Reviewer's report

Title: Impact of Housing on the Survival of Persons with AIDS

Version: 1 Date: 16 February 2009

Reviewer: Evan Wood

Reviewer's report:

Schwarcz et al. have conducted an analysis of time-to-death among individuals with AIDS using data from a comprehensive administrative database to investigate the impact of housing status on mortality. A secondary analysis evaluated the effect of supportive housing on mortality among homeless individuals at baseline. On the whole, their methods are appropriate and their findings supported by the evidence. This study is relevant, especially as structural interventions are increasingly recognised for their potential to reduce HIV-related morbidity and mortality, especially for marginalized or vulnerable populations. This paper was reviewed by myself with the assistance of a senior PhD candidate (MJ Milloy).

We suggest the following points in hopes of identifying ways of improving the analysis:

Major points:

1. Although the objective was to evaluate the effect of housing, the first multivariate model (n = 6163) contains a number of results that merit comment in the Discussion section -- specifically, the effects of injection drug use and public health insurance, both larger than the effect of homelessness.

2. The completeness of the AIDS registry is a possible source of bias. While the authors report it is evaluated annually and "found to be over 95% complete," we suspect homeless individuals are more likely to be missed than housed individuals. Similarly, while all-cause mortality has been used in past studies of AIDS mortality, homeless individuals may be more likely to die of non-AIDS causes. The authors might consider sensitivity analyses to investigate these possibilities.

3. The authors hypothesize that the increased mortality observed among homeless individuals may have resulted from higher levels of drug use, mental illness and inadequate use of healthcare including lower ART adherence. We agree. However, the two important factors, injection drug use and health insurance status, were included in the multivariate model. As above, some additional discussion of this seems warranted.

Minor points:

1. The figure containing the survival curves (page 22) lacks resolution and is
sub-standard for publication purposes. Similarly, the tables (beginning on page 23) could be reformatted to aid comprehension. We expect the journal has a house style to guide the authors.

2. There are a number of grammatical errors. The text could benefit from another edit.

**Level of interest:** An article of importance in its field

**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.