Reviewer's report

Title: Monitoring Entry into Care of Newly Diagnosed HIV-Infected Persons: San Francisco 2006-2007

Version: 3 Date: 9 September 2008

Reviewer: Anita Loughlin

Reviewer's report:

In general the manuscript reads better and has improved. I'm concern mainly about the statistical analyses presented in Tables 1 and 2. Table 1 is a univariate analysis examining cofactors for entering care versus not entering or unknown entry into care. There are 3 major concerns outlined below one concern is the Z test, secondly I'm concerned about grouping and findings, and thirdly I'm concerned that not all cofactors are presented in table that are eventually modeled and deemed important, eg, investigator interview. Furthermore, there is not multivariate analysis presented of variables that predictive of entry into care. Table 2 jumps to a multivariate analysis of a different question “of those who entered care what predicts entering care within 3 months?” I would have liked to have seen some univariate statistics for the question prior to this table. It is hard to believe that increasing CD4 or decreasing viral load (ie declining health) did not predict quicker entry into care, yet it wasn’t presented just used as a control variable.

Also, in my previous review I had favorably reviewed concept of paper, but gave some specific comments about suggested revisions. The author’s responses appeared to accept 90% of the suggestions and they stated that they made the suggested revisions. If so, I feel the paper would be an important manuscript and would be acceptable. I will just high light a few additional edits I feel were missed in the authors’ revisions.

Major concerns;

(1) Statistical analysis

Table 1 present a number of univariate frequency comparisons. The authors stated that the stat analyze of proportions was a Z test, which may result in doing many test increasing likelihood of having a significant result by chance. I’d consider a groupwise test first such as the Chi-square tests to identify statistically significant cofactors, or univariate odds ratios.

In Table 1 some of the groups sparse the sample out such that the cell sizes in the not in care group become small, you are not likely seeing significant results in your testing because of your grouping. If you did a tests using a continuous variable or collapse the groups you may see more differences, for example I collapsed the bottom to cells in age and show that there is a stat difference in age in persons who enter care (are older) then persons who don’t enter care.
In Table 1, not all co-factors in the study are represented? Where is one of your most important variables, public health investigator interview? Include all variables in this table.

Why do you group transgendered M to F with Males and not just call them transgendered, or if gender is female group them with females or call the category females and M to F transgendered?

Where is the multivariate analysis examining co-factors for entry into care.

Table 2 as stated above this is a leap to a multivariate analysis for a second question. It doesn’t follow from Table 1. I suggest strongly that a univariate analysis be presented also so reader can see effect of variables that didn’t fit the final model.

Figure 3 adds little to presentation, numbers on bars make it confusing. I’d suggest that you state this finding in text and use space to do a better presentation of analyses needed for 2 questions (1) what are the predictors for entry into care? and (2) among those who entered care what are the predictors for entering care within 3 months of diagnosis?

(2) I made the following comment quoted the reviewers response:

“My second comment is that the authors do not tell the reader in the introduction/background the rationale for why looking at CD4 and viral load tests are a good marker for accessing care. This rationale is not presented distinctly until the first paragraph of the discussion, page 9: “CD4 T cell counts and HIV plasma viral load are used to determine stage of disease and are commonly obtained on the first visit of HIV care. Therefore, CD4 T cell counts and HIV plasma viral load could potentially serve as a surrogate marker to evaluate entry into care, and determine unmet health care needs in various communities.” I would suggest the authors move this to the beginning of the article.

Authors: “That paragraph has been moved to the background section.”

While some of the information is in paragraph 3 of background section. The logic of why CD4/viral load are good markers for entry into care is still missing from the background section. That is that these tests are commonly done on the first and if not second visit to HIV medical care provider. Paragraph 3 of background should be reworked to contain this logic.

(3) Consistency, a suggestion was made to use consistent terms for the intervention that appear successful. The authors agreed to use case-manager interview yet in the abstract they again refer to this person as a “public health investigator” not a case manager. Consider sticking to one term either investigator (appears to be your preference that’s fine) or case manager.

See Abstract.
Results - We found that being interviewed by a public health investigator
See pages 5 and 6 – You mention case manager interview an referral but then
state that patient is being contacted by “public health investigator” and previously
referred to person as “case-investigator”.
See Stat plan page the phrasing is changed to “interviewed by the SFDPH,”

(4) Statistical analysis statement out of place and a mistake: The following
statement is really a result. In fact you had to consider sex and sexual orientation
in models which is part of the plan, and found that they did not add anything
which is a result. I’d leave what is part of plan in plan and what is a result in
result.

Second the mistake is that you don’t have 9% women you have -- n=9 according
to tables and n=10 according to writing -- women to model. The statement is also
awkward with the number dangling at the end. Consider rephrasing to “there
were not enough women (n=9) in the sample…”

Your sentence reads at bottom page 8 and top page 9.

“However, sex and sexual orientation were not found to contribute significantly to
the model (p > .05) and were excluded from the final model; it may be that there
were not enough women in the sample to detect differences by sex (9%).”

Minor comments

(1) Unless it is the style of Biomed Central dates should be July 1, 2006 not July
1st, 2006. Your computer maybe changing this in your spell check but it is not
correct.

See Abstract

Methods: Since July 1st, 2006,
Results: One-hundred sixty new HIV-infected cases were diagnosed between

(2) Do you mean and “HIV viral load” values in the conclusion of the abstract?

See Conclusion: The time from HIV diagnosis to initial CD4 T cell count and CD4
T cell value may be appropriate surveillance measures

(3) There are typos for example double periods ..
See Abstract -- collection methods..
See page 8 -- of those 101 patients. .

Level of interest: An article of importance in its field
Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.