Reviewer's report

Title: Increased incidence of kidney diseases in general practice after a nationwide albuminuria self-test program

Version: 1 Date: 28 March 2011

Reviewer: Susan Lynn Hogan

Reviewer's report:

Major Compulsory Revisions

Methods
1. Second paragraph: 95% confidence intervals should be described for the person-time incidence rates, and then added to the results.
2. Last paragraph: The rational and definitions used for Cox regression analysis need to be better delineated and explained. Also a justification for use of a time-to-event analysis should be included since the timeframe is generally short for needing this type of modeling. The definitions for the start points, end points and censoring points need to be clearly stated in terms of the modeling requirements. The interaction terms used need to be specified. The methods should also state that 95% confidence intervals were used.
3. First paragraph: Add absolute numbers for each the percents in the first paragraph.

Results
4. Second paragraph: The increased rates should be expressed as ‘increased by approximately 5 per 10,000 consultations to 25 to 30 per 10,000 consultations (use correct values- this is just an estimate/example). In the last sentence, reword some (a suggestion: ‘…in the first four weeks of period 2 to as high as an additional 10 per 10,000 consultations’).
5. Third paragraph: 95% confidence intervals for the incidence rates are needed here and in Table 2.
6. Paragraph four: More explicit results and explanations for the interaction results are needed. First, the absolute values and percents in these subgroups should be described (and possibly also provided in the table). After this information, then the hazard ratios can be provided, with reference for each hazard to what the reference or comparison group is defined as. The results would likely be easier to follow if hazard ratios and 95% confidence intervals for the subgroups were provided in a table. This information could be added in a separate section within Table 2 after the significant interaction terms are given.
7. Table 2: add 95% confidence intervals and summary measures by diabetes hypertension or the absence of these two
8. Figure: The figure will be easier to interpret with dashed references lines displayed to show the differences highlighted in the text. Also, the x-axis could be
limited to range from 15 to 45 per 10,000 to more clearly show the variations in the numbers across time.

Discussion

9. The discussion should provide a statement of public health relevance and benefit of this study particularly since the results are from a nationwide parent study. It would also be useful to include some thoughts on the potential impact of these results beyond this study and on the results may or may not translate to other programs/countries (generalizability). There are no cost/benefit estimates o, at the very least, some mention of the importance of this for future studies.

Specific Essential Minor Revisions/Comments:

Background

10. First paragraph first sentence. It is not clear from the references that chronic kidney disease has been included in with cardiovascular disease and diabetes mellitus as a lifestyle-related disease. A slight difference in wording can clarify this for the introduction.

11. Third paragraph: ‘a large number of probably false positive test results was found’ needs to be more clearly stated in the context of the program’s results and impact. It would be helpful to provide a summary of the actual increases in diagnoses of kidney diseases, hypertension and diabetes found in the program and already published.

12. Fourth paragraph: remove the double use of ‘self-test’ in the first sentence.

Methods

13. First paragraph, first sentence: include ‘urinary’ before ‘complaints’ in all instances throughout the paper (in many cases, just ‘complaint’ or ‘complaints’ is used.

Discussion

14. Typos – 5th line change ‘chance on’ to ‘chance of’; second to last line on page 11 change ‘cancer screening increased with’ to ‘cancer screening increased by’; last line of middle paragraph on page 12 change ‘It is unknown to which extend’ to ‘It is unknown to what extent’.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.