



Scaling Up Vector Control for Malaria Prevention

**“We’ll never reach 80% of households with 1 ITN for 2 people, and that’s ok”**

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# Overview

- Global targets are for countries to achieve 80% of households owning at least 1 ITN for every 2 household members.
- Countries expect to achieve these results following mass campaigns, or maintain this target through continuous distribution systems

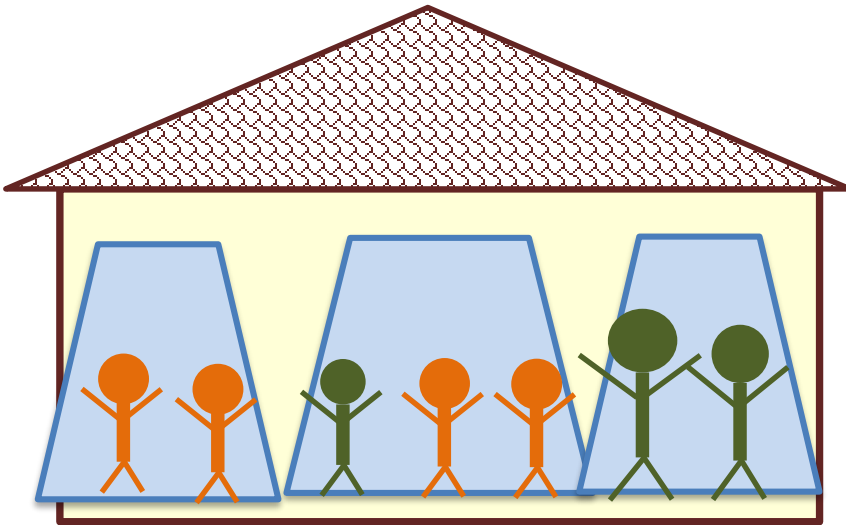
# Overview

- The goal of 80% household universal coverage is not attainable.
- We will explain why.

# Quick indicator review

- % of households that own  $\geq 1$  ITN
  - Relatively easy ‘threshold’ to hit
- % of households that own  $\geq 1$  ITN for every 2 household members
  - Much higher threshold – households with ‘nearly enough ITNs’ don’t count towards this indicator
- % of population with access to an ITN within their household, assuming each ITN covers 2 people
  - Population (people-based) indicator, that illustrates individual level coverage, even when the household doesn’t own quite enough ITNs.

# 7 people, 3 ITNs



Ownership of at least 1 ITN



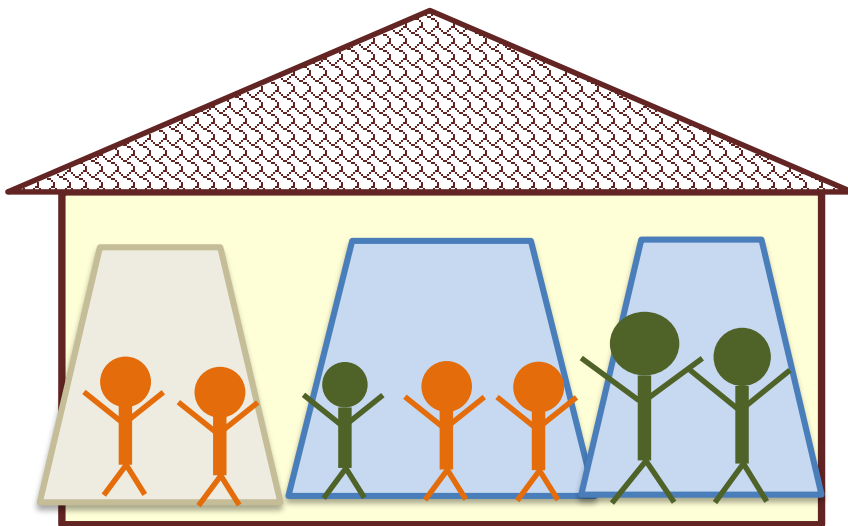
Population access to an ITN



Owens at least 1 ITN / 2 people



# 7 people, 2 ITNs, 1 untreated net



Ownership of at least 1 ITN



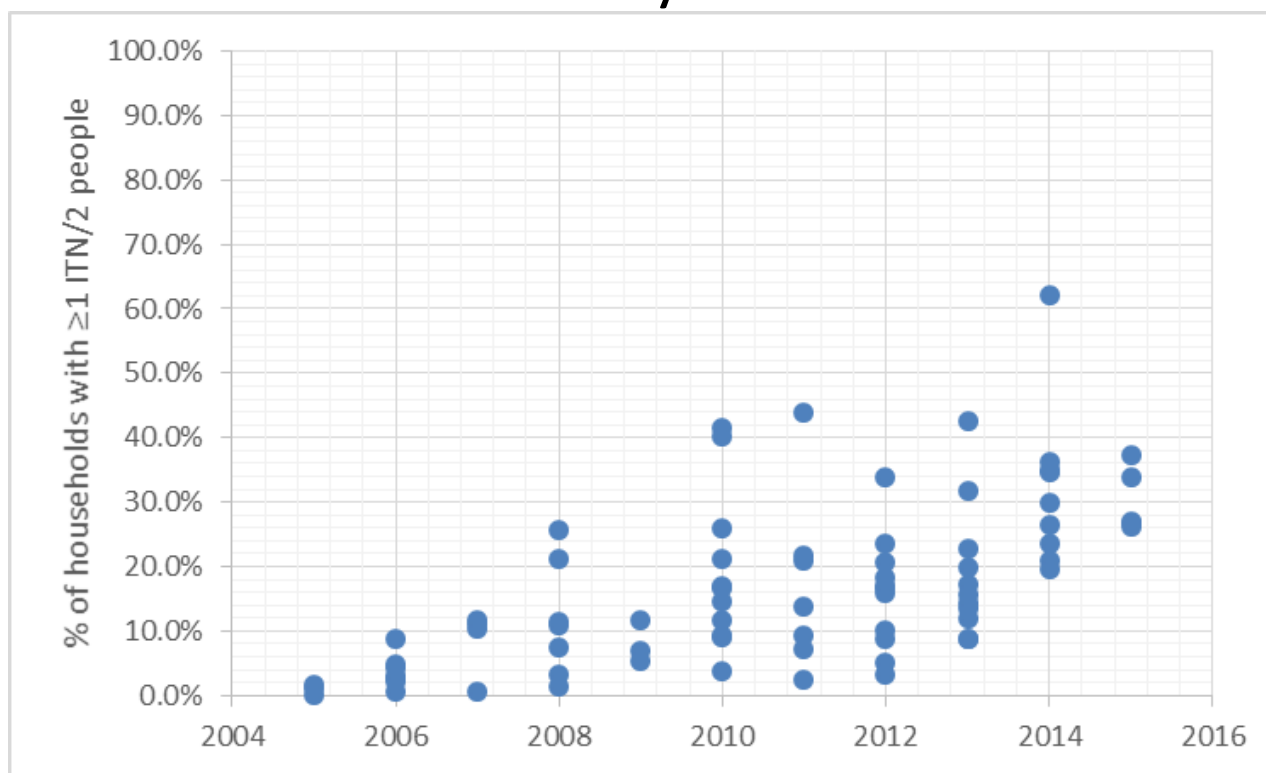
Population access to an ITN – 57%

Owens at least 1 ITN / 2 people



# Indicator: 1 ITN/ 2 People

- Often referred to as “universal coverage”
- However, at a national level, this indicator rarely exceeds 60% even directly after UCC



# Universal coverage Olympics!

- Highest recorded national result
- Highest recorded subnational result



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  - **62%** (Uganda 2014)
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  - **80%** in Lindi (Tanzania) in 2011-2012
  - (Lindi's average household size is 3.9)

## Top 11 surveys conducted soon after mass campaigns

| Country      | Survey | Year | Ownership ≥1 ITN | % population with access to an ITN | % households with ≥1 ITN per 2 people |
|--------------|--------|------|------------------|------------------------------------|---------------------------------------|
| Madagascar   | MIS    | 2011 | 80.5%            | 57.3%                              | 31.1%                                 |
| Rwanda       | DHS    | 2014 | 80.6%            | 63.8%                              | 42.2%                                 |
| Benin        | DHS    | 2012 | 81.8%            | 64.0%                              | 43.3%                                 |
| Rwanda       | DHS    | 2010 | 82.0%            | 64.2%                              | 40.7%                                 |
| Rwanda       | MIS    | 2013 | 82.6%            | 65.9%                              | 42.1%                                 |
| Mali         | DHS    | 2013 | 84.4%            | 65.1%                              | 39.6%                                 |
| Mali         | AP     | 2010 | 85.9%            | 61.6%                              | 31.7%                                 |
| Burkina Faso | DHS    | 2014 | 89.8%            | 71.2%                              | 47.4%                                 |
| Uganda       | MIS    | 2014 | 90.2%            | 78.8%                              | 62.0%                                 |
| Tanzania     | AMIS   | 2011 | 91.0%            | 74.7%                              | 54.8%                                 |
| Mali         | MIS    | 2015 | 93.0%            | 69.5%                              | 37.6%                                 |

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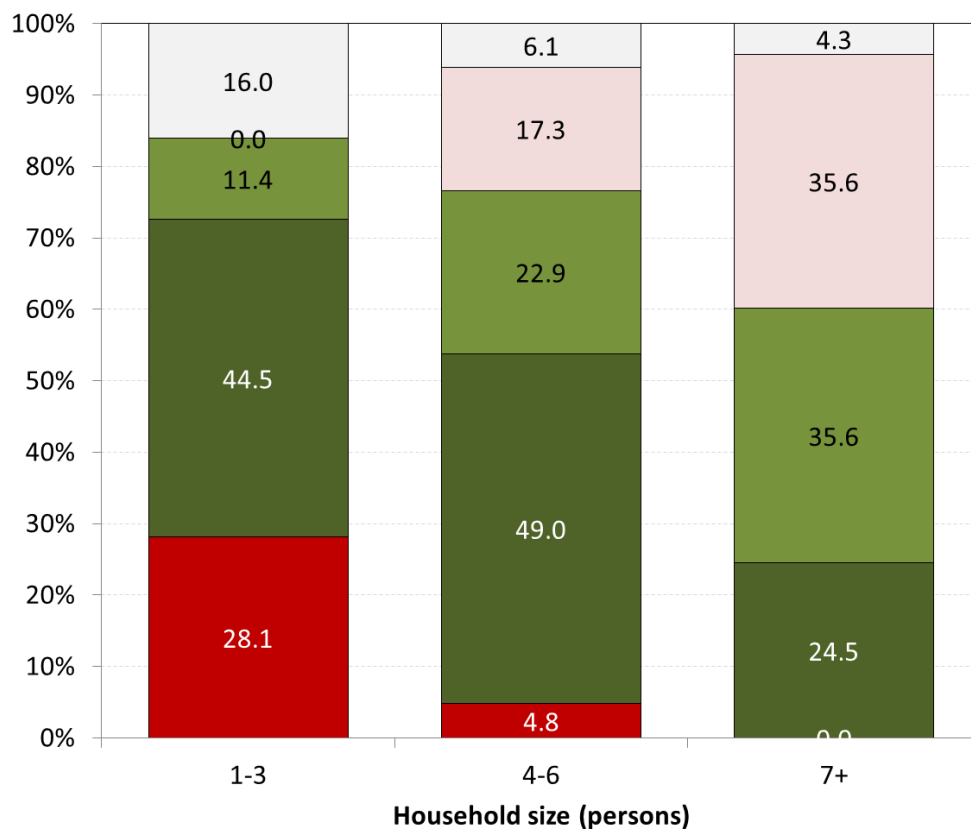
## Surveys conducted soon after mass campaigns

**Average household size in Mali:**  
**9**

| Country  | Survey | Year | Uganda | Tanzania | Mali  |
|----------|--------|------|--------|----------|-------|
| Uganda   | MIS    | 2014 | 90.2%  | 78.8%    | 62.0% |
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# Indicator: 1 ITN/ 2 People

- Larger HH almost never have “enough”



# Why?

- Countries or regions with larger average household size have a higher proportion of households that can't/don't reach 1 ITN for 2 people
  - They rarely receive the 'right' number of ITNs during the campaign, due to pragmatic rationing of ITNs at distribution points or during registration (e.g. 1 for 2 people, but max of 4 ITNs per household)
  - Larger households may not be motivated to obtain additional ITNs, either because kids are already sleeping together 3 to an ITN, or untreated nets are filling the gap
- Areas where household size is <4 on average are where we see the highest levels of household universal coverage. They require fewer ITNs overall to reach the threshold.

# So the target is unreachable?

- Yes, except immediately following mass campaigns in areas with small average household size.



# Maybe we should revise the 1.8 quantification??

- Population divided by 1.8 was developed as a way to help ensure more successful campaigns, since using pop/2 would mean that households with odd numbers of household members would be systematically undersupplied.
- However, the bigger problem in campaign success is not the 1.8 quantification, but quality of census and household registration data, which contribute much more to gaps in household universal coverage.

# What do we do?

- Keep in mind the limitations of the household universal coverage indicator.
- Population access – the proportion of the population with access to an ITN – is a much better indicator to focus on.
- It gives a fuller picture of individual and community-level coverage.

# Most Importantly

- Don't feel bad when your mass campaign achieves 40-60% households with 1 ITN for 2 people
- Focus on the positive – your population access indicator!