Continuous LLIN Distribution

Piloting School Net Distribution in Mainland Tanzania

TANZANIA

MALARIA

Lessons in Brief No. 9

In 2013, Tanzania piloted a large-scale school distribution of LLINs to children in grades 1, 3, 5, 7 of primary school, and grades 2 and 4 of secondary school. From June to July 437,930 nets were delivered in three regions, through 2,302 schools. The pilot found that it is feasible to rapidly and equitably distribute large number of nets through the School Net Program to the community, and that school teachers play a pivotal role in mobilizing and organizing students during the issuing process.

BACKGROUND

After completing two massive long-lasting insecticide-treated net (LLIN) campaigns for children under age 5 and for universal coverage, in 2011 Tanzania commissioned an assessment of options to maintain universal coverage through a combination of continuous channels. The country attained universal coverage, reaching over 90% ownership of at least one ITN in the 2011-2012 THMIS, and the challenge was to find ways to maintain this coverage. In addition to its voucher scheme to deliver nets to pregnant women and infants, Tanzania decided that schools presented a promising opportunity to distribute nets to a wide range of implementation households on a yearly basis. By March 2012 the plan had been approved and implementation begun.

STRATEGY

The school distribution strategy involved delivering free LLINs to all school children in primary grades 1, 3, 5, 7 and Forms 2 and 4 (second and fourth years of secondary school). This included 2,302 primary and secondary schools in three regions: Lindi, Mtwara, and Ruvuma—all in the southern zone. The strategy is based on the idea that because school enrollment is high in Tanzania, delivering nets to school children through a series of school campaigns over time is likely to eventually reach a majority of the households. Schools provide a fixed point of distribution and teachers are easily able to manage distribution of nets, keep accurate records, and lead discussions of the importance of net use. Existing school registration data provides an accurate quantification for procurement and planning.

Successful implementation required partner coordination and funding from multiple sources. Operational costs for the School Net Program pilot were funded by the Swiss Agency for Development and Cooperation through the Swiss Tropical and Public Health Institute, which has been providing long-term technical support to National Malaria Control Programme (NMCP). The US Agency for International Development's Presidential Malaria Initiative funded procurement of the LLINs and distribution of nets to the respective schools. The Tanzania Red Cross Society rebundled the nets and transported them from zonal level to the schools, and provided security for the nets during transport and storage. The head teacher at each school received and safely stored nets, and teachers of the targeted classes distributed them between June and July 2013.

TRAININGS

Compared to a mass campaign, there were many more distribution points, which made logistics challenging. Prior to the trainings, the strategy was introduced at advocacy meetings at regional and district levels. Nearly 10,000 people at national, district, and school levels were involved in the exercise. In November 2012, 12 master trainers were trained at the national level. These trainers then conducted district-level trainings of 64 regional and district malaria coordinators and school health coordinators. Each of these individuals then trained the ward education coordinator and two teachers (the head teacher and a health teacher) from each school in the ward. Each ward covers five to six primary schools and one or two secondary schools. A total of 4,481 teachers from 2,302 schools together with 426 ward education coordinators were trained.

REGISTRATION

Class teachers, supervised by health and head teachers, registered eligible school children. Eligible school children were those in Standard 1, 3, 5 and 7 and Forms 2 and 4. This exercise was successfully completed in all primary and secondary schools where a total of 437,930 eligible school children were registered.

Schoolchildren after net distribution in Ruvuma

LOGISTICS

A total of 510,400 LLINs were procured and distributed to all schools in Lindi, Ruvuma, and Mtwara regions. Each school was provided 100,000 Tanzanian Shillings (USD $62) through the School Bank Accounts to pay for people to guard the nets prior to issuing to the students; nets were kept at school level for a short time in order to avoid leakage and fraud. The Tanzania Red Cross Society provided transport of nets from Dar es Salaam to the districts, then immediately rebundled the nets into groups for each school, and sent them to the schools the following day. Temporary storage of nets was not a challenge for most of the schools. Altogether, net transport took two weeks.

Teachers organized assemblies in all primary schools to introduce the pilot, and explained why nets were being distributed to students, why every class would not get a net every year, and how to use and take care of the nets. Students were encouraged to share nets with other households if their families already had enough from the mass campaigns, so that households without children in school could benefit from the distribution.

Unlike school pilots in Ghana and Nigeria, teachers did not receive nets, which presented some challenges. Many teachers felt they should be included in the distribution or be paid per diem since they were ensuring that children were getting nets. Including teachers in the quantification for the next round is being considered.

ISSUING NETS

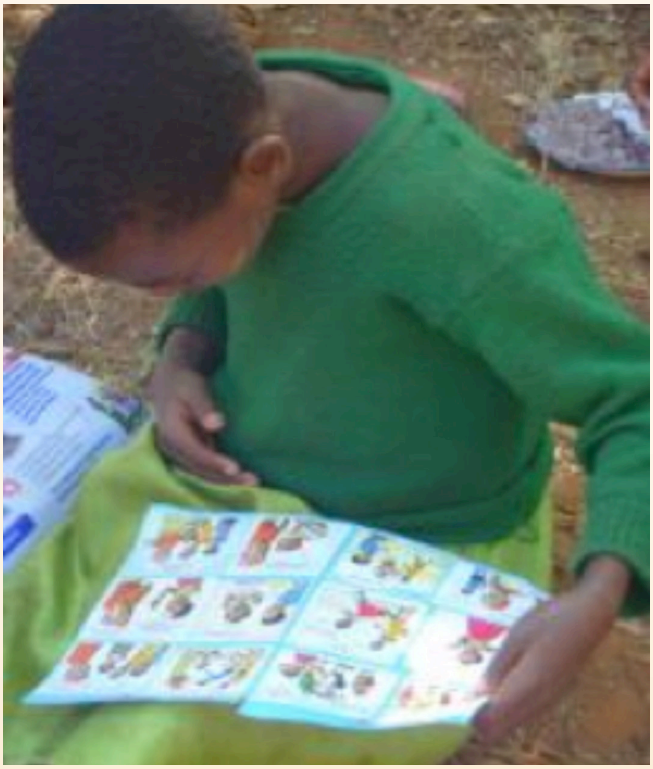
Attendance in school was very high on the days of issuing nets in the three regions, and the children were excited. Children rarely get something new for themselves, and many kids expressed great joy that they were getting a brand new net. Children in the non-targeted classes were disappointed that they would not receive nets. The strategy of encouraging redistribution of nets to needy households was a challenge—most head teachers said that children would not share nets with other households, but perhaps within their families. Schools needed only a half-day to complete distribution in all the classes.

A child in P3 signs for his net

A total of 437,930 LLINs were issued to school children, and the remaining 72,070 nets were stored as buffer stock at the district medical officer's office in each district. Experience from the mass campaigns showed that this amount of buffer was needed to accommodate unregistered households, so a 10% bufferstock was provided. School registration was slightly lower than expected, resulting in additional remaining nets. LLINs from the buffer stock will be given to eligible school children who were not registered during the registration process, and to cover institutional sleeping spaces in orphanages, hospitals, and military installations.

COMMUNICATION

Local radio stations broadcast spots about the school pilot because national radio stations would have reached people living in the non-pilot areas, causing confusion. Unfortunately, local radio stations are generally less popular, so exposure to the six radio spots was low, particularly in Lindi where there were no local radio stations. The stations also brought in district and regional trainers to talk about net distribution and answer questions from callers. The Pata Pata children's radio program also promoted the school net pilot and the redistribution of nets to needy households. Community change agents spread the word through their community activities and newly developed print materials. Mobile video units were deployed to Lindi and Mtwara regions to boost messaging. Nearly 30 Peace Corps volunteers participated in teacher trainings, and during distribution these volunteers talked to kids, filled out forms, and compiled reports. They also disseminated messages and facilitated discussions on the Pata Pata radio program. Omnibus survey results from just after the distribution indicated that the majority of people had heard about the School Net Programme either through radio (24%), or through school communication channels, including school children (30%). To improve the overall reach, in the next round of school distribution, pending funding availability, school-based communication will be reinforced.



A schoolgirl reviews the Pata Pata comic book after receiving her net.

SUPERVISION

The NMCP and partners supervised registration and issuing of nets to ensure procedures were followed, forms were filled in correctly, and to help resolve challenges. Some teachers did not quite understand how to correctly fill in the forms and may not have been fully briefed by the head and health teachers. The youngest kids, in primary 1 (ages 6–7), were not sure if they could take their nets home; some worried about bullies taking their nets, but there were no reports of this happening. Some parents came to school to ensure the net got home safely. Primary 1 students were often not yet able to sign their names, but by standard 3 this was no longer a challenge.

In addition to providing supervision, the Swiss Agency for Development and Cooperation provided funding to conduct an independent procedural audit, ensure adequate procedures for distribution and issuing of LLINs are in place, and make recommendations for future distributions.

PAYMENTS

Getting payments to the 10,000 people involved in the pilot was a major challenge. The SwissTPH NETCELL project tried to use M-Pesa™ to send reimbursements to trainees and teachers by mobile phone, but mobile networks were not always available or working correctly, and payments expired after seven days, sometimes before the recipient could travel to an area within network range to claim the payment. Moving around the country with large amounts of cash was difficult and stressful. Bank transfers were also used, but accounts were not always active, and about 6% of the 5,000 transfers were returned by the bank.

MONITORING AND EVALUATION

Ifakara Health Institute worked with the NMCP in the design and implementation of a monitoring and evaluation plan. A household survey was conducted to evaluate the outcomes of the pilot, and found that in the 37% of households that had an eligible child, 81% received a net from the school programme. Those not receiving a net were either not present that day, at boarding school, took the net to a different household, or simply didn't get a net. Of children who were in class on the day of distribution, roughly 95% received a net. Three years earlier, just after the UCC, ownership of at least one net in the southern zone was 94%. Following the School Net Programme, ownership of at least one

net was 80%. This indicates that households have kept their UCC nets despite their age. Moreover, the percent of households that had enough nets (1 net for every 2 people) was 49% in the Southern Zone (57% among eligible households), and 23% in the Lake Zone, which did not have any school distribution. With three years elapsed since the mass campaign however, the relatively small number of nets from the first year of the school distribution may not have been able to re-establish high access levels on its own. The NMCP will be repeating school distributions in the pilot areas to determine if this approach, in conjunction with ANC and EPI channels, can achieve high coverage.

LESSONS LEARNED

"The program was good because it increases the net coverage to the household and communities were happy for children to receive nets."

- Dr. Alex Hamis (Regional Malaria Focal Person, Lindi)

1. It is feasible to rapidly and equitably distribute a large number of nets through the School Net Program to the community.
2. School teachers play a pivotal role in mobilizing and organizing students during the issuing process.
3. The School Net Program successfully and rapidly delivered nets to eligible children, but more work is needed to determine whether this strategy is providing sufficient number of nets, with a wide enough reach, within sufficient time-interval to maintain universal coverage.
4. The demand for free nets is very high and has to be managed carefully.
5. Nets are very bulky commodities and logistics for their transportation need to be worked out carefully and well in advance to ensure smooth flow of activities.
6. Registration of the school children is a lengthy, labour-intensive and costly process. The results from the pilot show that the children registered through the School Net Program correspond very closely to the data from the Ministry of Education and Vocational Training so in future rounds this registration process could be omitted.
7. Tailor finance mechanisms to different areas. Areas with limited mobile networks may need to pre-position funds and staff who can issue payments and manage accountability forms.
8. The School Net Program's ability to maintain coverage (e.g. at least one net for every two people) at 80% or higher depends largely on the baseline coverage. If the coverage is low, the School Net Program will not be able to bring up coverage.
9. The number of nets shared between households in the evaluation survey was negligible, and is likely to be dependent on overall coverage levels and number of excess nets in the households. If coverage is low (e.g. insufficient nets for all sleeping spaces) intra-household sharing might not be a feasible option. This will affect the reach of the School Net Program into the communities.

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