These days Dr. Elizabeth Juma, head of the Division of Malaria Control (DoMC), doesn’t give much thought to continuous distribution of long-lasting insecticidal nets (LLINs). She knows that the nets are where they are supposed to be when they are supposed to be. She knows that every pregnant woman and child under one year in a malarious part of the country can take home a free LLIN from a health facility at any time, without fail. She knows that rural families who need more LLINs can buy them locally for an affordable price, about the same as for a plastic basin. She knows that the net distribution machine works.

Getting to this stage has taken 10 years of working hard and learning lessons. But now the system runs smoothly; Dr. Juma is free to focus on building up and strengthening other important efforts to drive down malaria in Kenya, knowing that, when it comes to nets, they’ve got it covered.

The Kenyan MoH is convinced of the effectiveness of LLINs. The Ministry has made LLIN distribution the primary malaria control intervention, aiming for Universal Coverage in malarious areas. The DoMC has a clear vision and plan to achieve this. Continuous distribution systems are a crucial complement to free distribution campaigns, maintaining the coverage that campaigns build. The DoMC’s smooth and efficient continuous distribution system is a model of how to do this well.

**The Kenya Model: Key Achievements**

- ITN ownership increased nationwide from 22% in 2003 (DHS, 2003) to 44% in 2005 (PSI/Kenya). By 2008, after the initiation of free mass distributions in 2006, coverage had risen to 56% (DHS, 2008).
- A high turnover system: more than 17 million LLINs delivered between 2001 and 2010 through continuous channels alone.
- Almost no stock-outs of LLINs in health facilities.

Secured funding for the country-backed strategy for over 10 years is attracting additional donors to the strategy.

**The Kenya Model: Key Information**

- A carefully designed continuous distribution model that includes multiple mechanisms:
  - Free LLIN distribution through ANC and EPI in health facilities in all malarious provinces in the country.
  - Socially marketed LLINs available at ~$0.55 USD (~49 Kenyan Shillings) in malarious rural areas (more than 7 km from an urban area).
  - Since these interventions began in 2001, modifications have been made over the years in response to findings from solid partner-led monitoring and evaluation activities. A large part of the current success is due to this 10-year period of development and learning.
  - The DoMC works in partnership with NGO and private-sector partners.
  - The DoMC maintains policy decision-making, leadership, and oversight of the system itself and of their main NGO partner, PSI/Kenya.
  - PSI/Kenya and the commercial sector run a dedicated LLIN delivery system.
  - PSI/Kenya works closely with the district health management teams (DHMTs) on day-to-day management.
  - All donors or partners support the principal of ‘one strategic plan, one monitoring and evaluation plan, and one implementation plan’.
- Intense supervision means that data return is good and stock levels are checked. (DMHT) supervision is complemented by PSI/Kenya supervision activities.
REASONS FOR SUCCESS

Kenya works on the principle of the ‘three ones’—one strategy, one co-ordinating body, and one monitoring and evaluation plan. This is not just jargon; the leadership and partners whole-heartedly support this approach and adhere to it at all levels.

One Strategy

Kenya firmly stands behind its chosen strategy, requesting all donors and partners to adhere to it. Having evidence that the strategy is working makes this task easier. Important aspects of the strategy that contribute to its success include:

Flexible training. Whilst the DoMC includes training on LLIN distribution as part of their standard midwife training or malaria refresher trainings, they have devolved responsibility for maintaining training levels to PSI/Kenya, which does this in collaboration with DoMC personnel. PSI/Kenya uses a flexible approach to training, with no set training course in place. Rather, they roll out trainings, or ‘briefings’, every year focusing on specific areas, e.g. data management or communication. The focus of the training will be either related to changes in the system or a response to issues arising from supervision activities. Staff turnover is a problem in Kenya, as elsewhere, and new staff are identified by the DHMTs and oriented by them to the system, as well as being briefed by visiting PSI/Kenya supervisors.

“Let’s face it, distribution of such bulky commodities is a headache. I am happy for a company to be paid to take it on and let us concentrate on service delivery”.

Rebecca Kiptui, DoMC

Dedicated supply chain. In the Kenyan model all continuous distribution of LLINs is undertaken by the private sector. Stocks are held regionally and moved out by vehicles hired on annual contracts. A PSI/Kenya staff member travels with the vehicles, visiting every health facility once each quarter to deliver LLINs, monitor the net distribution records, and cross-check the stock balances. This means that the delivery and supervision roles overlap under the clear oversight of a dedicated field officer. Generous buffer stocks that are built into the system at a number of levels are another major contributor to the lack of stock-outs.

Intense supervision. Supervision plays a major role of the extensive personnel network involved in supporting the distribution systems. In the health facility supervision is done in parallel. DHMTs are responsible for all health facility activities in their districts and conduct integrated support supervision activities. As mentioned, PSI/Kenya also have field officers who visit every health facility at least once each quarter along with the delivery vehicles. This is important to the effective supervision approach: Supervision is closely linked to the logistics system, as described below. Also, in the social marketing approach there is a bonus system to promote effective supervision: PSI/Kenya field staff are eligible for monthly bonuses based on the numbers of LLINs turned over, coverage of LLINs in the intended outlets in their area, and absence of stock-outs. This helps ensure that the socially marketed nets are being sold in the right places for the right prices—something often a challenge in similar systems.

Effective communication and community support. District and health facility staff consider the community’s support a major reason for the success of the system. Thanks in large part to the strong communication programme undertaken by the DoMC in partnership with PSI/Kenya, communities are aware of and respect the threat of malaria, want to obtain LLINs through the distribution system, and let district authorities know of instances of theft or sale of ‘free’ LLINs in shops. Also, community members take part in groups such as community management committees, which support health facility operations.

Whilst the programme is committed to ‘one strategy’, the Kenya experience shows that adapting programme approaches based on evidence and the changing environment is important to success.

Dynamic and responsive planning. Even though the overall model has been in place for 10 years, Kenya has adapted the approach based on lessons learnt along the way, particularly about bridging the gap from ownership to use, increasing access for the poorest groups, and reducing occasions for leakage of nets to the open market. Such improvements have been made possible by good monitoring of what is working and what isn’t, and a strong Technical Working Group in the DoMC ready to consider the needs of the system and support changes.

One Co-ordinating Body

Strong leadership ensures coherent co-ordination of a solid partnership with consistent donor support. The DoMC co-ordinate activities through the Vector Control Working Group.
Strong national leadership. The strength and vision of the DoMC in Kenya underpins the success of their continuous distribution model. The DoMC leads and co-ordinates the approach, making the partnership work for them. Co-ordination meetings of the Vector Control Technical Working Group, hosted and chaired by the DoMC, take place quarterly (or monthly if needed) without fail and are well-attended. The existence of this body is a crucial reason for Kenya's success; under their Terms of Reference, they do not just discuss and plan but also monitor and push progress. They are required to report to the Malaria Interagency Coordinating Committee and are accountable for results. This is a key way in which the DoMC are able to keep things moving and maintain their leadership and stewardship over partners’ activities.

“Kenya’s MoH knows that partners have strengths; they use these. They don’t see this as giving up control; rather they realize that leading a partnership will ensure MoH is in control of a successful model”.

Dr. Kalu Akpaka, WHO Kenya

Solid partnership. Kenya has a well-functioning health system and a good track record in attracting donor funding. Even with all these favourable characteristics, the Kenya DoMC recognized the importance of not going it alone when planning their model. Their health system works better than many in the region, and yet the DoMC knew that getting LLINs to all health facilities and shops in rural areas, maintaining stocks, and ensuring quality and data flow were outside the capacity of their already overstretched system. The DoMC works with a solid and focused partnership of two key donors (DFID and USAID) and a dedicated implementing partner (PSI/Kenya) that works closely with the private sector and some grass-roots community-based organizations to ensure success. The partnership is broad in that it crosses sector boundaries, but it is crucially,centred on a few strong, dedicated, and responsive partners.

Consistent donor support. Consistent and responsive donor support has been key to Kenya’s success. The UK’s DFID have supported the model for 10 years. The US’s President’s Malaria Initiative (PMI) is now beginning to provide support. This donor support is crucial, given that the distribution model relies on the presence of field supervisors and a dedicated private logistics system. Data showing that the system is working have been important to assuring donor support. Kenya’s experience shows that often donors are prepared to pay for a system with fairly high distribution costs if they know that it works. Dr. Gladys Tetteh of CDC/PMI considers Kenya’s strong leadership and commitment to results to be a crucial reason for the continued donor backing (see box at below).

“Kenya’s success has been closely linked to strong leadership and data-driven planning. They know what they need and they know what they want. Donors respond to that. They make a donor’s life easy”.

Dr. Gladys Tetteh, CDC/PMI

“The single main reason DFID has continued to support the LLIN distribution model for 10 years is the clear demonstration of results”.

Anita Kaushal, DFID Kenya

Supportive Environment

Well-functioning and funded health system. Kenya’s health system is not perfect, but it is far better than many others in the region. MoH supervision and training promote high quality in many areas. Whilst maintaining staffing levels are still a challenge, staff are present at most times in most health facilities. Levels of ANC and immunization uptake are extremely high (>90%). This is a solid foundation on which to build health facility-based LLIN distribution. Whilst the introduction of LLINs to this system was not without its hurdles—health staff in Kenya are just as overworked as in many other places—it has benefited hugely from being part of a functional health system.

And finally…time. Kenya’s continuous distribution model has existed for 10 years. Changes have been made along the way, but the same distribution channels have been used throughout this period. Only through attention to performance, frank assessment of what has worked and what has not, and improvements to the model over the years, has Kenya reached the success it has now achieved.
THE BIG PICTURE

A few underlying issues interact to lead to Kenya’s impressive achievement: LLINs available all the time to families at risk in malarious areas. The figure below illustrates how specific activities feed into and work together to maximize results. The central three rings show what Kenya has achieved. The outer sections show what activities or model components have made these achievements possible and how these activities interact. The three key issues of donor support, strong leadership, and solid partnership underpin the achievements and also reinforce each other.

LOOKING TO THE FUTURE

Kenya has an excellent continuous LLIN distribution mechanism. It has achieved this by being vigilant about what is working and what is not and about what is needed and appropriate in a changing context. The DoMC are continuing in this vein and are currently considering:

- Expansion of existing work with the commercial sector and using these partners more strategically
- Broadening donor involvement so the system is not so heavily reliant on a few donors
- Increasing the government’s financial support for the system
- Monitoring more closely consistent access to free LLINs, i.e. whether all eligible clients are offered and accept LLINs.

Good general health system functionality

- Families believe malaria is a threat, believe that LLIN are a useful and desirable way to prevent malaria.
- People want LLINs for their whole family, are able to obtain them when they need them, and do so.
- LLINs are available to most families who need them at all times, through health facilities or at low cost in rural shops.

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