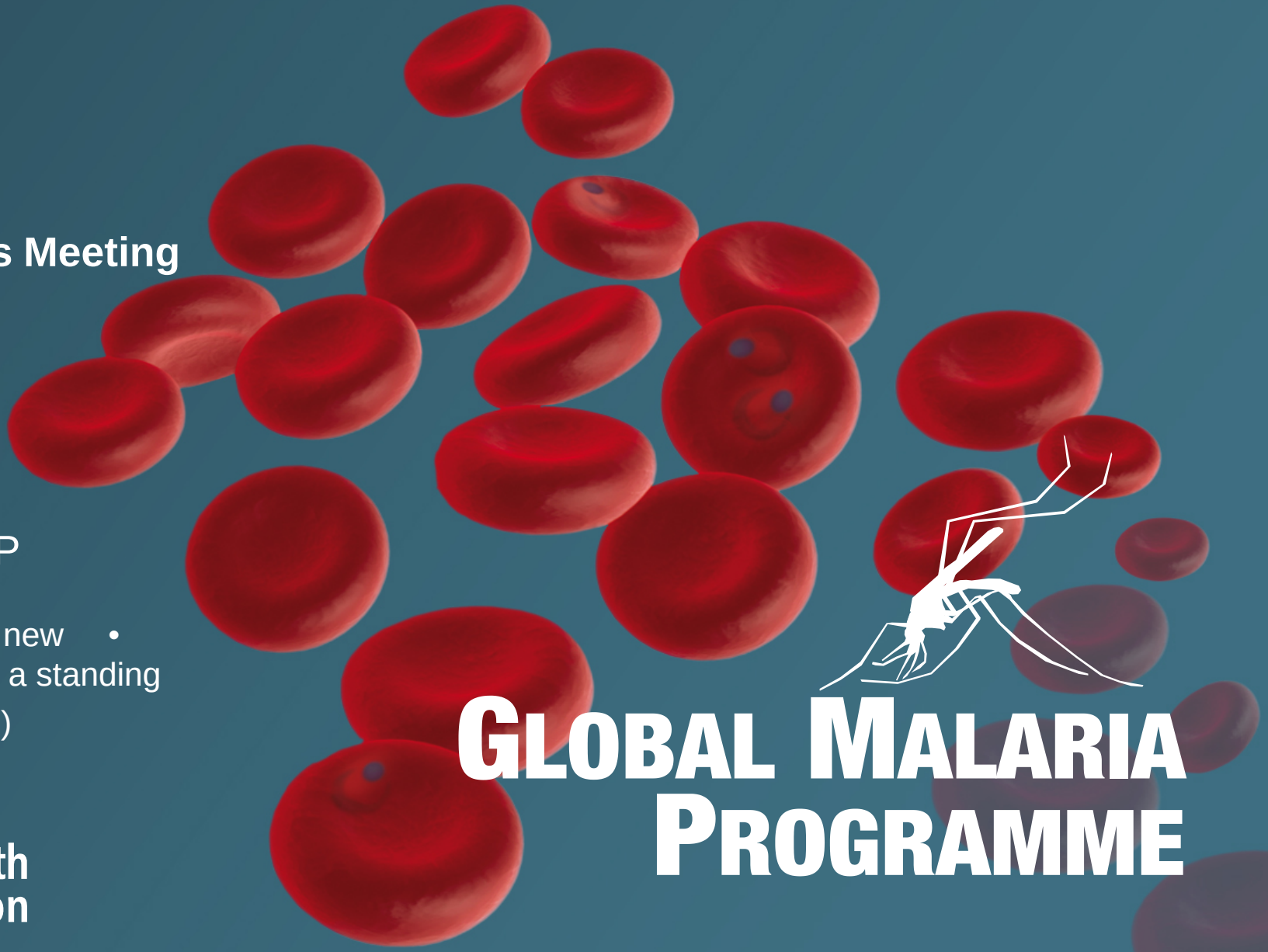
On the advantages of introducing a HOUSEHOLD MALARIA PROTECTION CARD As a common record for all LLIN distribution methods

For discussions* at
AMP Annual Partner's Meeting
17-18 February 2014



Dr. S. Hoyer, VCU/GMP

* (This is a presentation of a new operational concept and not a standing GMP/VCU recommandation)

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Why do we need a HOUSEHOLD MALARIA PROTECTION CARD ?

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Community Malaria Protection Card

IDENTIFICATION OF HOUSEHOLDS REQUIRING PROTECTION

Name of the community: .....

Village name and code: .....

Name and birthday of head of household: .....

Household registration number given by the Village Development Committee: .....

Name of household member and relationship	Birthday	Protected by mosquito net type (Number brand)	Received (Date) Signatures	Justifications of the Village development committee
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Every man, woman and child under a bednet every night!

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Rationale behind the proposition for a HOUSEHOLD MALARIA PROTECTION CARD (HMPC)

- Once established the HMPC's could provide "permanently self-updated household survey", facilitate LLIN coverage surveys and document speed of LLIN loss
- HMPC could empower individuals, households and communities to make justified and well-documented request for timely LLIN replenishments
- HMPC could make household members take better care of "their" by increasing a feeling of ownership
- HMPC could encourage better usage of LLIN by fostering knowledge of the individual's responsibility to achieving community benefits
- HMPC could help to optimally target protection within households and communities if ever required
- HMPC could help to increase equity and avoid wastage caused by duplicate distributions to same individuals and allow for transparent reallocation of LLIN within households
- HMPC should provide the transparency required to detect excessive requests and abuse.

How could universal LLIN coverage be sustained through HOUSEHOLD MALARIA PROTECTION CARDs (HMPC) ?

1. Establishment and training of Community Malaria Workers (CMW) as part of LLIN Campaign micro-planning under joint responsibility of NMCP, district medical officers and village authorities for. ex. Village Development Committees (VDC)

2. CMWs and external volunteers jointly conduct LLIN household surveys by distributing and filling out HMPCs with each household informing them of their rights and responsibilities to be protected but also to protect others by usage.

3. Initial universal LLIN mass distribution campaign is then carried out with all LLIN distributed entered into the HMPCs indicating individual users

4. A HMPC documented, sleeping-space-based gap analysis by individual households is thus possible immediately after the mass campaign coverage.

5. Households are from then on empowered to make justified request for additional LLIN to the CMW who collects them at VEC level.

6. The aggregated request are then conveyed by the VDC to the district and NMCP who send the required top up quantities every quarter re-utilising LLIN mass campaign logistics.

How different LLIN distribution methods could all use and be integrated into the HMPC ?

1. UNIVERSAL OR LLIN COVERAGE CAMPAIGNS
    1. Initial universal LLIN mass distribution campaign is then carried out with all LLIN distributed entered into the HMPCs indicating individual users. CMW enter data VDC verify, collect and aggregate entries

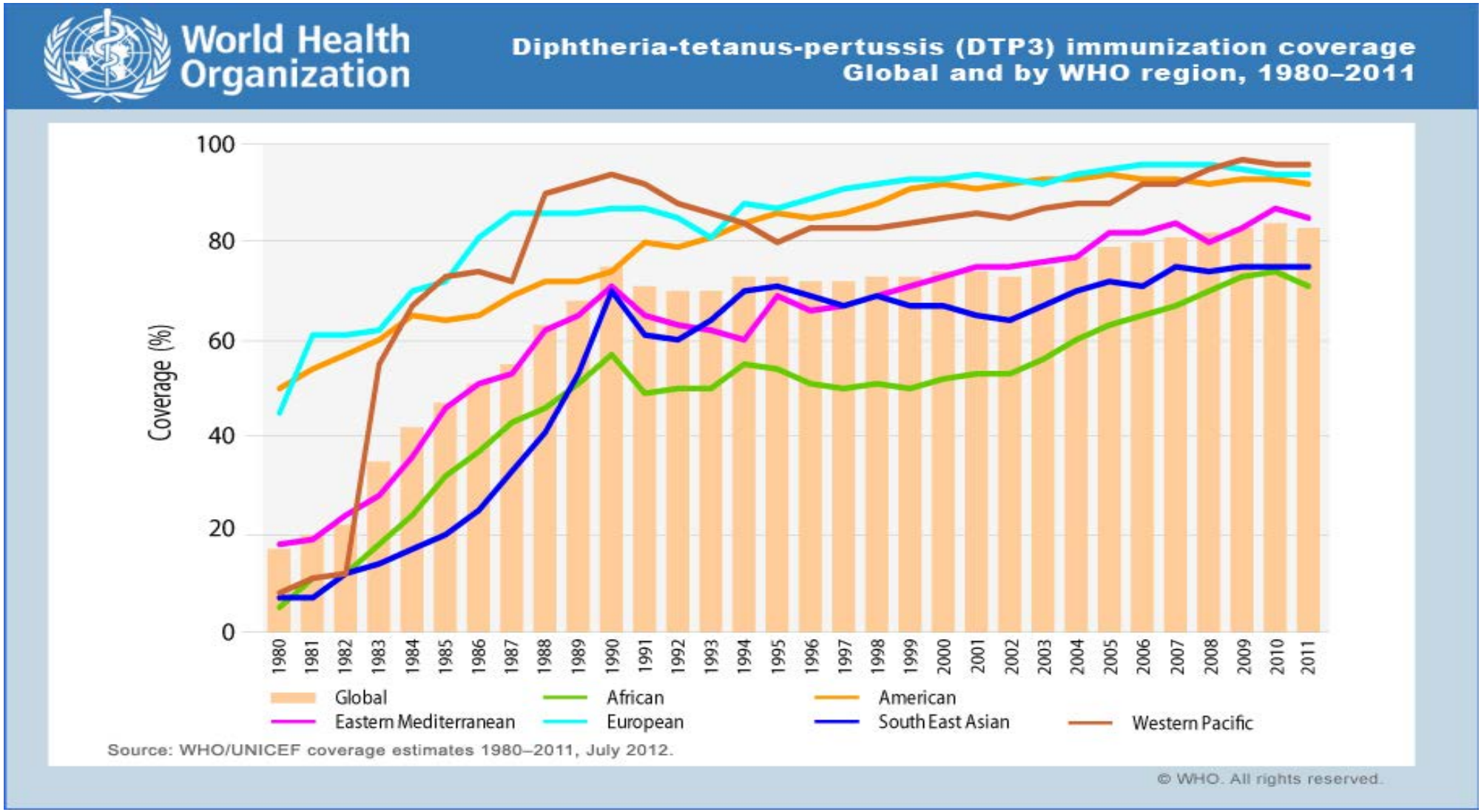
2. ROUTINE DISTRIBUTION OF LLIN THROUGH ANC
    1. ANC Service request presentation of HMPC to enter LLIN delivery
    2. CMW and VDC keep account of pregnant women, encourage visit to ANC services and verify entry

3. ROUTINE DISTRIBUTION OF LLIN THROUGH EPI
    1. EPI Service request presentation of HMPC to enter LLIN delivery
    2. CMW and VDC keep account of children under the age of 1 and encourage visit to EPI services and verify LLIN entry after visit

4. ROUTINE DISTRIBUTION OF LLIN THROUGH DAY SCHOOLS
    1. School request presentation of HMPC to enter LLIN delivery (unless it is a boarding school)
    2. CMW and VDC keep account of Day Schools that might distribute LLIN. If a school based distribution is confirmed, school should insist to be able to enter the LLIN into HMPC

5. ROUTINE DISTRIBUTION THROUGH COMMUNITY TOP UP DISTRIBUTIONS
    1. Households are empowered to make justified request for additional LLIN to the CMW who collects them at VDC level.
    2. The aggregated request are then conveyed by mobile phone to the NMCP who sends the required top up quantities every quarter to the VDC reusing LLIN mass campaign logistics.

Gradually increasing routine EPI coverage in Africa to now 70%
Provides an excellent platform for targeting the most vulnerable

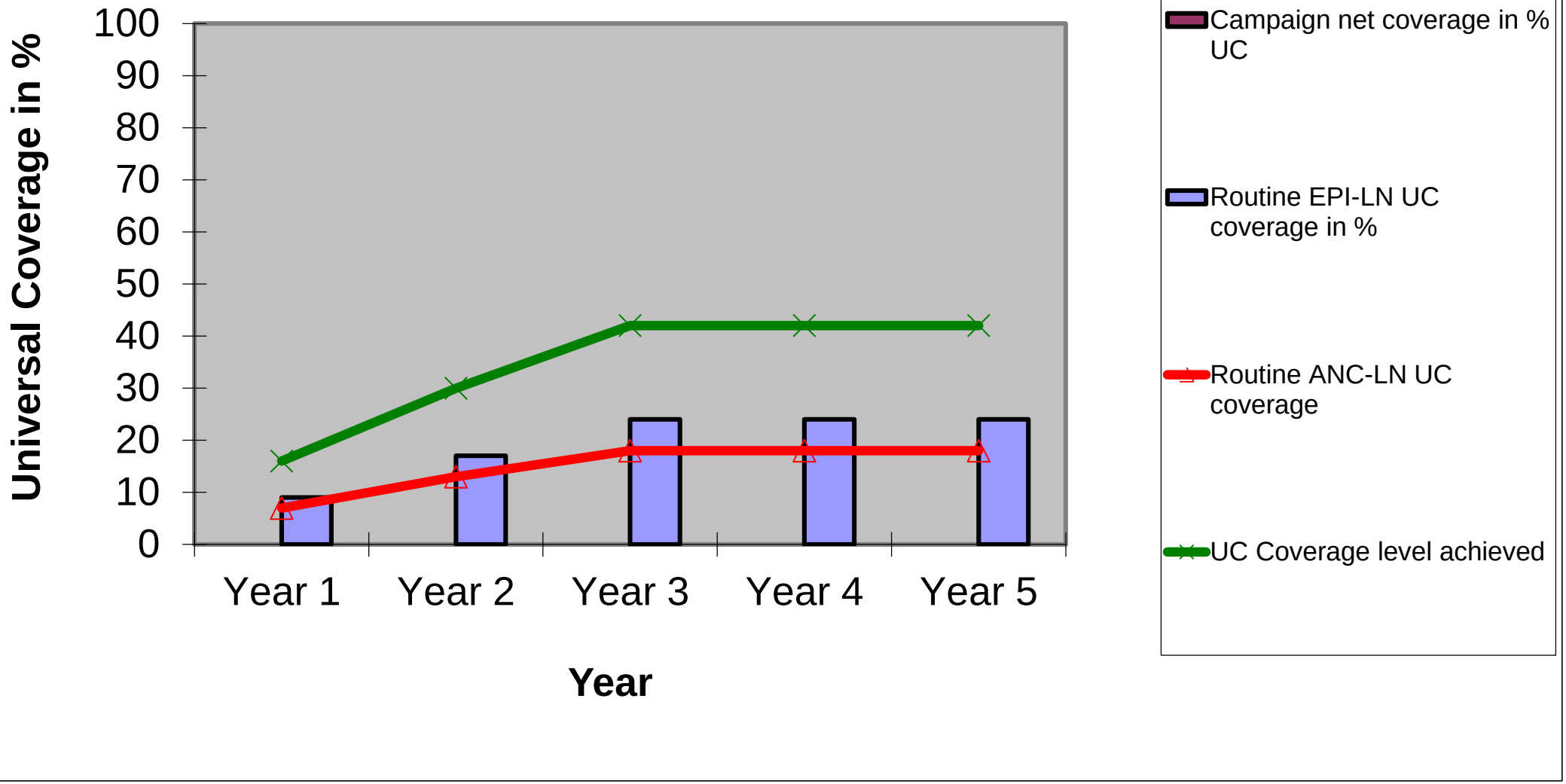


Rationale behind new community-based routine LLIN top-up distribution strategy

1. Out of 44 countries in the WHO African region with malaria

   - 32 adopted a policy of mass campaigns aiming at universal coverage (72%)
   - 33 report implementation of routine LLIN distribution through ANC (75%)
   - 27 report implementation of routine LLIN distribution through EPI (61%)
   - 20/44 of all three recommended LLIN service delivery strategies (46%). (WMR 2012)
   - The extent of sustained access to and coverage achieved by the WHO-recommended combined ANC + EPI routine LLIN distributions is unknown

Target routine distribution can neither secure universal access nor universal coverage:



Shortcomings of the current LLIN service delivery strategy:

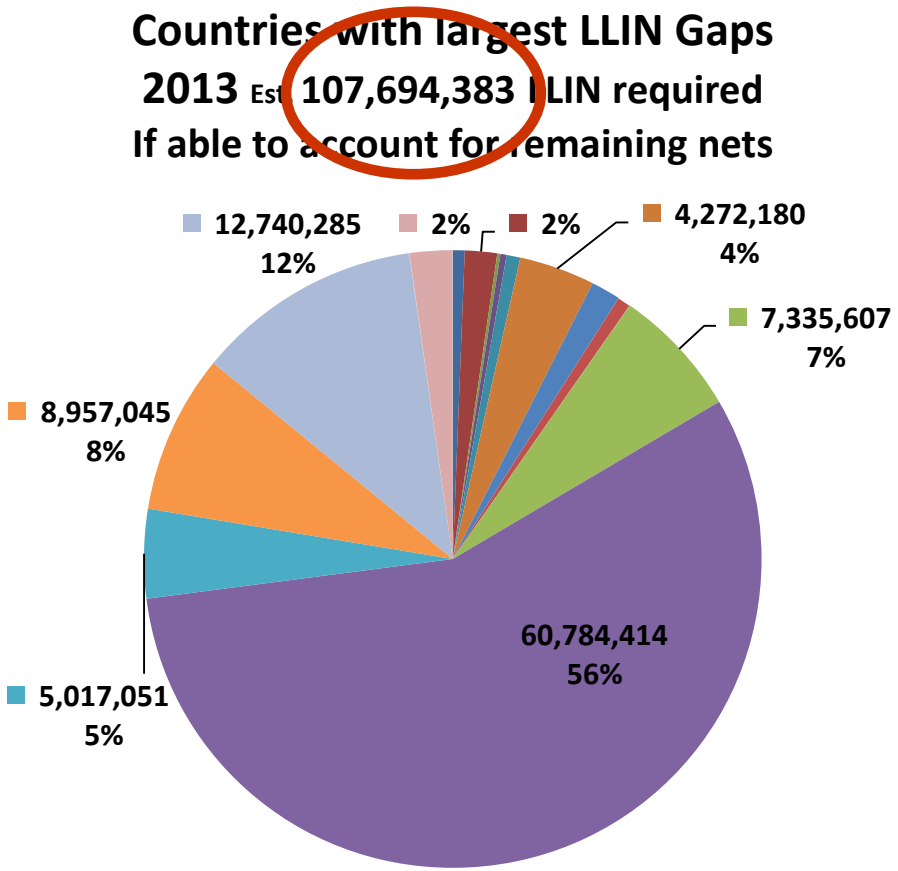
1. LLIN campaigns are very suitable for rapid scale up but not for sustaining high coverage levels.

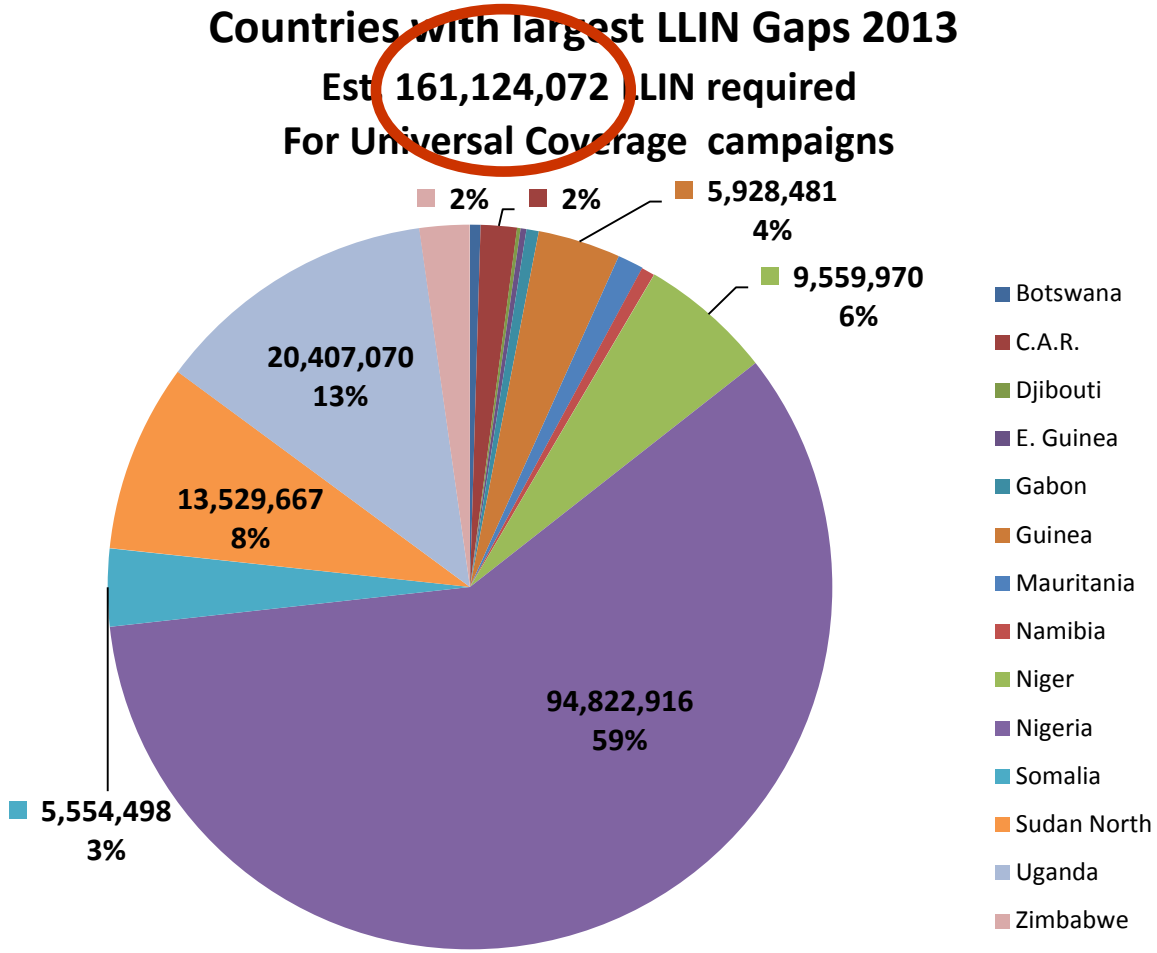
2. When warranted due low residual coverage successive LLIN campaigns do not allow for accounting and optimal usage of remaining nets

3. ANC and EPI routine distributions of LLIN provide very restricted access to replacement nets for the general population, low likelihood of access for households without children (est. at 30% of the population)

4. Each of the three current LLIN routine service delivery strategies (ANC; EPI, SCHOOL) require their own logistic infrastructure while community based top up could use existing LLIN campaign logistics

Illustration that 1/3 estimated savings could be made if LLIN campaign service delivery strategy was followed up with one Capable of accounting for remaining nets





Objectives of a new community-based LLIN service delivery strategy to be tested

- Sustained universal access to LLIN and coverage
- Increased disease impact over current methods
- Lower transport cost
- Lower LLIN replenishment cost
- Lower training cost
- Lower LLIN unit cost through stabilised demand

New LLIN Service Delivery Strategy To Be Tested

Regular Community-Determined Top-Up Distributions
Using LLIN Campaign Distribution Infrastructure and logistics

- Immediate follow-up of mass campaign with top ups of est. 5% of campaign LLIN volume in quarterly intervals to all campaign distribution sites. Quantities to be determined by community and controlled through "Household Malaria Protection Cards" similar to vaccination cards.

Possible advantages:

- Continued universal access to LLIN top up and replacement
- Possibly least expensive and likely most equitable of routine distribution systems (for the same reasons as for the campaigns)
- Additional economies of scale due to joint planning, funding and training with AMP Campaigns
- Could render future campaigns obsolete

Challenges of the method:

- Requires clear redistribution guidelines for receiving villages
- Requires regular supervision of community based redistribution system

Pilot study under preparation

Study site:

On the river Niger 24 villages situated 10 – 50 km upstream and downstream Niamey in the river Niger

Selection criteria of villages:

- Very similar socioeconomic and epidemiologic situation
- Identical rainfall
- Stable malaria transmission

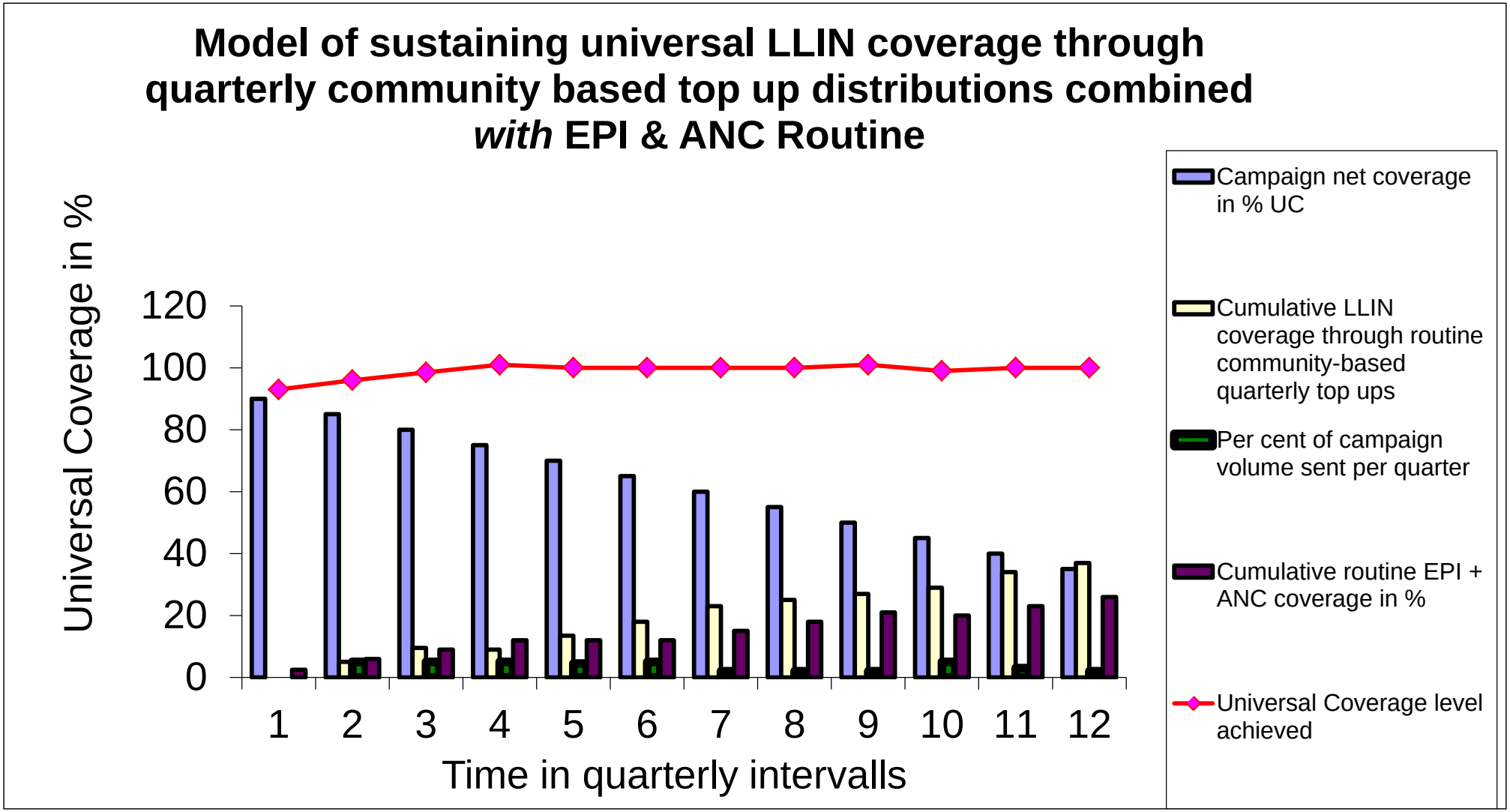
Methods:
A: LLIN campaign followed by community based, quarterly top up vs.

B: LLIN campaign followed by standard routine distribution through ANC and EPI:

- Coverage achieved (bi-annual external coverage surveys)
- Disease impact (through RDT tests of village malaria workers)
- Cost (direct comparison)
- Entomological impact of difference in coverage

Sample size: 12 villages in each arm

Proposed solution to be tested:



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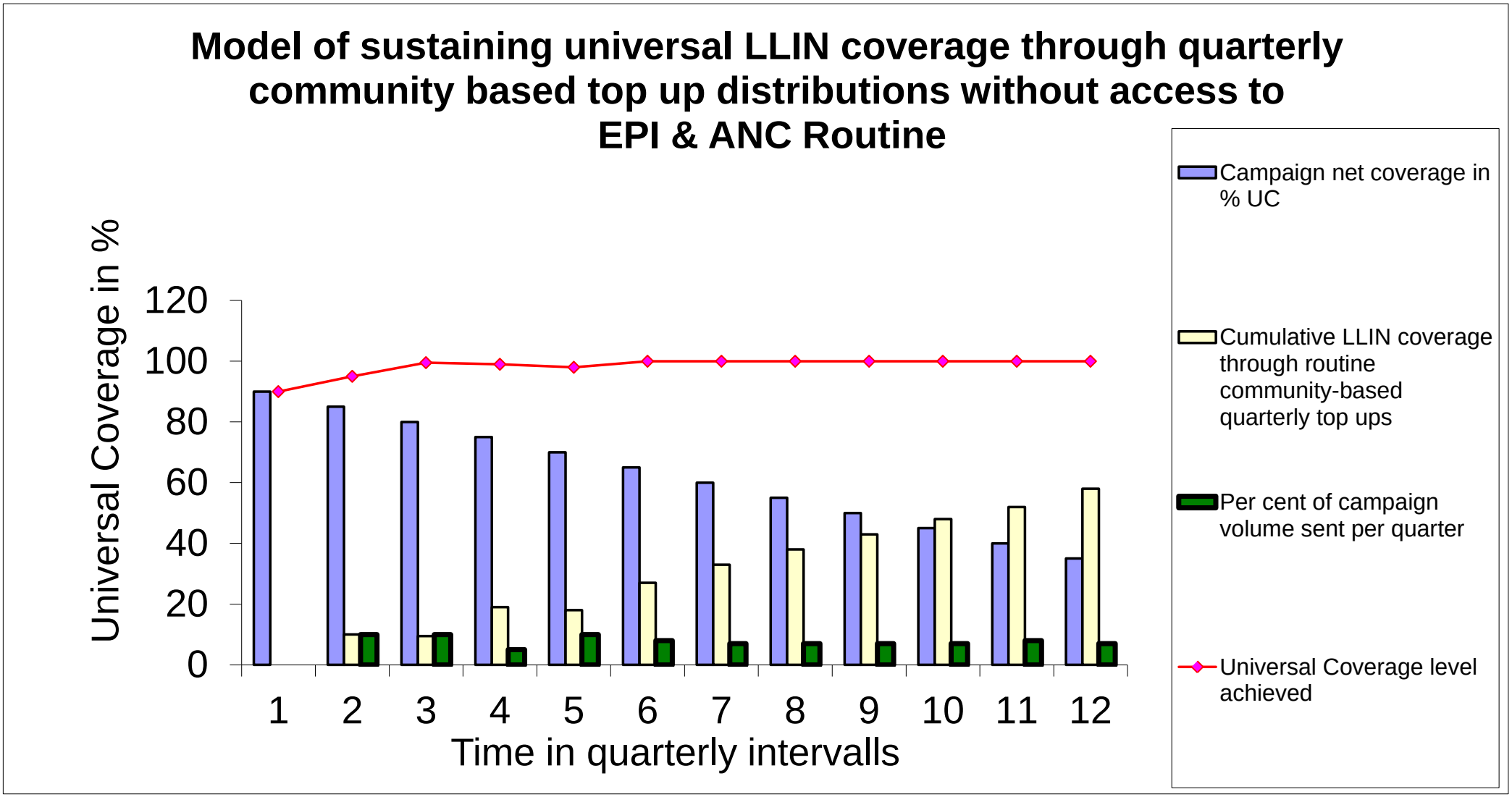

Do you now agree we should introduce HOUSEHOLD MALARIA PROTECTION CARDs ?

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