# Stata do-file for ITN Use and Access Report

\*\*\* Stata Do-file for PMI Access:Use report using MIS or DHS datasets

\* (see www.vector-works.org/resources/llin-use-and-access-for-pmi-countries/)

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\*\* Goals: calculate three indicators –

\* 1) household ownership of any ITN;

\* 2) population access to ITN;

\* 3) population use of ITN the previous night

\* Step 1 - prep universal coverage indicators

\* in the household data file (HR) – generate a new hhid variable to assist with merging.

\* Note: very occasionally hv001 must be multiplied by 10,000 to accomodate longer hv002 strings.

rename hhid hhidx

gen hhid=(hv001\*1000)+hv002

gen persid=hhid\*100+hv003

foreach var of varlist hml10\_\*{

gen itn\_`var' = `var'==1

}

egen nitn= rsum (itn\*)

label var nitn "# of ITN in household"

gen anyitn=nitn>0

label var anyitn "hh has any ITN"

\*\* calculate variable for households with at least 1 ITN for 2 people (p2itn) before doing any merging, if you want

\* create de jure members 'person' from hv012

clonevar person=hv012

gen itnpers=nitn/person

label var itnpers "ITN per person in household"

\* SAVE the household data file (HR)

save, replace

\* create a small dataset with only hhid, nitn, anyitn to merge into the household member dataset

keep hhid nitn anyitn

save nitn, replace

\* Step 2 - OPEN the household member data set (PR). Population Access MUST be calculated in the

\* hh member dataset to do the weighting correctly for individuals (and not by hh)

\* generate a separate, comparable hhid to match the datasets on

rename hhid hhidx

gen hhid=(hv001\*1000)+hv002

gen persid=hhid\*100+hv003

\* merge the PR file and the new 'nitn' file to bring the nitn variable into the household member (PR) file

merge m:1 hhid using nitn

drop \_merge

\* generate the 'stayed in the household last night' (defacto members) variable

gen stay=hv103==1

label var stay "stayed in house last night"

\* rename the stratification variables -

\*\* region (region or province);

\*\* urban (urban or rural residence);

\*\* ses (wealth quintile),

\*\* irs (household was sprayed in the last 12 months)

clonevar region=hv024

clonevar urban=hv025

clonevar ses=hv270

clonevar irs=hv253

clonevar month=hv006

clonevar year=hv007

clonevar age=hv105

\* Step 3 - Still in the household member (PR) file, calculate population access using the MERG method

gen potuse=nitn\*2

label var potuse "potential ITN users in hh"

egen defacto=sum(stay), by(hhid)

label var defacto "de facto population"

bysort hhid: gen access2 = potuse/defacto

replace access2=1 if potuse/defacto >1

label var access2 "proportion in hh with access"

\* gen the useitn variable

gen useitn=hml12==1

\*\* set survey weights using cluster (hv001), strata (hv024) and household sampling weight (hv005)

svyset hv001 [pw=hv005], strata(hv024)

\*\* calculate national population access

svy: mean access2 if stay==1

\*\* calculate stratified population access, use 'logistic' command to assess significant differences from 1st result

svy: mean access2 if stay==1, over(region)

svy: logistic access2 i.region if stay==1

svy: mean access2 if stay==1, over(ses)

svy: logistic access2 i.ses if stay==1

svy: mean access2 if stay==1, over(urban)

svy: logistic access2 urban if stay==1

svy: mean access2 if stay==1, over(irs)

svy: logistic access2 i.irs if stay==1

\* Step 4 - still in the household member (PR) file, calculate the mean net use

\*\* calculate national population use of ITNs

svy: mean useitn if stay==1

\*\* calculate stratified population use

svy: mean useitn if stay==1, over(region)

svy: logistic useitn i.region if stay==1

svy: mean useitn if stay==1, over(ses)

svy: logistic useitn i.ses if stay==1

svy: mean useitn if stay==1, over(urban)

svy: logistic useitn urban if stay==1

svy: mean useitn if stay==1, over(irs)

svy: logistic useitn i.irs if stay==1

\* SAVE the household member file (PR)

save, replace

\* Step 5 - CLOSE the household member file and OPEN the household file.

\* rename the needed stratification variables -

\*\* region (region or province);

\*\* urban (urban or rural residence);

\*\* ses (wealth quintile),

\*\* irs (household was sprayed in the last 12 months)

clonevar region=hv024

clonevar urban=hv025

clonevar ses=hv270

clonevar irs=hv253

clonevar month=hv006

clonevar year=hv007

save, replace

\*\* calculate ownership of at least one ITN in household file

\*\* set survey weights using cluster (hv001), strata (hv024) and household sampling weight (hv005)

svyset hv001 [pw=hv005], strata(hv024)

\*\* calculate national household ownership of at least 1 ITN

svy: mean anyitn

\*\* calculate stratified household ownership of at least 1 ITN

svy: mean anyitn, over(region)

svy: logistic anyitn i.region

svy: mean anyitn, over(ses)

svy: logistic anyitn i.ses

svy: mean anyitn, over(urban)

svy: logistic anyitn urban

svy: mean anyitn, over(irs)

svy: logistic anyitn i.irs

\*\* GENERATE ANY NET and NET ACCESS FOR PLACES LIKE MYANMAR

\*\* in HR file

clonevar numnet=hml1

gen anynet=numnet>0

keep hhid numnet anynet

save numnet, replace

\*\* open PR file

merge m:1 hhid using numnet

drop \_merge

gen potusenet=numnet\*2

label var potusenet "potential net users in hh"

bysort hhid: gen accessnet = potusenet/defacto

replace accessnet=1 if potusenet/defacto >1

label var accessnet "proportion in hh with access to net of any kind"