**INTRODUCTION**
South Sudan has an estimated 25 percent of the population living in endemic areas at risk of contracting malaria. Malaria accounts for 20-40% of mortality and over 20 percent of morbidity seen at health facilities (MSF, 2009), it’s 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 5 million LLINs have been distributed through mass campaigns and routine health services.

Despite distribution, net ownership remains low with 35% of households in South Sudan having at least one net, and 25% have at least one net for every two people (MSF, 2009). Coverage in Lainya County - with 66% of households owning at least one net, 35% having enough nets for every household member - is close to the national target of 70%. Modelling shows that, even if universal coverage is attained, net ownership will still decline due to wear, tear and loss.

The purpose of the pilot in South Sudan aims to provide a sustainable method of replacing LLINs in households where they may have been destroyed, damaged or lost.

**OBJECTIVES**
- Test community-based distribution systems in South Sudan.
- Determine the sustainability, 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.

**METHODS & MATERIALS**

**Study site**
Lainya County is located in Central Equatoria state, 100 km south of Juba, the capital of South Sudan. The county is 5,300 km² and has a population of 240,055 (35,164 households). The population is served by a network of 21 functional health facilities (one hospital, 4 PHCC and 1 PHU), and 29 health workers including one doctor, ten nurses and six medics (Health Facility Mapping, 2010).

**Pilot design**
The continuous distribution system keeps bednets in the community at all times in storage units established in Primary Health Care Centres (PHCCs) and in all 5 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 health workers - Net Coupon Holders - who are posted throughout the county at specified times. Coupon receivers can redeem from PHCCs during normal operational hours.

The pilot includes a system for determining the eligibility of persons/households that should get more nets, as well as criteria for selecting those members of the community who will determine whether or not the household is eligible. The design also takes into consideration the various stakeholders in the community and the community administrative structure, to ensure full community participation and sustainability.

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

At the current net coupon redemption rate of 95%, the pilot has already exceeded its target (90%).

**BASELINE SURVEY**
The overall goal of the survey is to establish baseline information on the pilot community in Lainya County. A total of 50 households were interviewed (6-27 Apr 2012) with a focus on the following key areas: level of household ownership, net use, LLIN attrition, physical condition of current net, and equity in ownership. A key result was that ITN ownership of at least one ITN is equitable, 66%, and close to national target of 70%, and only 15% have enough ITN for every person in the household. In addition to an ownership gap there was also a use gap leading to an overall very low rate of only 13% of the population using an ITN the previous night.

**BASELINE HOUSEHOLD SURVEY**
Conducted baseline survey with a sample of 50 households with ethical approval from the Ministry of Health

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- Residents of Lainya County
- Lainya volunteers

**DONORS**
- Department for International Development (UKaid)
- USAID (Networks project)

**REFERENCES**
1. South Sudan Malaria Indicator Survey 2009, Ministry of Health, Republic of South Sudan, Juba, 2009
2. Health Facility Mapping (2009-2010), Ministry of Health, Republic of South Sudan, Juba, 2010

**CONCLUSIONS**
- BCC is key – constant communication and information about the use of nets is necessary to maintain community demand for nets.
- Strengthened partnerships and ongoing support supervision is crucial to the success of the pilot.
- Avoid overloading busy health workers by assigning net coupon and redemption responsibilities to auxiliary staff.
- Understand the context, be flexible and adapt – increasing geographic access may be more important than service hours.
- Continuous distribution requires heavy logistical support.

**Figure 1:** Map of Republic of South Sudan with Central Equatoria province and county.

**Figure 2:** Figure illustrating how the Continuous Distribution System works.

**Figure 3:** The continuous distribution system keeps bednets in the community at all times.

**Figure 4:** PHCC/US, Store Keeper 14.

**Figure 5:** Quantity Breakdown of pilot study execution and outcome.