Reviewer's report

Title: Severe Mental Illness and Mortality of Hospitalized Acute Coronary Syndrome Patients in the Veteran Healthcare Administration

Version: 2 Date: 17 July 2007

Reviewer: Amy Kilbourne

Reviewer's report:

General
The goal of this study was to determine whether patients with SMI and ACS were at greater risk of 1-year mortality compared to those with ACS and no SMI. The authors conducted a survival analysis of all VHA patients from 2003-0225 with ACS. There were no differences in cardiac procedure use, and adjusted analyses found no differences in mortality between SMI and non-SMI patients.

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

The major limitation of this study is the method by which SMI was defined. Serious mental illness had traditionally included chronic, recurrent illnesses such as schizophrenia, bipolar disorder, and recurrent major depressive disorder. However, the authors also included anxiety and personality disorders. ICD-9 codes can be unreliable for identifying persons with SMI, and are notoriously unreliable for distinguishing persons with single versus recurrent episodes (e.g., those with depression 296.2 may have recurrent diagnoses of single-episode depression). Moreover, it is very difficult to accurately assess personality disorders based on ICD-9 administrative codes. More importantly, lumping Axis II (e.g., personality disorders) with Axis I disorders together can be problematic as persons afflicted with these different disorders may not experience the same barriers to medical care. The authors should consider alternative algorithms for identifying persons with SMI, such as limiting the sample to those with 1 inpatient or two outpatient diagnoses and perhaps excluding those with Axis II disorders (see work by Lurie and colleagues, as well as the algorithms used by the VHA SMITREC for identifying veterans with SMI using administrative data). The authors should also discuss the limitations of relying on ICD-9 codes to identify persons with SMI. Also, when comparing their results to previous studies, the authors need to compare how they defined SMI versus how the prior studies defined SMI.

Also, in the Background section (page 3), the authors do not make a compelling case for why they expect disparities in AMI-related procedure use or mortality exist for SMI patients. For example, what are the features of SMI that make patients vulnerable to these increased risks (e.g., provider stigma, patient barriers including discomfort with medical providers, lack of awareness of
medical symptoms, etc.). Some discussion regarding the unique barriers persons with SMI face with accessing medical care is warranted in order to place this study in the context of the SMI-medical care literature.

In addition, the authors need to discuss the limitations of the EPRP data. Notably, EPRP does not oversample those with SMI, and those with SMI who are selected for inclusion in the EPRP sample may over represent those who already have adequate access to medical care.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
None

Discretionary Revisions (which the author can choose to ignore)
None

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, the manuscript does not need to be seen by a statistician.

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