Subject: Multilevel weighting for chronic disease module
Posted by anver on Wed, 01 Oct 2025 13:04:46 GMT
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I am analysing the Lesotho DHS (2023-2024) and Mozambique DHS (2022-2023) using a multilevel model with three levels. I am following the DHS guidelines on how to approximate the level weights.
However, I am working with the chronic disease module, which has only been administered to a subsample of households (every second household). The guidelines state that the selection probability has to be adjusted to account for subsample selection, but they do not specify how to do this. Is it appropriate to just divide S_h, the number of households selected per cluster (according to Appendix A), by 2 since every second household was selected? Or is there a more appropriate way?

In addition, when these surveys are pooled, how should the level weights be calculated? Should I follow the same steps, combining the clusters of both countries under A_h and the number of households per cluster under M_h? Then to calculate M, should I sum the number of households according to the censuses of both countries? Similarly, for S_h should the numbers of each be added up and divided by 2 to account for the subsample selection?

Lastly, to initially set the survey design (svyset), I assume that I can just follow the previous guidelines and multiply the individual weights (v005/mv005) by a factor (N/S)/Ni, is that correct?

Thank you very much in advance.

Subject: Re: Multilevel weighting for chronic disease module
Posted by LandenSchmidt on Mon, 13 Oct 2025 23:35:05 GMT
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(A) Draft Stata code that (1) computes n_chronic_i per cluster, (2) de-normalizes weights, (3)

(either combined population or equalized); or (B) Run through a worked toy example (one stratum / two clusters x trench run) to show the arithmetic so you can see where the subsample adjustment enters.