Subject: Reproduce household ownership of ITN's using household member recode files
Posted by galka on Thu, 01 Dec 2016 19:06:40 GMT
View Forum Message <> Reply to Message

Hello,

I would like to calculate a range of indicators related to coverage and use of malaria interventions. Some of these are customarily reported at household level, others for children under 5 etc. To avoid downloading multiple datasets I was hoping to be able to reproduce the statistics using just Household Member Recode files. This, however, proved tricky.

I am able to replicate "Proportion of households with at least one mosquito net: Any mosquito net" in both HR and PR files matching DHS final report. When it comes to "Proportion of households with at least one mosquito net: ITN" I can only replicate in HR files, estimates in PR are off.

This seems to be the case in most surveys, the difference in magnitude, however, varies by country.
Here, for example, I tabulate data from Ghana 2014 DHS survey:

```
/* ======= using HR file */
use ghhr71fl.dta, clear;

gen anynet_hh= (hml1>0);
egen nmbitn_hh= rowtotal(hml10_*);
gen itnnet_hh= (nmbitn_hh>0);

sum anynet_hh itnnet_hh nmbitn_hh [w= hv005];

    Variable |     Obs      Weight       Mean   Std. Dev.       Min       Max
-------------+-------------------------------------------- --------------------
  anynet_hh |  11,835  1.1835e+10    .6958722   .4600565         0         1
  itnnet_hh |  11,835  1.1835e+10    .6834536   .4651484         0         1
  nmbitn_hh |  11,835  1.1835e+10    1.332503    1.25887         0         7

/* ======= using PR file */
use  ghpr71fl.dta, clear;
gen anynet= (hml1>0) if hml1<.;
by hv001 hv002, sort: egen nmbitn= total(hml10) ;
gen itnnet= (nmbitn>0);
sum anynet itnnet nmbitn [w= hv005] if hvidx==1;

    Variable |     Obs      Weight       Mean   Std. Dev.       Min       Max
-------------+-------------------------------------------- --------------------
     anynet |  11,835  1.1835e+10    .6958722   .4600565         0         1
     itnnet |  11,835  1.1835e+10    .4066891   .4912367         0         1
     nmbitn |  11,835  1.1835e+10    1.223365   1.914324         0        17
```

I also looked within the two files and found that there is disagreement in between the 2 files with respect to ITN ownership.

/* ======= using HR file */
hv001 hv002 hml10_1 hml10_2 hml10_3 hml10_4 hml10_5 hml10_6 hml10_7 nmbitn_hh
1 2 yes 1
1 6 yes 1
1 11 yes yes 2
1 14 yes yes 2
1 19 yes yes 2

/* ======= using PR file */
hv001 hv002 hvidx hml10 nmbitn
1 2 1 0
1 2 2 0
1 2 3 0
1 2 4 0
1 2 5 0
1 6 1 0
1 6 2 0
1 6 3 0
1 11 1 0
1 14 1 0
1 14 2 0
1 14 3 0
1 19 1 0
1 19 2 0
1 19 3 0
1 19 4 0
1 19 5 0
1 19 6 0
1 19 7 0
1 19 8 0
1 19 9 0
1 19 10 0

Please, advise whether and if so - how can household level statistics be replicated in PR files.

Many thanks,
Katya

Subject: Re: Reproduce household ownership of ITN's using household member recode files
Posted by Liz-DHS on Fri, 09 Dec 2016 21:23:44 GMT
View Forum Message <> Reply to Message

Dear User,
A reply from malaria expert, Dr. Lia Florey:
Quote:
Dear Katya,

Thank you for your question. If you look in the PR file and compare hml10 and hml12 you will see that hml10 is actually representing whether or not an individual slept under an ITN the night before the survey and not representing ownership of an ITN. This is likely the reason for the discrepancies that you observed. I would recommend calculating the household-level variables you need in the HR file. If needed you can then merge those household-level variables into the PR file by hv001 and hv002.

As a warning, you will also not be able to calculate the indicators on IPTp or case management of fever using the PR file. If you have datasets with anemia and parasitemia data those indicators can be calculated using the PR file (and using this file is necessary if you are trying to replicate the indicators from the report).

I hope this is helpful.

Best,
Lia