Reviewer's report

Title: Active collaboration with primary care providers increases specialist referral in chronic renal disease

Version: 1 Date: 28 August 2004

Reviewer: James Novak

Reviewer's report:

General

This is a non-randomized, non-blinded, controlled trial of PCP instruction by one nephrologist assessing outcomes of CKD referral patterns in a German city. Intervention at the PCP level is relatively novel and is worth pursuing. The effort from Dr. Hahn in meeting 250 PCPs over 18 months is impressive.

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

1. The authors state that there was a "statistically significant" shift from patients referred is ESRD to those merely in CKD. However, none of the p values reported is less than 0.05. They are less than 0.1, indicating a nonsignificant trend that may be appropriate for driving hypotheses, but the title, abstract, results, figures, and interpretation of these results as significant must be revised.

2. P values aside, the number of patients in each group (A and B) seems too small (group A has only 18 patients) to justify stratification into three further subgroups based on creatinine clearance. Thus, there are substantial differences in age and gender among all six subgroups (Table 1), further clouding interpretation of results.

3. The methods section indicates that group B (intervention group) was analyzed 6 months after the last visit to a PCP had occurred. Clearly, this group would be heterogeneous in terms of the recency of intervention; i.e., PCPs interviewed at the beginning of the 18 month period could scarcely be expected to remember the discussion as well as those interviewed at the end. It would be difficult to adjust for this recency bias statistically, but some comment should be made in the discussion. It may be that in future trials, wherein the intervention is conducted over a shorter time period, this bias would be reduced and results would reach statistical significance.

4. The discussion of health outcomes as "somewhat improved" in the results section should be quantified as to statistical significance. The use of a Kaplan-Meier curve to describe "lost" patients is unconventional. Figure 2 is misleading and should be eliminated.

5. The discussion should be modified to accurately report the results, i.e., that a trend toward earlier referral was found. The first paragraph in the discussion is highly speculative and should be reworded (i.e., "This should benefit first the patient, and then in the long run society as a whole." "It is very probable that adequate treatment and therefore prolongation of the pre-dialysis CRF stage will incur reduced overall spending; the increase in quality of life for the patients is immeasurable.").

6. The authors include several references indicating improved outcome with early referral, but for balance, should include additional references citing worse or unchanged outcomes (i.e., Traynor JP,

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Nephrologist associations' recommendations regarding early referral should be specified in the first background paragraph.

2. The term "eythrozyturia" in the methods section is unfamiliar to me; I was unable to find either this term or "erythrozyturia" (assuming a typographical error) in either Dorland's or Stedman's medical dictionaries. Another term should be used.

3. The word "atoned" is misused in the second paragraph of the discussion.

4. There is no direct object in the first sentence, last paragraph of the discussion ("The retrospective design of this study does not allow to analyze...").

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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 of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests: None