Community-based LLIN Continuous Distribution Pilot

Malaria Consortium’s long lasting insecticidal net (LLIN) continuous distribution pilot in South Sudan aims to provide a sustainable method of replacing LLINs in households where they may have been destroyed, damaged or lacking.

**Project Outline**

In South Sudan an estimated 70 percent of the population living in endemic areas is at risk of contracting malaria. Malaria accounts for 20-40 percent of morbidity and over 20 percent of mortality seen at health facilities (South Sudan Malaria Indicator Survey, 2009). It is the leading cause of death in all age groups. Currently, the most common malaria prevention strategy is the mass distribution of LLINs. Since 2008 more than nine million LLINs have been distributed across the country.

Despite distribution, net ownership remains low with 59 percent of households in South Sudan having at least one net, and 25 percent having at least one net for every two people. Coverage in Lainya County is at 66 percent of households owning at least one net and 19 percent having enough nets for every household member.

While Lainya County is close to the national target of 70 percent, modelling shows that, even if universal coverage is attained, net ownership will still decline due to wear, tear and loss. This was evident in the survey conducted on the evaluation of coverage, retention and use of LLIN post-distribution in Northern Bahr el Ghazal, which showed that only 77 percent retained their nets beyond six months.

Although mass campaigns have been conducted in South Sudan, universal coverage targets have not been reached and other ‘keep up’ strategies have not been tested as a way to maintain coverage. Survey data also shows that net retention is poor in this context but there is limited evidence on net durability. These contextual factors made South Sudan an ideal location for the field-testing of continuous distribution channels. Already based in South Sudan, Malaria Consortium was selected to implement the study. The Ministry of Health (MoH) National Malaria Control Programme strategy for malaria prevention also promotes the use of mixed methods to increase net ownership and use, thereby supporting the initiative.

**Country**
South Sudan

**Donor**
Department for International Development/UKaid
USAID (NetWorks project)

**Length**
October 2011–March 2013

**Partners**
Republic of South Sudan National Malaria Control Programme (RoSS NMCP) Central Equatoria State Ministry of Health, Lainya County Health Department, USAID Networks, UNICEF South Sudan, Population Services International (PSI) South Sudan
In April 2011, Malaria Consortium investigated the feasibility of launching a pilot for the continuous distribution of LLINs in South Sudan. Field visits to Northern Bahr el Ghazal and Central Equatoria states indicated that community-based distribution would be the optimal approach. Lainya County was selected based on several criteria, including accessibility, relative security, and adequate storage at county and payam levels.

Malaria Consortium, together with the MoH, began preparations for a LLIN continuous distribution pilot in October 2011 to test whether universal coverage can be maintained through a continuous LLIN distribution system.

The system keeps mosquito nets in the community at all times, in storage units established in Primary Health Care Centres/Units (PHCC/Us) in all five payams, including rural hard-to-reach areas. The pilot uses a ‘pull system’ to ensure storage facilities never run out of stock. Community members receive net coupons from community level health workers - Net Coupon Holders - who are posted throughout the county at specified times. Coupon recipients can redeem from PHCC/Us during normal operational hours. Based on current figures, coupon redemption is at 92 percent, which has already exceeded its target of 80 percent.

Malaria Consortium has taken the lead on designing the pilot’s study and supervising its implementation, including coordination with the National Malaria Control Programme, and implementing partners UNICEF South Sudan and Population Services International South Sudan.

**Project Objectives**

The objectives of this project are to:

- Test community-based distribution systems in South Sudan
- Determine the scalability, accountability and cost-effectiveness of such a model
- Determine the effectiveness of such systems in maintaining universal coverage of nets
- Guide policy on LLIN distribution in South Sudan

**Key achievements:**

- Conducted baseline survey with a sample of 600 households with ethical approval from the MoH
- Procured and sourced 50,000 LLINs
- Distributed and tracked over 23,500 LLINs and more than 25,600 coupons to ensure no stock-out
- Achieved 92 percent countywide net coupon redemption

- Established 14 LLIN storage facilities at health centres to ensure accessibility to nets
- Trained 198 pilot volunteers - 160 community workers and 38 primary healthcare facility staff in community distribution of LLIN, malaria prevention and behaviour change communication to promote net uptake and use in the community
- Over 1,100 household visits conducted by Net Coupon Holder Supervisors to track coupon redemption, net availability and use

This project has a direct impact upon Malaria Consortium’s efforts to:

- Promote the use of mixed methods for improving malaria prevention and control strategies
- Build capacity and develop human resources at community, county and state level
- Engage in behaviour change communications for the use of LLINs
- Provide evidence to support policy and practice through operational research
- Monitor and evaluate impact and results
- Advocate for and support policy change

A Store Keeper and Net Coupon Holder oversee distribution in Birigo village, Wuji Payam, Lainya County