Reviewer's report

Title: Dissatisfaction with the Laboratory Services in conducting HIV related testing among Public and Private Medical Personnel in Tanzania

Version: 3 Date: 24 June 2008

Reviewer: Wilson Pace

Reviewer's report:

Third Review 6-08

This manuscript reports on health care personnel satisfaction with laboratory services in Tanzania. The manuscript presents the data primarily related to public and private laboratory status but the authors state in their reply that the intent was to create a baseline information set at the national level. The authors have improved reporting related to the entire sample compared to the sub analyses.

The concerns discussed in the second review have been much more thoroughly addressed in the manuscript itself this time.

Major Revisions – following each section from the secondary review is a short section titled Current Review: which updates the secondary review based on the current manuscript.

Overview-

Secondary review: This paper focuses the analysis on the differences in satisfaction between public and private labs in Tanzania- but the authors noted in their letter of response that that initial intent of the project was to understand health professional satisfaction at the national level. The sample size and sampling strategy appear more appropriate for this intent than for a sub-analysis based on lab status. To this end the authors should re-examine the main focus of this manuscript and focus on what the entire dataset can tell us prior to undertaking any secondary analyses. For instance, do nurses differ in their overall level of satisfaction and individual item satisfaction than the other groups? It appears that there are items that may be relevant only to subsets of interviewees and this would make more sense through an initial global analysis of the data. Without better clarification at this level the paper remains very difficult to follow.

Current review- the overall description within the paper and the labels for the tables are much improved and make the results easier to follow.

1. The relationship of each group of medical personnel to the lab needs to be clarified. It would seem that nurses and physicians are consumers of lab services and that lab personnel are providers of lab services and thus their views and even ability to answer specific questions would be different. This needs to be better clarified in the manuscript. Again- this may be easier to understand if the
initial analysis was undertaken as the entire data set level divided by user groups instead of by lab type.

Current review – this has been improved and is acceptable

2. A baseline survey proceeded interviews at participating facilities. How was this survey administered? Please include in the manuscript the response rate to this survey. The baseline survey included 24 labs and the in depth surveys include 21 labs- how were the 21 chosen from the 24?

Current review- this has been clarified

3. No information on the response rates for the interview process is included thus it is not possible to evaluate the representativeness of the responders. The manuscript has not been revised to reflect this information and while the response from the authors indicates a 100% response rate the analytical numbers don’t track with this reply. A 100% response rate at 12 interviews per lab would result in 252 interviews. There are 235 reported in the Methods section. Furthermore, the highest number of responses analyzed for any given question in Table 1 is 196. The authors need to describe in the manuscript how the sample size dropped from 252 to 235 (of particular note was one of the three groups more likely to have missing enrollment?) Next, of the 235 respondents why are only 196 used for any given analysis and is it always the same 196 individuals? The final question on table 1 reports only 192 respondents, is this a subset of the 196 or an overlapping set of individuals with some of the 39 respondents not used in the above analysis included in this analysis. Again, all this might be much clearer if the analysis started at the full dataset level instead of the sub analysis level by lab type. Furthermore, there is the acknowledgement of missing data- which could be at the item level or the person level, but this is not well addressed. This reviewer recommends that the authors review the Consort criteria for reporting study enrollment and try to create a flow diagram something along these lines.

Current Review: The sample strategy is now explained and the response rates are adequate. Table 1 adds to the overall understanding but is probably unnecessary. If it is to be retained the names of all labs should be removed and replaced by numbers. A consort diagram would still probably be easier to follow- but the current approach is adequate once lab names have been removed from Table 1 or Table 1 is removed all together.

4. The next level of data collection involves interviews with apparently up to 13 individuals in 21 labs. The exact number of expected interviews at this lab level is not mentioned. It would most labs either sends out or receives samples from other labs and some do both. If the exact role did not exist in a given lab but the function occurred anyway the rationale for not interviewing someone dealing with the issues should be included.

Current Review: This has been clarified

5. The issues discussed in 5, 6, 7, 8 and 9 below were included in the initial
review and do not appear to have been addressed within the manuscript revisions.

This reviewer is very confused on the roles of the individuals interviewed. This may be because of not being familiar with how lab services are provided in Tanzania- but this confusion is likely to be present for others around the world. From the text it appears that three different types of “health care personnel” were interviewed- nurses, physicians and laboratory personnel. These appear to be very disparate roles and why their results should be grouped for analysis is not clear. Presumably, nurses and physicians are ordering lab tests for patients and receiving lab results. Lab personnel are handling these orders, dealing with completing tests, sending specimens to reference labs or receiving specimens from other labs and then reporting results back to clinicians. These are very different functions and various groups have control of very different aspects of this chain of events. Thus, grouping their responses across similar questions is not intuitively logical. For instance, how is the question about timely results interpreted by nurses and physicians (who ordered the test) compared to lab personnel who conduct the test? If patients have to travel to the lab to have specimens collected (which appears to be the case at least some of the time from a companion manuscript) then do the nurses and clinicians account for a potential lag in when a patient presents for the lab test? It would seem the lab personnel would only be dealing with the delay from when they receive or collect a specimen to when they report the results. These are very different perspectives and grouping them under a single response needs to be justified.

Current Review: this has been clarified and labeling of the tables has been improved.

6. Likewise for the response to “clear, complete results” is confusing. Presumably if the lab personnel thought their results were not clear and complete they would change the way results are reported.

Current Review: resolved

7. Finally, the beliefs around whether a test result is “correct or accurate” are also very different from a clinician’s perspective than lab personnel. Presumably lab personnel run controls and various tests to assess the accuracy and reliability of test results, which are more likely to be affected by specimen handling than by test performance. Clinical personnel question results when they don’t make clinical sense – which is very different than true validity and reliability.

Current Review: resolved

8. The intent of the response options in Table 2 are not clear and who actually has the ability to deal with poorly handled specimens and therefore dissatisfied customers is not at all clear. For instance, does availability of equipment mean within the sending lab or within the receiving lab for either table? This is not clear at all. What was intended to be collected from the question “result generated from referral laboratories” in Table 2 is not clear to this reviewer compared to
“Clear result report” in the same table.

Current Review: resolved

9. Table 3 identifies “poorly identified specimen” as a concern among a large number of receiving labs. But, it is not clear from the manuscript if this is a problem with the ordering physician/office not providing the necessary information or is this a problem at the sending lab level. This data is impossible to use for QI activities or considerations with out greater detail.

Current Review: resolved

10. The results indicate there are differences in dissatisfaction levels in selected areas between private and public laboratories for health care personnel (presumably these differences are driven by nurse and physician dissatisfaction but that is not possible to tell.) If the results were first analyzed overall by group this issue may be clarified.

Current review- satisfactory

This article will provide baseline information for labs overall in Tanzania.

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'