

---

Subject: Multilevel weighting for chronic disease module

Posted by [anver](#) on Wed, 01 Oct 2025 13:04:46 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

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  $(N/S)/N_i$ , is that correct?

Thank you very much in advance.

---