hospital, they serve a population with few alternatives for hospital care. Despite broad agreement that CAHs play a critical role in the nation's safety net, we know little about the quality of care they provide or the outcomes their patients achieve. We examined how CAHs performed on measures of process quality and patient outcomes for Medicare patients with AMI and HF in 2006-7. We found that CAHs cared for patients that were older, more often white, and more often had diabetes, but less often had chronic kidney disease and hypertension. CAHs were less likely to provide advanced cardiac services. CAHs had significantly lower quality of care for HF and much higher readmission and mortality rates for AMI and HF than non-CAHs. Adjusting for hospital characteristics such as cardiac services, rural location, region, and teaching status did not significantly alter our results. Current efforts to help CAHs appear inadequate; given the barriers they face, partnership with larger hospitals, telemedicine, or incentives to develop cardiac expertise may be needed to improve outcomes at these institutions.

	Non-Critical Access Hospitals (n=3470)	Critical Access Hospitals (n=1268)	P value
<b>Patient Characteristics</b>			
Age (mean)	80 years	82 years	<0.001
Non-white race	15.8%	6.1%	<0.001
Chronic kidney disease	30.6%	18.6%	<0.001
Diabetes	32.9%	35.5%	<0.001
Hypertension	58.3%	49.4%	<0.001
<b>Hospital Characteristics</b>			
Presence of a cardiac intensive care unit	37.5%	9.5%	<0.001
Ability to perform percutaneous coronary intervention	47.7%	0.5%	<0.001
Ability to perform coronary artery bypass grafting	30.2%	0.3%	<0.001
<b>Acute Myocardial Infarction Quality and Outcomes</b>			
Hospital Quality Alliance myocardial infarction summary score	94.9	94.6	0.89
30-day readmission	22.5%	28.9%	<0.001
30-day mortality	16.5%	21.2%	<0.001
<b>Heart Failure Quality and Outcomes</b>			
Hospital Quality Alliance heart failure summary score	85.7	75.9	<0.001
30-day readmission	25.8%	30.7%	<0.001
30-day mortality	10.5%	12.5%	<0.001