Author's response to reviews

Title: The Impact of Statins on Health Services Utilization and Mortality in Older Adults Discharged from Hospital with Ischemic Heart Disease: a cohort study.

Authors:

Charmaine A Cooke (charmaine.cooke@dal.ca)
Susan A Kirkland (susan.kirkland@dal.ca)
Ingrid S Sketris (ingrid.sketris@dal.ca)
Cox Jafna (jafna.cox@dal.ca)

Version: 3 Date: 1 September 2009

Author's response to reviews: see over
September 01, 2009

Editorial Office, BMC Health Services Research

To the Editorial Office,

I am enclosing my revised manuscript entitled ‘The Impact of Statins on Health Services Utilization and Mortality in Older Adults with Cardiovascular for consideration for publication in the BMC Health Services Research journal.

I have addressed the comments in the body of the revised manuscript and I am including a point-by-point response to the comments in this letter.

Comments from the Associate Editor

Page 4, Paragraph 3
The paragraph on page 4, paragraph 3 has been changed to read:

‘Gaps in evidence may exist on the safety and effectiveness of drugs during real world use where drugs may be often used by diverse patient groups outside the controlled environment of clinical trials (21-23). In particular, older adults who may have many concomitant diseases, complex drug regimens and cognitive and functional decline are often excluded from RCTs; this may limit the generalizability of RCTs to these populations. Therefore, the impact of statins on mortality and health service utilization in the real world in older adults may need to be explored.’

We hope this better addresses the reviewer’s comments.

Page 6, Paragraph 2
This change was inadvertently left out of the revised manuscript. On page 14, paragraph 3 (the end of the paragraph which extends into page 15), the addition reads:

‘Finally, data was not available on compliance with or discontinuation of statins during the study period. An analysis of these factors may reveal important differences in outcomes depending on the length of time that a person receives the medication.”
Nonetheless, as our study examines the impact of statin use on health services use and mortality in all statin users, our outcomes reflect those that occur in real-world use of these medications.

**Comment on c-statistic**
The issue has been addressed. The use of the c-statistic is mentioned in the Methods section on page 7, paragraph 4, and the inclusion of the c-statistic value of 0.78 and the reference for this value is found under results on page 9, paragraph 3. The paragraph has been changed to better reflect the level of discriminatory power for this value.

**Minor Essential Revisions from Pauline Lockhart**
We apologize that this was overlooked in the original revisions.

**Title page**
The suggested changes have been made.

**Page 5, Paragraph 3**
The initial cause for hospitalization for all patients in this study is for IHD as per page 5, paragraph. The title of the paper now reflects this.

**Page 8, Paragraph 4**
As the reviewer has indicated, the data shows an apparent paradoxical prescribing of statins in that they are less likely to be dispensed to individuals with severe disease. It is unclear from the clinical registry why this is so, and it probably is related to a multitude of factors taken in their entirety. Since the clinical and demographic characteristics for the seniors in the statin initiator group were different from those in the non-initiator group, propensity scores were generated to attempt to minimize bias, and improve comparability between the two groups. The results from the study therefore support the statement on page 11, paragraph 2 in that statin use reduced mortality in all patient groups, regardless of comorbidity.

Sincerely,

Charmaine Cooke, BSc (Pharm), MSc (Community Health and Epidemiology)
Project Coordinator, Population Health Research Unit, Dalhousie University