

the intervention or a second comparison group? Are outcomes really improved? One outcome is mortality, and a quick glance at the table suggests that in-hospital mortality is increasing with time. Logistic regression analysis is reported in the Results section, though no mention is made in the Methods of why or how this was done. No denominator for the number of heart failure patients in the practice is reported. Although the authors suggest that a reduced number of admissions resulted from the process, the use of angiotensin-converting enzyme inhibitors in the outpatient settings did not appear to change, as evidenced by its constant rate of use (or nonuse) among those admitted with heart failure. Additionally, data sets such as those used by insurance companies do not classify heart failure based on left ventricular ejection fraction measurement.<sup>2,3</sup> As written, the article serves as an excellent guide to implementing an excellent quality improvement intervention. The lack of a comparison group and the insufficient data available to examine rates of hospital admissions for heart failure prevent us from accepting the conclusions of reduced hospitalizations at this time. Even though the authors' assertions might ultimately prove to be valid, we would encourage more caution in the stating of conclusions.

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## References

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2. Aetna US Healthcare data. PCP cardiac performance report. 5/1/96-4/30/97 and 4/1/97-3/31/97. Pittsburgh: Aetna US Healthcare, 1997. (Report reflecting sampling of PCP patients evaluated for congestive heart failure and appropriate angiotensin-converting enzyme inhibitor therapy.)
3. Croft JB, Giles WH, Roegner RH, Anda RF, Casper ML, Livengood JR. Pharmacologic management of heart failure among older adults by office-based physicians in the United States. *J Fam Pract* 1997;44:382-90.

The above letter was referred to the authors of the article in question, who offer the following reply.

*To the Editor:* As discussed in the Study Design and Practice Guideline sections of the article, the guideline was introduced at the outset of the study period and revisited each month at our regularly scheduled continuing medical education meetings. Also, as mentioned, the physicians were apprised of their performance data at quarterly quality improvement meetings; therefore, the intervention indeed occurred throughout the study period. As mentioned in the Conclusions section of the article, we believed this was paramount to our success.

We did not measure our performance at any time before the intervention. There was no control population in our study. Our intent was to measure whether the

guideline would improve our care for congestive heart failure. It was not our intent to compare our performance to that of another medical group. We believed it would be impossible or unethical to develop a control population of patients within our medical group.

As stated in the Conclusions section of our paper, reducing hospital admissions for systolic congestive heart failure has been a valid outcome measure in a previously published landmark trial. We therefore conclude that outcomes improved throughout our study. Statistical regression was the simplest modeling tool to support our findings. The study was not powered to develop any statistical significance in regard to mortality; therefore, we would reserve judgment relating to any mortality statistics presented.

Because this population was not a closed population, there is no fixed denominator. The statistical relevance of the data, however, lies in the five consecutive quarters that we experienced progressively lower numbers of admissions for systolic dysfunction while recording remarkably steady numbers of admissions for diastolic dysfunction. The only way in which these data could be considered faulty would be if only our systolic congestive heart failure patients somehow self-directed their care to other hospitals. We consider that extremely unlikely.

Selecting only those patients who required admission to the hospital for congestive heart failure as a fair representation of angiotensin-converting enzyme (ACE) inhibitor use within our entire outpatient congestive heart failure practice is in error. In fact, one could intuitively expect that the subset of patients requiring admission would likely have the lowest rates of ACE inhibitor use.

Finally, as stated in the conclusion, we would have preferred to have completed our own measurement of ACE inhibitor use by our physicians in the outpatient setting. The group believed, however, that the additional demands required to complete the audit exceeded our financial and human resources. As a best alternative, Aetna US Healthcare data were used as surrogate data. Though we agree that it is possible, we consider it highly unlikely that the rise in ACE inhibitor use as measured by Aetna US Healthcare was the result of increased use primarily in patients with diastolic dysfunction.

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## Prenatal Testing and Counseling for Down Syndrome

*To the Editor:* This letter is in response to the article entitled "Multiple Marker Screening for Down Syndrome—Whom Should We Screen?" by Dr. Sara Cate and Susie Ball (*J Am Board Fam Pract* 1999;12:367-74). An otherwise clear and concise review of prenatal genetic screening was marred by some muddled statements that, I suppose, were meant to reflect ethical issues.

The authors noted that family physicians and internists were more likely than other specialists to interject their own opinions regarding abortion. Male physicians were noted to be more likely than female physicians to