UNICEF Country Experiences with LLIN Distributions through ANC & EPI

The Good, the Bad and the Ugly...

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GLOBAL FIGURES

• 145 million LLINs were delivered in 2010, but only 70 million in 2012.
• An estimated 53% of households in SSA now have at least one bed net, and 90% of persons with access to a net use it.

UNICEF PROCUREMENT

• Since 2000, UNICEF has procured and helped to distribute over 200 million mosquito nets in over 30 countries.
• Large majority of UNICEF nets are distributed through ROUTINE systems such as ANC & EPI.
Angola

- Since 2013 UNICEF has been coordinating a pilot test of the community-based approach in Caonda municipality in Huila province to directly benefit 1,500 families and 4,500 under-five children.
- 178 CHWs, 80 health providers and 10 trainers have been trained in IMCI & will be provided with essential medications, equipment and supplies, supervised, monitored and motivated to diagnose and treat children less than five years who are sick due with common child killers (including malaria).
- Promote effectively the correct and continuous use of LLINs by the beneficiaries to prevent malaria among under-five children and pregnant women.
- Costs per LLIN are very similar to campaign delivery (approx $2.78 per net), since the nets have to reach the health center

CHWs will receive a monitoring handbook, where they will register families’ demographic, epidemiological and behavioural data to ensure follow-up as well as an instructive booklet.
CHAD

• In 2013 distributed 170,000 LLINS in 12 districts which covered 31 health zones (SASDE) including some emergency areas as part of broader RMMCH/HSS platforms

• LLINs are given to PW at first contact (ANC 1) which is the national strategy

• LLINs are given to children who receive all their routine vaccines

• LLINs are also distributed to malnourished children at therapeutic feeding centers

• Operational costs are considered to only be transport to the districts of approximately $1.5/MILD
Sierra Leone

• Forecasting of nets is carried out by the NMCP using the population figures ie expected number of pregnant women, ANC attendance & EPI coverage rates.

• Distribution is integrated with that of essential medicines and commodities under the Free Health Care Initiative in order to make efficient use of resources.

• Distribution is based on a quarterly matrix prepared by the NMCP which allocates the quantity of nets for each district based on pop.
  • LLINs are taken from the central storage facility to district stores which in turn allocate and distribute to Peripheral Health Units in a “milk run” model – deliver then return to base to restock especially where only small vehicles can access.

• The NMCP carries out regular monitoring of data registers. Data is transmitted from sites thru the HMIS.

• Current distribution costs are based on mostly on mileage particularly at peripheral level which is the major cost driver for distribution. The average was $0.83 – including hiring the truck, offloading & DSA
Challenge: Access to affordable, high quality LLINs

- If financing is available, lead times are still 2 – 6 months from the time of starting the procurement process to delivery in country.
  - Delayed funding affected implementation of activities in many regions
  - Timing when nets enter country to avoid rains, elections, etc.
- Local Production
  Production capacities of WHOPES recommended LLINs in sub-Saharan Africa is still limited
Challenge: Routine “vs” campaign

• **Avoiding stockouts** by ensuring sufficient nets are available to meet demand (requiring ordering on time, storage) can be expensive and requires supportive interventions such as M&E and efficient tracking systems.

• Competition with campaigns – often “Routine nets” are thrown into campaigns to make up numbers leaving no nets for routine the following year.
Challenge: Quantification

• How many pregnant women are expected and whether and when they will come for ANC?
• How many children will complete EPI?
• When to schedule delivery – at first or last contact?
Challenge: Logistics

- Contracting to deliver to provincial/regional capitals
  - Chad: Even though transporters were contracted to deliver close to the community at the regional capital, they were deposited in the national capital and then had to be transported back (an additional 600 kms in either direction)

- Packing in the appropriate containers
  - Chad: LLINs were transported in 40 ft containers, even though where these were deposited there are not cranes that could support the weight. This broke two cranes.
  - Mozambique: LLINs were packaged in ballots weighing up to 28kg each hence it difficult for porters to carry. In some cases, ballots were split locally in order to resolve the problem making stock accountability challenging
  - Unloading containers can be a challenge when there is no crane (Kenya, Angola)
Challenge: Transportation

The less mass-transport can be used, the more the cost goes up

**DRC**: when the Congo River was used cost went down but when have to use trucks the prices goes up exponentially

**Weight**

Different bales weight more and/or take up more room adding to freight costs.

**Road infrastructure and rains**

**Kenya**: rain and bad roads delayed delivery in some areas.

**Timing of transport vehicles**

**Regularity of deliveries**

Land-locked countries have the most difficult terrain and have the longest delivery times.
Challenge: Difficult Terrains
**Fixed point distribution:**

- **Cons**
  - People might need to travel long distances
  - Need to have some “token” to exchange against fixed number of nets (could be lost, forged, etc.)

- **Pros**
  - Nets are at a central point
  - Can deliver multiple interventions

**House to house distribution**

- **Cons**
  - Nets are heavy
  - Security of those distributing the nets
  - How many nets to carry?
  - Privacy (if male head of HH is not present might not permit)

- **Pros**
  - Can see immediately how many are in the HH
  - Can help hang-up immediately
Challenge: How many interventions to integrate?

Different targets

• in the era of “universal coverage” integrating LLIN distributions with polio vaccinations can be very difficult as it is not the same strategy eg. House to house vs. fixed point distribution and polio often require multiple « sweeps » in order to cover everyone.

• EPI denominators are not always exactly the same as those used by the NMCP, which makes quantification & operationalization very difficult

When are too many interventions too much?

• Togo: 5 different interventions at the same time: Ivermectine, praziquantel, Vit A; deworming and LLINs

• Madagascar: 20 different interventions, including family planning.

When are opportunities to increase child survival being missed?

• Kenya: too few CHWs so only did public health messaging
Challenges: Installing LLINs in the home

• Lack of knowledge or accessories needed for hanging up the LLINs
  • E.g. strings (long enough), hooks, hammer
• Construction of houses can make the installation more difficult
  • E.g room sizes, material of the walls and ceilings
  • In Rural Kenya majority of houses have two rooms with sitting room turned into bedroom at night. Nets have to be removed during the day and stored away.
  • Also some people especially children sleep on the floor and hanging nets were difficult to hang in this situation
• Psycho-social perception
  • Airlessness, heat, claustrophobia
  • Rejection of white nets in some communities due to association with death as pieces of white netting materials are used as lining materials in coffins
Challenge: Communication

- Communication activities are often under-budgeted
- Fund for communication are often taken out of community mobilization and put in “launch” activities or mass media
  - Interpersonal community activities, such as incentivization of CHWs are more effective but more expensive
- How to show effectiveness of communication/BCC/IEC activities?
- Need for social mapping of refusals to use nets. Critical data for evidence based Advocacy, Communication & Social Mobilization (ACSM) lacking
- Limited involvement of suppliers/manufacturers in ACSM. The suppliers don’t invest in demand creation outside promoting their brands
- ACSM is campaign oriented and not in build into national plans
- ACSM for ITN use is also integrated in communication strategy for child health but funding still remains a challenge
Challenge: Community Level & Rumors

Community Level (Kenya & Mozambique)

- Several mobilizers were observed to have insufficient knowledge or ability to transmit key educational messages about the use of LLINs. (Kenya)
- In some areas, appropriate local leaders were not at all involved or contacted regarding nets being distributed.

Spreading of rumors

Cameroon: Without enough sensitization or proper understanding of how to air LLINs prior to use, some people who had minor irritation convinced others to throw away their LLINs.

DRC:

- Rumors spread from Belgium for political reasons convinced some that the nets were poisoned and so they were burned.
- LLIN sellers convinced the population that LLINs distributed by “white” NGOs would render those slept under them impotent.
Challenge: Warehousing

- Multiple points of storage: provincial level, district level and distribution point require careful planning (infra-structure and human resources)
- Consignments were freighted to districts after clearing from the port of entry to minimize warehousing costs
- Some districts were not ready to receive the nets due to lack of space, inadequate resources to hire space
Challenge: Security

- Security costs escalate due to delayed funding for distribution
- *Kenya*: Theft/pilferage was reported leading to rationing in few districts.
- *Cote d’Ivoire*: 1000s of nets were stolen in the wake of election violence
Strategies used for success

• Good coordinated leadership at the central level with engagement of key stakeholders.

• Strong and timely logistics to ensure availability of LLINs
  • Distribution tools such as census/distribution forms and stock management reporting forms are present at sites on time and local teams knew how to use them

• Tailoring IEC to local context
  • E.g. in rural areas without mobile phone or radio access organize and disseminate information through respected community leaders, e.g. discussions by the village chief at weekly village meetings, door to door visits by the local mobilizers who were known members of the community and fluent in the local dialect.
  • In more urban areas use local radio stations to broadcast information about using nets and reinforce educational messages.

• Entrust and empower local leaders,
  • E.g. local health centers staff and local mayors to educate their constituents, participate in (e.g. quantification) and ensure net usage

• Community level mobilizers
  • Can conduct education sessions on how to hang up the LLIN and how to wash and care for the nets – as well as distributing nets.
Lessons learned

- Success comes from use of multiple strategies
- LLINs were effectively organized and delivered using a variety of local transport methods across difficult terrain to even the most remote sites, including by truck, canoe, and cart and carrying ballots of LLINs on a porter’s back.
- Timely informing of communities to facilitate participation and stimulates demand
- Avoid stock-out to ensure that women and children keep coming back to receive more nets
- Strong community support and engagement of local leaders
Merci
Thank you
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