Reviewer's report

Title: Variation in recommendations of national guidelines for chronic heart failure across Europe and their relationship to clinical practice. A comparative analysis of guideline content and target versus the IMPROVEMENT survey of prescribing performance in primary care.

Version: 2 Date: 26 February 2005

Reviewer: Arno Hoes

Reviewer's report:

General

The report includes an interesting comparison of 15, almost all national, guidelines on heart failure in Europe, with emphasis on therapeutic recommendations. In addition, the guideline recommendations are compared to prescription patterns observed in primary care patients, by using the IMPROVEMENT data.

The paper is relevant for those involved in the therapeutic management of heart failure patients and those interested in the application of clinical guidelines in daily primary care.

The paper could be further improved if the authors focused even more on drug therapy and on primary care guidelines (in their comparison with prescribing practice). In addition, the statistical analysis is not fully explained in the current version.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The paper would be even more interesting if focus would be entirely on drug therapy for heart failure. For example the parts about the diagnosis of heart failure could be deleted; the more since a useful comparison between guidelines and practice data warrants another full paper.

Emphasis is, certainly in the second part involving the comparison with IMPROVEMENT data, on primary care. It remains unclear whether in that comparison the recommendations from guidelines applied by GPs (according to the experts) in that particular country were applied. I hope, for example, that the GP guideline and not the CBO guideline was used in the Dutch comparison.

In the statistical analysis, the comparison data were adjusted for age, gender and NYHA classification. The method applied is not mentioned (multiple logistic regression?). Moreover the reason for this adjustment is not provided. Actually, these factors are unlikely to be confounders, since their association with the contents of the guideline seems very unlikely. To clarify this issue, the authors should provide both adjusted and unadjusted odds ratios.

In my view other potential confounders are of more interest, such as the year of publication of the guideline. The latter is likely to be associated with both the contents of the guideline and the prescription pattern and may thus confound the relationship.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
In table 3, two odds ratios are given for betablocker use in countries with a restricted indication in the guideline; one with the wider indication and one with no recommendation as the reference category. Using a dummy variable and one reference category (and two odds ratios) would make the findings easier to interpret.

Some limitations of the IMPROVEMENT study could be mentioned, since the IMPROVEMENT data are crucial in the comparison between guidelines and practice data. For example, some GP patients in IMPROVEMENT may actually be "managed" at cardiology out-patient clinics and not in primary care.

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests