Reviewer’s report

Title: How many people have had a myocardial infarction? Prevalence estimated using historical hospital data.

Version: 2 Date: 17 January 2007
Reviewer: Charles Maynard

Reviewer’s report:

General

-------------------------------------------------------------------------------------------------------------------

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

-------------------------------------------------------------------------------------------------------------------

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

Page 7. The first sentence could be more clearly stated. Diabetes is a chronic condition requiring continuous care. Acute myocardial infarction is an acute manifestation of a chronic condition, coronary artery disease. Hence, there are fewer clearly defined episodes of care for AMI as compared to diabetes.

Page 12. There is a reference to figure 4, but no figure 4 was provided.

Page 12. There is no reference to table 2; presumably table 3 should be table 2 and table 4 is actually table 3.

In general, the manuscript should be reviewed for typographical errors, including spelling and grammar errors. Examples include page 7 "4) compare these prevalence the estimates ...", page 12, second paragraph

-------------------------------------------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)

Page 11. If an individual had multiple admissions for AMI, were all removed or only the one where death occurred?

Page 14. Other forms of heart disease most likely include unstable angina or some other form of “rule-out” myocardial infarction.

Page 16. About 1/3 of individuals with acute myocardial infarction (AMI) do not survive the pre-hospital phase. It might be worth referencing one or more of the MONICA papers which describe the epidemiology of AMI as well as secular trends in AMI occurrence.

The DISMOD model assumes that incidence rates of AMI are constant over time. As the authors indicate, this assumption is not warranted given the decline in AMI incidence over time.

An underlying assumption is that the one has data sources with identifiers that allow for linking as well as governmental agencies that are willing to release these databases. Ontario and other Canadian provinces may be farther ahead on this than states in the US. For example, in the State of Washington, the state hospital discharge abstract database has limited identifiers making it more difficult to link to state death records.

What next?: Accept after minor essential revisions
Level of interest: An article whose findings are important to those with closely related research interests

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.