

POSTER ABSTRACTS

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Quality in Chronic Disease Care: Drug Adherence in CHF Patients

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Background: Use of angiotensin converting enzyme inhibitors and angiotensin receptor blockers (ACE) for patients with congestive heart failure (CHF) represents a measure of high quality care, which is well supported by the numerous clinical trials. The levels of use in everyday practice are less well known: specifically how often are patients receiving these drugs, how often are they adherent to the therapy, and what are the clinical implications of adherence. We addressed these questions in a large integrated delivery system population.

Methods: Using the health system's pharmacy databases, we determined the proportion of active members in the CHF disease registry who received any ACE prescription in baseline year (1999), and measured individual adherence in the study year (2000). We defined adherence as when the proportion of days covered (PDC) by the ACE drug ≥ 0.8 . We also evaluated patient characteristics associated with low adherence, and used the Anderson-Gill extension of the Cox proportional hazard model to examine the association between adherence and the number of emergency department (ED) visits.

Results: In baseline year, 68% of 21,393 subjects received at least one ACE drug; of this group, 74% of patients were adherent in the study year. These patients tended to be male (68%), above 65 years (69%; mean age 70.2, SD=12.0) and have Medicare insurance (67%); Factors significantly associated with ACE adherence in the bivariate analyses included the prescription drug copayment level and race (p -value < 0.05). In our multivariate analyses, non-adherent subjects had significantly more ED visits (hazard ratio=1.19; 95% CI: 1.14– 1.24) compared with adherent subjects.

Conclusions: The level of drug adherence among CHF patients receiving ACE drugs is suboptimal. Poor adherence is concerning given the strong trial evidence linking ACE use with improved outcomes in CHF patients, and this study's finding of a strong association in everyday practice between ACE adherence and ED visits. Further research is necessary to investigate the factors associated with drug treatment quality, and to assess impacts on other clinical and economic outcomes.