

QUARTERLY REPORT 23 JANUARY – MARCH 2010

Achievement and Maintenance of Comprehensive Coverage with Long Lasting Insecticidal Nets in Tanzania (AMCC)

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Rolling Continuation Channel (RCC)



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LIST OF ACRONYMS

AMCC	Achievement and Maintenance of Comprehensive Coverage
ANC	Antenatal Care
A - Z	A to Z Textile Mills Limited
BCC	Behaviour Change Communication
COMMIT	Communication and Malaria Initiative in Tanzania
DED	District Executive Director
DMO	District Medical Officer
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GPS	Global Positioning System
HP	Hati Punguzo
IHI	Ifakara Health Institute
IRKs	Insecticide Re-treatment Kits
ITN	Insecticide Treated Net
IV	Infant Voucher
JHU	Johns Hopkins University
KPI	Key Performance Indicator
LLIN	Long Lasting Insecticidal Net
M&E	Monitoring & Evaluation
MEDA	MEDA Economic Development Associates
MoHSW	Ministry of Health and Social Welfare
NMCP	National Malaria Control Programme
PMI	President's Malaria Initiative
PSI	Population Services International
PWV	Pregnant Woman Voucher
RCH	Reproductive and Child Health
RM	Regional Manager
RMO	Regional Medical Officer
SMT	Senior Management Team
TNVS	Tanzania National Voucher Scheme
U5CC	Under Five Catch-up Campaign
UCC	Universal Coverage Campaign
USAID	United States Agency for International Development
VEO	Village Executive Officer
VTS	Voucher Tracking System
WEO	Ward Executive Officer
WVT	World Vision Tanzania

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EXECUTIVE SUMMARY

LLINs issued to under-fives in three zones; green light given for Dar es Salaam U5CC.

Through the Under Five Catch-up Campaign (U5CC), a total of 2,267,728 LLINs were issued to children under five years of age in Central, Northern and Coast zones this quarter. At the end of the quarter the U5CC had been implemented in 20 of 21 regions. Implementation in Dar es Salaam region did not take place this quarter as planned due to shortage of funds for LLINs; however, in March MoHSW announced that it would provide approximately TZS 3 billion to cover the shortfall so that U5CC in Dar could be implemented in April and May.

Universal Coverage Campaign (UCC) piloted in Mwanza. A pilot to test UCC training, Standard Operating Procedures, and campaign materials successfully took place January 10th to 19th with 600 PMI-funded LLINs distributed in three different villages in Mwanza Region. A comprehensive pilot report was developed using input from all partners and stakeholders, outlining pilot methods, results, and recommendations for the UCC moving forward. The findings of the pilot study have been used to amend and improve the registration cards, training, report formats and procedures.

Nearing the four million mark for redeemed Pregnant Woman Vouchers. This quarter 129,229 PWV were returned to MEDA, bringing total PWVs returned since program inception to 3,965,214. We will hit the four millionth PWV mark in April. 116,594 Infant Vouchers (IV) were also returned this quarter, with 1,373,614 returned over the life of the program. The cumulative redemption rates stand at 70% for PWV and 57% for IV.

LLIN and “Hybrid” vouchers start flowing in. This quarter witnessed significant returns of LLIN vouchers, with 55,110 LLIN PWVs this quarter. 56,826 LLIN IVs returned over the same period. Word has also trickled down to pregnant women and caregivers of infants that they may now redeem their old value vouchers for LLINs at a fixed top up of TZS 500. As a result, 8,073 Hybrid PWVs and 5,127 Hybrid IVs were returned this quarter.

A-Z matches PMI contribution for LLINs to retailers. MEDA, through funding from PMI, will be providing a one-time subsidy to existing retailers in the form of an initial stock of five LLINs. A-Z has also made a commitment to match the PMI contribution and will provide an additional five nets per retailer, allowing for total subsidized stock of ten LLINs per retailer. In order to be eligible for this subsidy, retailers must purchase a minimum of five nets. This “buy five, get ten” scheme will help the retail sector to establish an LLIN inventory position and enable the recruitment of retailers to the program.

Reporting of retailer recruitment goes mobile. In an effort to better track the progress of LLIN retailer recruitment nationwide, MEDA made some interesting technology developments this quarter. We piloted a web-based form that is accessed through a mobile phone so that each time a retailer is recruited, the A-Z Sales Representative can input the retailer data into the phone and submit it real-time into a jointly-managed database. Other SMS reporting methods were developed and tested to assess the possibility of collecting data from retailers on net sales and stock levels.

MEDA Quarterly Report gets a makeover. To increase the readability and provide a more logical flow to the quarterly report, MEDA is introducing a new reporting format this quarter. The report has been structured into four strategies: the first is related to mass-distribution campaigns, the second to the voucher scheme, the third related to improved management systems and the fourth to behaviour change communication (BCC).

BACKGROUND AND RATIONALE

In October 2004, MEDA and the donor community, under the auspices of the Tanzania Ministry of Health and Social Welfare (MoHSW), launched a collaborative effort to increase the availability of insecticide treated nets (ITNs) to pregnant women and infants in Tanzania through the Tanzania National Voucher Scheme (TNVS).

Pregnant women and children under the age of five are most vulnerable to malaria. Pregnancy reduces a woman's immunity to malaria, making her more susceptible to infection and increasing the risk of illness, severe anaemia and death. For the unborn child, maternal malaria increases the risk of spontaneous abortion, stillbirth, premature delivery and low birth weight - a leading cause of child mortality. According to Roll Back Malaria (www.rollbackmalaria.org), malaria kills a child in the world every 30 seconds, mostly children in Africa.

Malaria is both preventable and treatable. To date, effective preventive and curative measures have been developed; however, sleeping under ITNs remains an important strategy for protecting pregnant women and their newborns from malaria-carrying mosquitoes. Research shows that ITNs reduce placental malaria, low birth weight, and abortions and stillbirths in women living in malaria affected regions of Africa. Sleeping under ITNs can also reduce overall child mortality by 20 per cent. Most recent data on household use of ITNs reveal low coverage rates of around 5 percent across Africa. TNVS is an effort to boost coverage rates among pregnant women and infants in Tanzania.

TNVS makes ITNs widely available to pregnant women and infants in Tanzania through vouchers that subsidize the cost of nets at appointed TNVS retailers throughout the country. The voucher system targets sustainability and accessibility by facilitating the distribution of ITNs through a public-private partnership of clinics, wholesalers and retailers.

MEDA is responsible for the logistical coordination of the program and for ensuring availability, accessibility and affordability of vouchers and ITNs across the country. MEDA has staff members in each region who monitor voucher activity at health clinics and retail shops, recruit and register additional shops into the program and share information on the unfolding of TNVS on the ground on an ongoing basis. To accomplish this, MEDA works closely with program stakeholders, including local government officials, local organizations, clinic staff and the private sector.

MEDA and its partners have recently rolled out an upgraded Hati Punguzo (HP) voucher, which extends and enhances the current TNVS program. The purposes of the upgraded voucher are to:

- 1) Increase the quality of bed nets by switching from an ITN that consists of a polyester net bundled with an insecticide re-treatment kit, to a Long Lasting Insecticidal Net (LLIN) that comes pre-treated, lasts longer, and does not require retreatment.
- 2) Increase the affordability of bed nets by reducing the top-up amount to be paid by the recipient to a fixed TZS 500.

In addition, MoHSW, along with its partners, determined that ITN coverage was not being achieved quickly enough among the important demographic - children under the age of five years. The solution to address this challenge has been to embark on a catch-up campaign that would rapidly increase coverage of this vulnerable group to a more desirable 80 percent. MEDA was selected as the logistics contractor for a one-time, free distribution of LLINs program, titled: "Under Five Catch-up Campaign" (U5CC) which began in 2008 with an

integrated measles campaign in Tanga region and continued rolling out in 2009 and 2010 in remaining regions.

As part of scaling up for maximum impact, MoHSW decided that achieving coverage among vulnerable groups would not be adequate to meet targets in reduction of malaria-related morbidity and mortality in short time frame. Therefore, MoHSW has begun the rollout of the Universal Coverage Campaign (UCC) in which MEDA will play a major role. The goal of the campaign is to provide LLINs for all sleeping spaces which were not covered during the U5CC through a mass distribution approach resulting in high ITN ownership and coverage countrywide. In addition to this it will create the market for a sustainable TNVS.

This report has been structured into four strategies:

1. **Contribute to efficient and effective LLIN distribution campaigns:** This specifically refers to LLIN procurement, and the logistics of registration and LLIN issuing for U5CC and UCC;
2. **Contribute to effective and efficient initiatives that endure ongoing and more sustainable distribution of LLINs:** TNVS, and includes information on Pregnant Woman Vouchers (PWV), Infant Vouchers (IV), the voucher distribution chain, and the private sector based voucher redemption chain;
3. **Support the development of improved systems for management, training and monitoring & evaluation:** Address cross-cutting systems such as Human Resources, Information Technology, Fraud Control, and Monitoring & Evaluation;
4. **Support acquisition and nightly use of LLINs through behaviour change communication activities:** Refers to BCC activities supported by the Achievement and Maintenance of Comprehensive Coverage (AMCC) grant such as community mobilization for UCC, as well as voucher promotion to consumers and retailers.

MEDA's quarterly reports include information on both Global Fund and PMI funded activities since both donors contribute to the above strategies, however, activities supported by each donor can be easily identified in the donor specific data tables provided in Appendix A of this report.

STRATEGIES

Strategy 1: Contribute to efficient and effective LLIN distribution campaigns

1.1 Under Five Catch Up Campaign (U5CC)

1.1.1 U5CC Activity Summary

Table 1 summarizes U5CC activities during the quarter. Upon completion of the campaign in quarter 24, MEDA will verify data for all zones and provide a summary for all zones countrywide.

Table 1: U5CC Activity Summary for January – March 2010

Location	Children registered	LLINs procured	LLINs issued
Central Zone	n/a	1,065,748	1,052,750
Northern Zone (excl. Tanga)	n/a	587,808	567,293
Coast (excl. Dar es Salaam)	597,502	663,860	647,685
Total	597,502	2,317,416	2,267,728

1.1.2 Planning

Preparations for U5CC activities in the Dar es Salaam region began in late March upon receiving word from NMCP that the Government of Tanzania would contribute the required funds to allow for implementation of the campaign in this last remaining region. MEDA senior management attended courtesy calls to government officials at regional and municipal levels. Regional Managers completed data collection pertaining to WEOs, VEOs and the number of streets in each district. Registration in Dar es Salaam is scheduled to take place in late April and issuing during the third week of May at which time the U5CC will be complete in all the 21 regions of mainland Tanzania.

1.1.3 Registration of Children under Five

This quarter, registration occurred in Morogoro and Pwani regions of Coast zone from January 27th to February 2nd in which a total of 597,502 children under five were pre-registered.

1.1.4 Procurement and Delivery of LLINs for U5CC

Based on registration data collected in the previous quarter (including a buffer), 1,065,748 LLINs were procured and subsequently delivered to Central zone (Dodoma, Manyara and Singida), and 587,808 were procured and delivered to Northern zone. [Note: Northern Zone is Kilimanjaro, Arusha and Tanga regions; however, Tanga region is excluded here because U5CC was implemented in Tanga during an integrated campaign jointly with national vaccination campaign in August 2008.] In addition, 663,860 nets were procured and delivered to Coast zone, Morogoro and Pwani regions, with the exclusion of Dar es Salaam region due to funding shortages.

In total, 2,317,416 LLINs were procured this quarter for U5CC. Of the LLINs procured, 871,080 were funded by PMI through the AMCC grant, and 1,446,336 were funded by Global Fund and MoHSW.

1.1.5 Issuing of LLINs to Children Under Five

LLINs were issued to children under five in three zones this quarter. From January 29th to January 31st issuing occurred in Central zone where 1,052,750 children received LLINs over the three day period. From February 5th to 7th, 567,293 children received LLINs in Northern zone, and from March 19th to 21st, 647,685 LLINs were issued in Morogoro and Pwani regions of Coast zone.

1.1.6 Challenges and Actions Taken

There were delays in issuing of LLINs in Central zone where issuing was originally scheduled to occur January 5th to 7th but actually occurred January 29th to 31st. In addition,

issuing in Northern zone was delayed from the planned January 15th to 17th until February 5th to 7th. The delays were due to an appeal to the Public Procurement Appeals Authority (PPAA) made by an unsuccessful bidder in the LLIN delivery tender claiming that they had been unfairly disqualified. The PPAA heard the case and ruled that the bidder had been correctly disqualified but noted that procedures did not fully follow the Tanzanian Procurement Act, and therefore ordered a re-tender. MEDA conducted a re-tender in accordance with the PPAA wishes but the result did not change. Net distribution was delayed during the period of the re-tender.

In Dumila village of Kilosa district in Morogoro, a village chairperson and two volunteers were accused of stealing seven and a half bales of nets which were in transit from the VEO office to the issuing point. The story was highly publicized in the media and the accused have been taken to court. LLIN issuing took place as planned after the MEDA Regional Manager secured sufficient nets from the Ward level buffer stock and delivered them to Dumila. The MEDA Zonal Manager investigated and provided a full report to headquarters. The stolen nets were later recovered, so additional nets were not sent to this village. The Zonal Manager's report on this incident is included as Appendix B.

Several districts in Coast zone were short nets upon delivery. MEDA discovered that this was our fault due to human error during data entry of village data into packing lists. Having caught the error, we quantified the shortfall and immediately placed another order with A-Z to deliver the extra nets to meet the requirement. In future, MEDA will employ a stricter verification process to avoid such errors.

1.2 Universal Coverage Campaign (UCC)

1.2.1 Planning

A Universal Coverage Campaign (UCC) pilot to test UCC training, Standard Operating Procedures, and campaign materials successfully took place January 10th to 19th with 600 bed nets distributed in 3 different villages in Mwanza Region. A comprehensive pilot report was developed using input from all partners and stakeholders which outlined the pilot methods, results, and recommendations for the UCC moving forward. The findings of the pilot study have been used to amend and improve the registration cards, training, reports, and procedures. The full pilot report is included as Appendix C of this report.

Negotiations are also ongoing and proposals have been submitted to the MoHSW regarding MEDA's role as logistics contractor for net procurement and distribution under Global Fund Round 8. While formal contract signing has yet to take place, progress has continued for preparation and planning of the campaign.

This quarter also saw the development of a number of other supporting materials for the UCC including the MEDA Training and Procedures manual, Registration and Issuing reports and forms, and the final approved version of the Universal Coverage Registration Card (UCRC) booklets.

Throughout the quarter regular meetings of the UCC Taskforce -- comprised of representatives from NMCP, MEDA, WVT, and PSI -- helped to make policy decisions, align partner schedules and materials, and continue to move the UCC planning forward. Standard Operating Procedures outlining the step-by-step roles of all program stakeholders and policies were also created and continuously refined and completed.

Training of VEOs, WEOs, and registration of sleeping spaces for the UCC will begin upon Global Fund Round 8 contract signing whereas procurement, delivery and issuing of LLINs can begin only upon the selection of an LLIN supplier. Data on number of volunteers trained, number of sleeping spaces registered, number of nets procured and distributed will be presented in future quarterly reports.

1.2.2 Challenges and Actions Taken

The delays in Global Fund Round 8 contract signing and finalization of bid documents for the LLIN supplier is a challenge for all implementing partners in the campaign because these delays alter the completion date of the campaign. The lengthy international tendering process for the LLIN supplier is the main obstacle to completion of the campaign by the desired date of October 2010 before the national elections. MEDA's ability to implement the campaign is also jeopardized by delays if the end date falls after March 31st, 2011 when the bulk of MEDA's funding for its infrastructure (running costs and staffing) will be depleted under Global Fund RCC.

Once MEDA and other partners have signed contracts with MoHSW and a start date is set, MEDA will work with NMCP and other implementing partners to revise the UCC roll out schedule. Once the approximate end date is known, the concerned stakeholders will also identify any additional resource requirements if campaign end date is forecast past March 31, 2011.

Strategy 2: Contribute to effective and efficient initiatives that endure ongoing and more sustainable distribution of LLINs

2.1 Pregnant Woman Voucher (PWV)

2.1.1 PWV Activity Summary

Table 2 summarizes PWV procurement, distribution and redemption for the quarter and cumulatively.

Table 2: Pregnant Woman Voucher Activity Summary

	Procured	Distributed	Returned	Redemption Rate
Quarter 23	500,000	474,025	129,229	54%
Cumulatively	6,650,000	6,900,150	3,965,214	70%

2.1.2 PWV Procured

This quarter MEDA received 500,000 LLIN PWVs from Idube Printers in South Africa. At the end of this quarter, the total number of PWVs procured since launch in 2004 stands at 6,650,000 vouchers, of which 1,000,000 are LLIN PWVs.

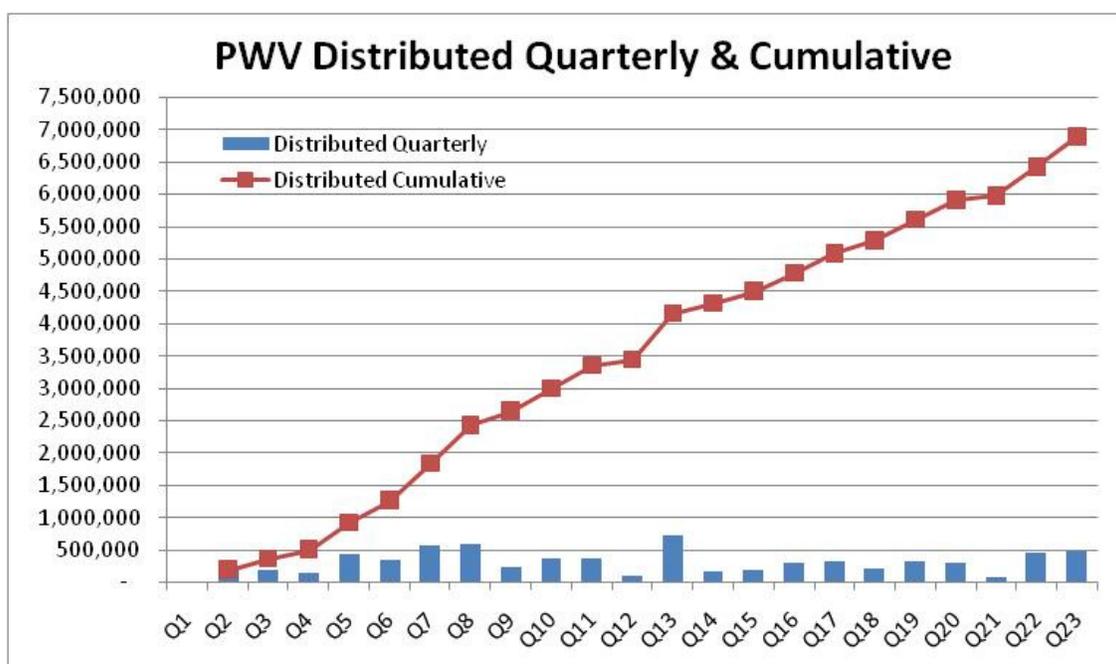
2.1.3 PWV Distributed to Districts

Voucher books are continually replenished at district level and subsequently at RCH level. MEDA sends a three month stock of PWV books to the District Medical Officer (DMO) where they are stored securely. Clinic staff members regularly collect new books in exchange for

stubs of used vouchers. They are encouraged by MEDA to perform this exchange when stocks at clinic level reach 50%.

Distribution of PWV continued this quarter through support from the Global Fund. In total, 474,025 LLIN PWVs were distributed to districts in the 23rd quarter: 10,650 in January, 244,350 in February, and 219,025 in March. Total PWV distribution to districts at the end of the quarter stands at 6,900,150, of which 4,727,625 vouchers were distributed under GFATM support and 2,172,525 under PMI support. Chart 1 shows the actual number of PWVs distributed per quarter and cumulatively since July 2004.

Chart 1: PWV Distributed to District Medical Officers



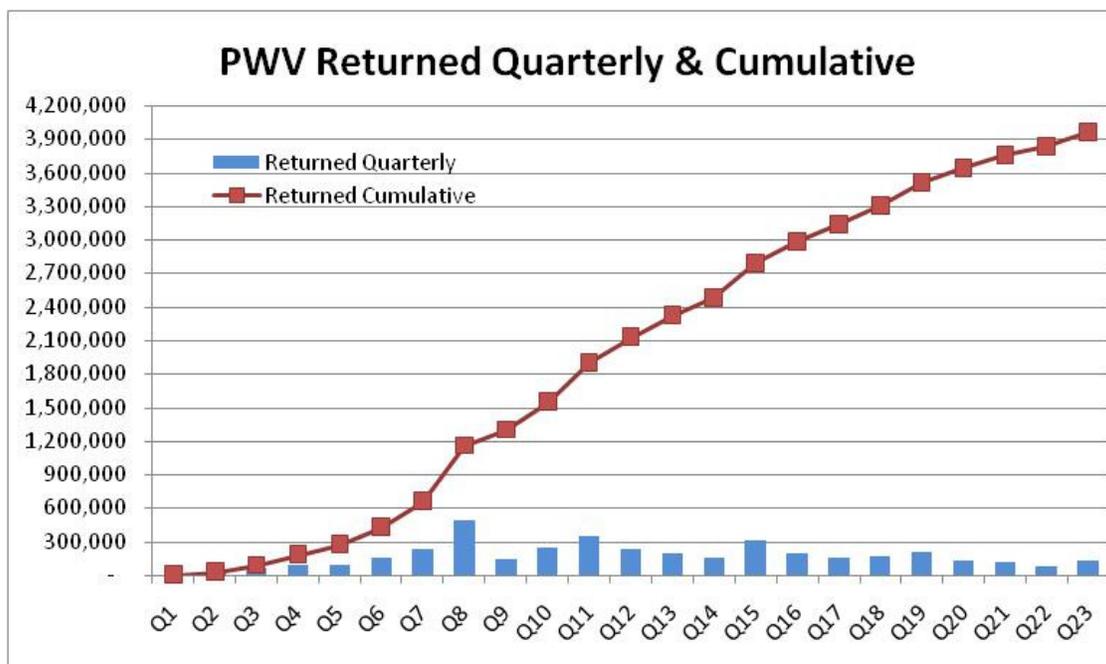
In October 2009, the new higher value fixed top up LLIN voucher was introduced into TNVS. Since then MEDA has stopped distribution of the old value PWV (valued at TZS 3,250). All unused old value vouchers were also collected from RCH clinics in the previous quarter so that in this quarter, the only vouchers in the distribution chain have been LLIN PWV. Of the 6,900,150 PWVs distributed to date, 954,425 are LLIN PWVs.

2.1.4 PWV Returned

Returned vouchers constitute those vouchers which have been redeemed by pregnant women at retailer shops which are then collected by manufacturers and submitted to MEDA and scanned into the database. For every voucher returned to MEDA by the manufacturers and scanned into the database, payment is made to the relevant manufacturer for the value of the voucher. MEDA accepts old value vouchers from A-Z Textile Mills, Moshi Textiles and a few selected wholesalers in Dar es Salaam. The new LLIN vouchers are submitted to MEDA only by A-Z since they are the only manufacturer contracted to supply nets to be redeemed for LLIN vouchers. In total, 129,229 PWVs were returned during the quarter; 24,238 vouchers were returned in January, and 104,991 vouchers were returned in the

month of March¹. This results in an average monthly return this quarter of 43,076. The cumulative number of PWVs returned since program inception stands at 3,965,214 (865,336 funded through PMI) at the end of quarter 23. Chart 2 shows quarterly and cumulative PWVs returned.

Chart 2: PWV Returned to MEDA Quarterly and Cumulatively



Of all PWVs returned, a subset is LLIN PWVs which have been redeemed by pregnant women for the fixed top up of TZS 500. The manufacturer submitted the first batch of redeemed LLIN PWVs in December 2009 and since that time monthly returns of these vouchers have increased substantially. Cumulatively, 59,730 LLIN PWVs have been returned of which 55,110 were returned in quarter 23: 5,659 in January and 49,451 in March.

Another subset of PWVs returned are vouchers which were distributed to pregnant women as old value vouchers, but have been redeemed for LLINs. These PWVs are referred to as “Hybrid” vouchers. Redemption of old value PWVs for an LLIN at a fixed top up of TZS 500 is now permitted since MoHSW recognized that this is another strategy to increase the affordability of nets for the voucher recipient in parallel to the introduction of the LLIN PWV. The first redeemed Hybrid PWVs were submitted to MEDA by the manufacturer in December 2009 and since that time monthly returns of these vouchers have increased substantially. Cumulatively, 8,381 Hybrid PWVs have been returned of which 8,073 were returned in quarter 23: 613 in January and 7,460 in March.

2.1.5 PWV Redemption Rate

¹ Due to a scanner breakdown, all vouchers of all types returned in February were scanned during the month of March and have therefore been entered into the database as vouchers for March. MEDA will adjust the database so that all vouchers returned in February (as reported by manual counts and payment records) are recorded as such, and the adjusted data will be reported next quarter. MEDA apologizes for any inconvenience this may cause.

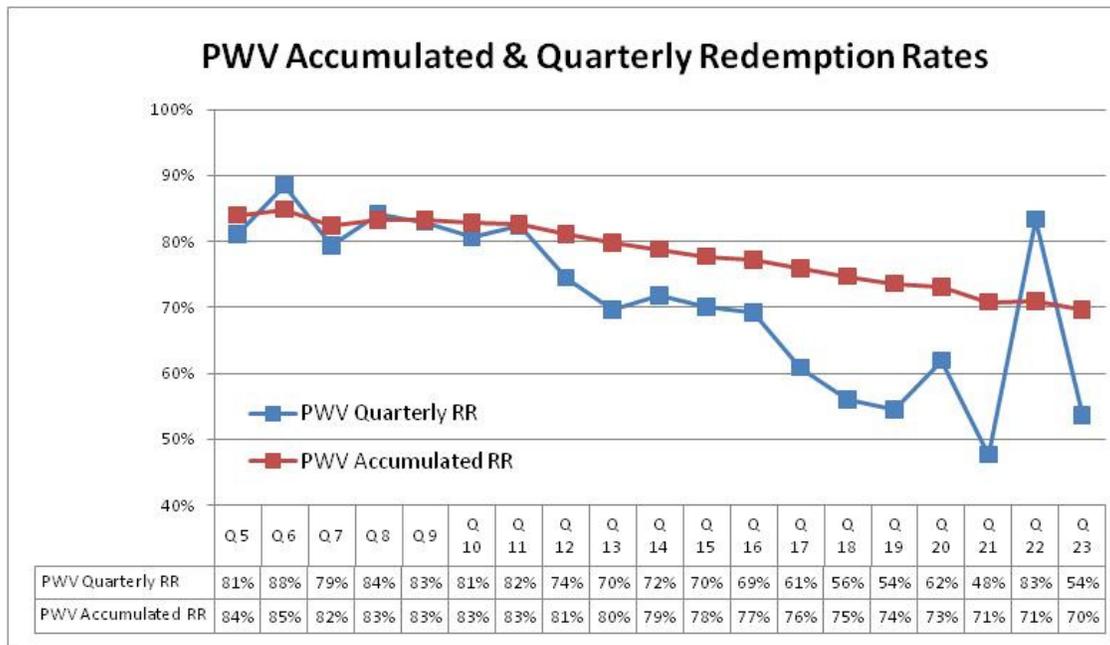
MEDA counts a voucher as “redeemed” when it has been returned to MEDA, scanned into the database and matched with its corresponding stub, which has also been returned and scanned into the MEDA database. The formula used to calculate the redemption rate is therefore:

$$\text{Redemption Rate} = \frac{\text{Number of vouchers returned to MEDA with matching returned stubs}}{\text{Number of stubs returned to MEDA}}$$

The quarterly redemption rate is calculated based on stubs and vouchers with corresponding stubs returned during the quarter. In quarter 23, there were 9,908 PWV stub books returned, equivalent to 247,700 vouchers. This quarter 132,760 vouchers have been matched with their corresponding stubs at MEDA, resulting in a quarterly redemption rate of 54%.

Cumulatively, 186,801 PWV stub books have been returned to MEDA from the DMOs, representing a total of 4,917,729 vouchers. 3,442,017 of the 3,965,214 returned vouchers have been matched with their corresponding stubs at MEDA, making the effective accumulated redemption rate 70%. A total of 523,197 vouchers received have not been included in the calculation of the redemption rate because their respective stub books are still in the field and some are yet to be recorded to the database. Chart 3 shows the comparison of both accumulated redemption rates at the end of each quarter and the discrete quarterly redemption rate.

Chart 3: PWV Discrete Quarterly and Accumulated Redemption Rates



The abrupt spike in the redemption rate in quarter 22 was the result of a decrease in the number of stub books returned that quarter. There are several factors that caused the large decrease in stub books returned, particularly the nationwide dispatch of the new LLIN voucher and the annual staff retreat. MEDA field staff accumulated large numbers of stub books in the field which were returned to HQ during the annual staff retreat at the end of the quarter and were scanned into the system in quarter 23. Now that the LLIN voucher has

been fully launched, the quantity of stubs returned quarterly has returned to its normal pace, which has brought the quarterly redemption rate back down as shown in Chart 3 above.

2.1.6 Pregnant Women Accessing Vouchers

MEDA collects data on the proportion of pregnant women (PW) receiving a PWV irrespective of number of visits to the RCH Clinic. By the end of the quarter, records for 144 PW were obtained from clinic registers, of whom 141 PW were recorded to have received a PWV, for a percentage total of 98%. Cumulatively since October 2009, 358 PW out of 378 PW in the clinic registers over the last two quarters received a voucher during a visit to the RCH clinic for a percentage total of 95% receiving a voucher at some point in their pregnancy. Table 3 summarizes this data.

Table 3: PW Receiving Vouchers at Any RCH Visit

	Sample Size (No. of PW)	Received Voucher	Did Not Receive Voucher	Proportion Receiving Voucher
Quarter 23	144	141	3	98%
Cumulatively	378	358	20	95%

In theory, the earlier a woman receives her voucher, the longer she will sleep under a net during pregnancy and the risk of her contracting malaria is reduced. RCH staff are therefore encouraged to issue vouchers to pregnant women as early as possible during the pregnancy. In addition, women are encouraged, through BCC, to attend RCH earlier in their pregnancy.

MEDA also collects data on the proportion of women who receive a voucher at first visit. This quarter records for 725 PW were obtained from clinic registers and 637 PW were found to have received a PWV during their first ANC visit to the RCH clinic, for a percentage total of 88%. Cumulatively, 1583 out of 1833 PW received a PWV during their first visit to the RCH clinic for a total of 86%. Data is summarized in Table 4.

Table 4: PW Receiving Vouchers at First RCH Visit

	Sample Size (No. of PW)	Received Voucher	Did Not Receive Voucher	Proportion Receiving Voucher
Quarter 23	725	637	88	88%
Cumulatively	1833	1583	250	86%

It has been difficult to obtain the mean gestation period of a PW attending ANC for the first time during pregnancy because clinic records do not provide this data in the format requested by the GFATM. Clinic registers only record whether the gestation of the pregnancy has been determined to be <20 (less than 20) or >20 (greater than 20) weeks. Data was obtained and recorded accordingly and is shown in Table 5.

Table 5: PW Gestation Age at First Visit

	Sample Size (No. of PW)	First visit at >20 weeks	First visit at 20 weeks	First visit at <20 weeks
Quarter 23	490	239 (49%)	1 (0.20%)	250 (51%)

Cumulatively	1260	598 (47%)	36 (3%)	626 (50%)
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By the end of the quarter, out of the 490 PW for whom data was obtained from the Mtuha clinic registers, 239 PW, or 49% of the total PW sample, attended ANC for the first time when they were more than 20 weeks pregnant. 250 PW, or 51% of the total PW sample, had been to the ANC for the first time when they were less than 20 weeks pregnant and 1 PW, 0.20% of the total PW sample, had been to the clinic when they were 20 weeks pregnant. Cumulatively, 598 PW (47%) of 1260 PW, had been to the clinic when they were more than 20 weeks pregnant. 626 PW (50%) of 1260 PW, had been to the clinic when they were less than 20 weeks pregnant and 36 PW (3%) of 1260 PW had been to the clinic when they were 20 weeks pregnant.

As existing health clinic registers are able to provide only limited and often inconsistent data regarding indicators for PW access to vouchers, MEDA has developed an improved set of data collection tools and methods that will be able to capture these data more effectively. These tools are being piloted by MEDA regional and Zonal Managers, and details regarding the tools and results will be presented in the next quarterly report.

2.2 Infant Voucher (IV)

2.2.1 Infant Voucher Activity Summary

Table 6 summarizes IV procurement, distribution and redemption for the quarter and cumulatively.

Table 6: IV Activity Summary

	Procured	Distributed	Returned	Redemption Rate
Quarter 23	500,000	440,950	116,594	51%
Cumulatively	3,475,000	3,669,200	1,373,614	57%

2.2.2 IV procured

This quarter MEDA procured 500,000 LLIN IVs. The total number IVs procured cumulatively from program start stands at 3,475,000 vouchers at the end of this quarter, of which 1,000,000 are LLIN IVs.

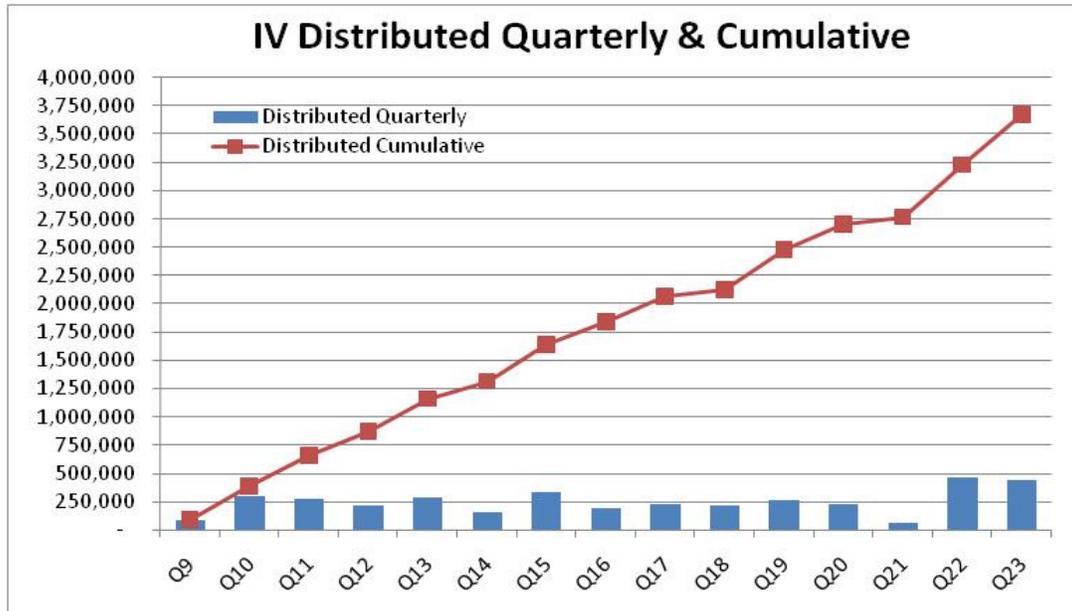
2.2.3 IV Distributed to Districts

Voucher books are continually replenished at district level and subsequently at RCH level. MEDA sends a three month stock of IV books to the District Medical Officer (DMO) where they are stored safely. Clinic staff members regularly collect new books in exchange for stubs of used vouchers. They are encouraged by MEDA to perform this exchange when stocks at clinic level reach 50%.

Distribution of the infant voucher continued this quarter under PMI support. A total of 440,950 LLIN IVs were distributed this quarter: 26,125 in January, 227,750 in February, and 187,075 in March. By the end of the quarter, the total number of IVs distributed cumulatively stood at 3,669,200. At the beginning of quarter 22 (October 2009) the new higher value fixed top up LLIN voucher was introduced into TNVS in parallel with the LLIN voucher for pregnant women. Since then MEDA has distributed only LLIN IVs. Of the 3,669,200 IVs

distributed to date, 899,400 are LLIN IVs. Old value IVs are no longer distributed. Chart 4 illustrates the actual number of IVs distributed per quarter and cumulatively since the introduction of the IVs into the TNVS in July 2006.

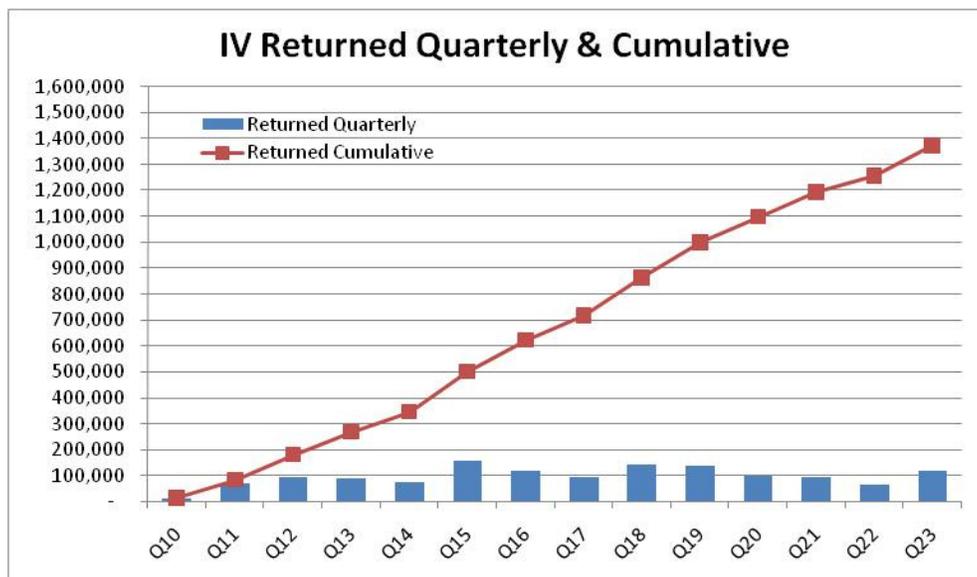
Chart 4: IV Distributed to District Medical Officers



2.2.4 IV Returned

A total of 116,594 infant vouchers were returned this quarter: 23,790 in January and 92,804 in March. This results in an average monthly return this quarter of 38,865. The cumulative total of infant vouchers returned since program inception stands at 1,373,614. Chart 5 shows the number of IVs returned per quarter and cumulative.

Chart 5: IV Returned to MEDA by Quarter and Cumulative



Of all IVs returned, a subset is LLIN IVs which have been redeemed by pregnant women for the fixed top up of TZS 500. The manufacturer submitted the first batch of redeemed LLIN IVs in December 2009 and since that time monthly returns of these vouchers have increased substantially. Cumulatively, 62,289 LLIN IVs have been returned of which 56,826 were returned quarter 23: 6,884 in January and 49,942 in March.

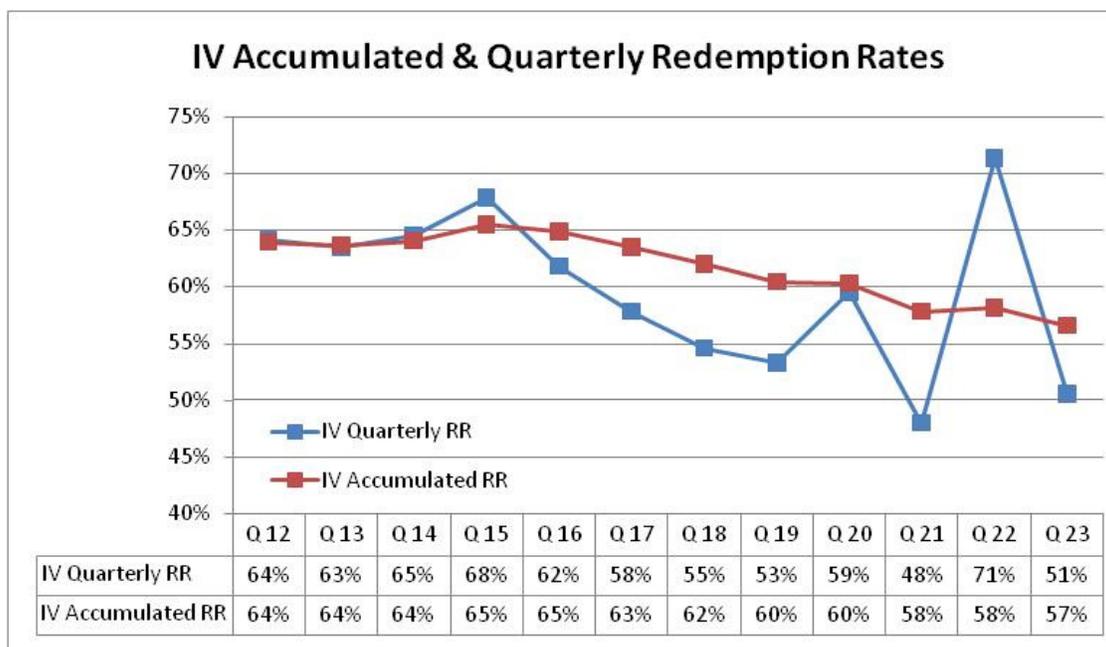
Another subset of IVs returned are vouchers which were distributed to caregivers of infants as old value vouchers, but have been redeemed for LLINs. These IVs are referred to as “Hybrid” vouchers. Redemption of an old value IV for an LLIN at a fixed top up of TZS 500 is now permitted since MoHSW recognized that this is another strategy to increase the affordability of nets for the voucher recipient in parallel to the introduction of the LLIN IV. The first redeemed Hybrid IVs were submitted to MEDA by the manufacturer in December 2009 and since that time monthly returns of these vouchers have increased substantially. Cumulatively, 5,184 Hybrid IVs have been returned of which 5,127 were returned in quarter 23: 290 in January and 4,837 in March.

2.2.5 IV Redemption Rate

The number of IV stub books collected this quarter equalled 7,785, which is equivalent to 194,625 vouchers. Of the 116,594 vouchers returned this quarter, 98,335 have been matched with their corresponding stubs, resulting in a discrete quarterly redemption rate of 51%.

By the end of the cumulative reporting period, 68,347 IV stub books representing a total of 1,708,676 vouchers were received from the DMOs. In total, 977,957 of the total 1,373,614 returned IVs have been matched with their corresponding stubs at MEDA, resulting in an effective accumulated redemption rate of 57%. The total number of vouchers returned but excluded from the calculation due to outstanding stub books is 395,657. Chart 6 shows both quarterly and accumulated redemption rates.

Chart 6: IV Discrete Quarterly and Accumulated Redemption Rates



Similar to the trend in the PWV redemption rate, the abrupt spike in the IV redemption rate in quarter 22 was the result of a decrease in the number of stub books returned that quarter. There are several factors that caused the large decrease in stub books returned, particularly the nationwide dispatch of the new LLIN voucher and the annual staff retreat. MEDA field staff accumulated large numbers of stub books in the field which were returned to HQ during the annual staff retreat at the end of the quarter and were scanned into the system in quarter 23. Now that the LLIN voucher has been fully launched, the quantity of stubs returned quarterly has returned to its previous trend which has brought the quarterly redemption rate back down as shown in Chart 6 above.

2.3 Voucher Distribution Network

2.3.1 Clinic Involvement in TNVS

RCH clinics participating in the voucher program are recorded and categorized. Specifically, it is important that not only government health facilities are issuing vouchers, but that private and faith-based facilities are involved in the program as well. Table 7 shows the number and proportion of faith-based and private sector RCH participating in TNVS.

Table 7: Faith-Based and Private Sector RCH Clinics Participating in TNVS

	Faith Based RCH		Private Sector RCH		Totals	
	Faith Based RCH (n)	Participating in TNVS	Private Sector RCH (n)	Participating in TNVS	All FB and Private (n)	Participating in TNVS
Quarter 23	143	137 (96%)	69	48 (70%)	212	185 (87%)
Cumulatively	263	254 (97%)	127	91 (72%)	390	345 (88%)

Information on 212 faith-based and private sector RCH clinics was obtained during the quarter; 143 were faith-based and 69 were private sector. Of these 212 clinics, 185 clinics, or 87% are enrolled in TNVS. Cumulatively, information on 390 faith-based and private sector clinics have been obtained over the last two quarters, of which 345, or 88%, are currently enrolled in TNVS.

MEDA also collects data on the number of clinics that provide outreach services to the remotest areas and the proportion of those clinics conducting outreach services that include TNVS (i.e. issue vouchers to the target group) in their outreach. This information is shown in Table 8.

Table 8: Clinics Including TNVS in Outreach Services

	Clinics not conducting outreach	Clinics conducting outreach	Clinics including TNVS in outreach (n)	Clinics including TNVS in outreach (%)
Quarter 23	373	942	569	60%
Cumulatively	660	993	1653	66%

This quarter, data was obtained for 942 RCH clinics that conduct outreach services. Of these clinics, 569 clinics reported including TNVS activities during these services, equivalent to 60%. Cumulatively, 993 of 1,653 RCH clinics or 66% that participate in TNVS and conduct outreach services include TNVS during outreach services.

2.3.2 District Government Involvement in TNVS

This quarter 75 District Executive Directors (DEDs) were interviewed to determine if their districts included ITN-related activities in their district budgets. 48 districts reported having some form of ITN-related activity in their budgets for a percentage total of 64% of districts around the country. Cumulatively, 88 of 134 districts surveyed have reported including ITN-related activities in their budgets over two quarters for a percentage total of 66%. Table 9 summarizes this data.

Table 9: ITN Activities in District Budgets

	Sample Size (districts surveyed)	Districts not including ITN activities	Districts including ITN activities (n)	Districts including ITN activities (%)
Quarter 23	75	27	48	64%
Cumulatively	134	46	88	66%

2.3.3 Managing Voucher Stock Levels

Despite the on-going rollout of the U5CC and the impending UCC, demand for LLIN vouchers was high among pregnant women and caregivers of infants. While this high demand is an excellent indication that TNVS can thrive during and after mass distribution campaigns, it meant that stocks of vouchers were finished much sooner than predicted. As a result, voucher stock outs at DMO level and to some extent at clinic level, were widespread this quarter.

During the upgrade of the TNVS in quarter 22, MEDA had planned to distribute a three month stock of each voucher type to each clinic and leave another three month stock with DMOs. MEDA procured 500,000 of each type of voucher, which was enough to provide a three month stock to clinics, but due to the rapidly increasing redemption rate of the new voucher it was not enough to cover all DMOs.

Additional vouchers were obtained from our international supplier in January. A three month stock was then distributed to DMOs, however this stock was rapidly depleted because clinics had already finished the three month stock initially provided to them. In an effort to assess voucher stocks remaining at DMO offices and RCH clinics, MEDA conducted a clinic audit in early March 2010. Each Regional Manager was tasked with surveying the DMO office and five clinics in one district of their region.

The results of the clinic audit show that while the majority of clinics across the country had voucher stock, DMO office stocks were depleted significantly. At the point in time when the clinic audit was conducted (first week of March), it appears that the majority of clinics had recently replenished their stocks by using the DMO stock, which then left DMOs without remaining stock. Of the 19 districts surveyed, four DMO offices had ample stock of both voucher types; however, the remaining DMOs were in need of replenishment. MEDA Regional Managers had already started the voucher request process -- a normal part of their job -- prior to the commencement of the clinic audit. Normally the Voucher Tracking System (VTS) department processes voucher requests from the districts in the order in which the requests were received; in March, however, we prioritized dispatch to the districts which needed stock most.

The results of the MEDA clinic audit in each district surveyed are shown in Table 10 below.

Table 10: Results of the March 2010 Clinic Audit

Region	District	Proportion of PWV stock remaining at DMO	Proportion of IV stock remaining at DMO	Proportion of clinics with voucher stock remaining
Arusha	Monduli	100%	100%	80%
Coast	Mkuranga	0%	0%	100%
Dar es Salaam	Temeke	0%	0%	100%
Dodoma	Dodoma Urban	51%	51%	100%
Iringa	Iringa Urban	5%	3%	80%
Kagera	Bukoba Urban	0%	0%	100%
Kigoma	Kibondo	0%	0%	60%
Kilimanjaro	Mwanga	0%	0%	100%
Lindi	Lindi Urban	0%	0%	100%
Manyara	Kiteto	0%	0%	80%
Mara	Musoma Urban	7%	0%	100%
Mbeya	Mbozi	0%	0%	100%
Mtwara	Newala	99%	89%	100%
Mwanza	Mwanza Urban	4%	4%	100%
Rukwa	Sumbawanga Urban	89%	89%	100%
Ruvuma	Songea Urban	0%	0%	100%
Singida	Singida Rural	79%	61%	100%
Tabora	Tabora	30%	31%	100%
Tanga	Muheza	0%	0%	100%

Regional Managers continually encourage clinic staff to replenish vouchers at clinic level when stocks reach 50%; however, it is crucial the stocks be available at DMO offices to allow this replenishment to occur. In the future, MEDA will be making two key changes to its operations to avoid stock outs at DMO level. Due to the large amount of human resources required to implement mass-distribution campaigns, Regional Managers are sometimes required to leave their regions and work in regions where a mass campaign is occurring. This can cause delay in voucher requests, as can the failure of DMO staff to report stock levels to the Regional Manager on a regular basis. MEDA is exploring the option of automating voucher requests; the method used is yet to be determined. Secondly, MEDA will improve its stock management system at headquarters to ensure that ample stocks of vouchers are in stock at MEDA headquarters at all times.

2.3.4 Challenges and Actions Taken

The issue of voucher stock outs, described in the section above, was the main challenge this quarter. However, voucher liability - the value of the vouchers that have been distributed but have not yet been redeemed (sometimes referred to as “vouchers in the field”) – has been an additional challenge related to voucher distribution. Due to the decision to allow old value vouchers to be redeemable for LLINs, the subsidy of these Hybrid vouchers paid to the manufacturer is equal to the subsidy for the LLIN voucher. This essentially means that MEDA will deplete its budget for subsidies sooner than anticipated. MEDA cannot distribute vouchers to districts unless funds are available for the redemption of those same vouchers. A voucher liability report will be made available in April 2010, at which point MEDA will determine how many more vouchers can be distributed based on available funding.

2.4 Expanding and Strengthening the Commercial Supply Chain

2.4.1 Retailer Recruitment

With the rollout of the upgraded LLIN voucher, A-Z is now conducting the recruitment, training and retention of retailers into TNVS. MEDA has been receiving monthly reports from A-Z since January 2010 and they will begin reporting weekly next quarter. MEDA is also considering the implementation of a real-time mobile phone based retailer reporting system which is described more in depth in the Information Technology section of this report. For this quarter, retailer data has been drawn from A-Z monthly reports.

6,646 retailers participated in TNVS before the introduction of the LLIN voucher. Any retailer wanting to accept LLIN vouchers is re-contracted and re-trained by A-Z. In addition to past TNVS retailers, A-Z is also contracting retailers who have never before participated in TNVS. The long-term goal of this recruitment exercise is to have one retailer per village, or over 12,000 retailers. As of March 31, 2010, the number of retailers who have been sold LLIN nets for TNVS and who are accepting LLIN vouchers, according to the March A-Z monthly reports, was 2,603. These retailers are distributed by region as shown in Chart 7 below.

Chart 7: Regional Distribution of Retailers Accepting LLIN Vouchers



The data above illustrates the large regional variances in the numbers of retailers recruited for the upgraded LLIN voucher. Clearly, more recruitment needs to be done in some of the more remote areas of the country. Another way of determining focus areas for immediate action is to examine the ratio of clinics to retailers. Table 11 shows the number of clinics, the number of retailers recruited to accept vouchers for ITNs, the number recruited to accept LLIN vouchers and lastly, the ratio of clinics to LLIN retailers.

Table 11: Clinic to Retailer Ratio per Region

Region	Clinics (n)	ITN Retailers (n)	LLIN retailers (n)	Ratio: Clinics to LLIN retailers
Arusha	192	175	158	0.82
Coast	177	296	300	1.69
Dar es Salaam	140	281	395	2.82
Dodoma	258	383	80	0.31
Iringa	298	299	27	0.09
Kagera	222	347	78	0.35
Kigoma	190	274	25	0.13
Kilimanjaro	247	324	224	0.91
Lindi	171	237	189	1.11
Manyara	107	171	132	1.23
Mara	185	383	86	0.46
Mbeya	281	397	24	0.09
Morogoro	245	408	80	0.33
Mtwara	158	219	75	0.47
Mwanza	303	448	196	0.65
Rukwa	185	230	35	0.19
Ruvuma	210	373	40	0.19
Shinyanga	278	519	195	0.70
Singida	158	230	107	0.68
Tabora	188	349	47	0.25
Tanga	235	303	110	0.47
TOTAL	4,428	6,646	2,603	0.59

In the table above, regions where the clinic to retailer ratio is less than one will be given immediate attention and priority so that the ratio is at least one to one.

MEDA is also collecting data on the proportion of villages in Tanzania with at least one TNVS retailer. This data is currently being collected and analyzed. Due to the late start up of the LLIN voucher programme, delays by the manufacturer to commit to original launch dates, and misaligned schedules among partners - under which the LLIN manufacturer is responsible for contracting TNVS retailers - MEDA does not yet have adequate data to be able to calculate the proportion of villages with TNVS retailers nationwide. The new MEDA retailer database and the A-Z weekly retailer reports to be implemented next quarter will collect this data.

2.4.2 Retailer strengthening

Upgraded vouchers have rendered existing ITN stock ineligible in exchange for the new vouchers. Retailers who have invested working capital to stock polyester nets (ITNs) are reluctant or unable to invest in the higher priced LLINs. To respond to this challenge and to help existing retailers afford the cost of transitioning to the new LLINs, MEDA, through funding from PMI, will be providing a one-time subsidy to be provided to existing retailers in the form of an initial stock of five LLINs. This important gesture will help to maintain a strong and sustainable retail chain and encourage vendors to remain committed to a program that relies on them for both voucher and full price sales.

This quarter A-Z made a commitment to match the PMI contribution and will provide an additional five nets per retailer, so that the total subsidized stock of LLINs will be ten (10) per retailer. MEDA drafted and circulated an agreement that will be signed by each retailer upon receipt of these nets. This agreement has since been translated into Kiswahili and the procurement process was started. The process of distribution of nets to retailers will begin next quarter.

2.4.3 Managing LLIN stocks in Retail Outlets

The selected LLIN for the upgraded TNVS is an Olyset® sized 4x6x7, blue and white in colour. It cannot be purchased at full price as it has special packaging identifying it as a net specifically to be redeemed for a voucher and a top up of TZS 500. In their monthly reports, A-Z provides data on the number of these nets sold to retailers. In total, since the LLIN voucher introduction in October 2009, A-Z has reported net sales totalling 326,796 broken down by month in Chart 8.

Chart 8: LLIN Sales (Voucher Nets) Monthly



The March A-Z Sales Report also provides information on net sales in each region. The data roughly corresponds to the data in Chart 7, which illustrates the regional distribution of retailers accepting LLIN vouchers. Higher sales are reported in easily assessable areas such as Dar es Salaam, Arusha, Coast and Mwanza. Remote areas such as Kigoma and Rukwa remain underserved.

Of the total LLIN sales for TNVS made by A-Z to retailers since October 2009 when the upgraded voucher was introduced, the regional distribution of these sales is provided in Chart 9.

Chart 9: LLIN Sales (Voucher Nets) per Region since October 2009



In a response from reports from the field of LLIN shortages in retailer shops, MEDA decided to conduct a rapid retail audit, the purpose of which was to obtain quantitative data in order to better assess the situation on the ground. Over a period of 24 hours on March 2nd, 2010, MEDA Regional Managers administered a telephone survey to five TNVS retailers per district in each of the 128 districts in the 21 mainland regions of Tanzania. Of a total of 6,646 original TNVS retailers nationwide, 574 retailers were sampled, representing 9% of the total retailers. Data was collected on the number of LLIN voucher nets in stock, the number of other nets in stock regardless of type, and whether or not they had been contracted to accept LLIN vouchers.

Nationwide, only 36%, or 207 of the 574 retailers surveyed, reported having LLIN voucher nets in stock. The regions with the largest proportion of retailers having LLIN voucher nets in stock were Dar es Salaam, Arusha and Coast regions, where over 70% of retailers had LLIN voucher nets. The regions with the smallest proportion of retailers stocking LLIN voucher nets were Lindi, Mtwara, Rukwa, Mbeya, Shinyanga and Kigoma, where fewer than 20% of retailers had these nets in stock. In 10 of 128 districts (8%), 100% of retailers surveyed had LLIN voucher nets in stock. In 55 of 128 districts (43%), between 1% and 50% of retailers had LLIN voucher nets in stock and in 39 of 128 districts (30%), none of the retailers surveyed had LLIN voucher nets in stock.

2.4.4 Challenges and Actions Taken

As discussed above, the most significant challenges this quarter were the lack of availability of LLINs in retailer outlets and the slow uptake of A-Z in recruiting retailers to accept LLIN vouchers. The situation is more critical in some regions than others, as shown by the retailer recruitment reports and the retailer audit. A-Z has noted that it did not originally have enough vehicles or staff to perform retailer recruitment and LLIN distribution at the speed required in the contract.

MEDA and A-Z met regularly during the quarter to strategize on how to overcome these challenges and will continue to meet about them twice monthly. MEDA feels that the retail audit provides a good snapshot of LLIN stocks and will continue to conduct monthly retail audits until the A-Z retailer reporting system is fully operational and their reporting is accurate.

A-Z has purchased more distribution vehicles and has increased their sales force from one sales representative per region to two or three representatives per region. A-Z has also committed to purchasing GPS and internet-ready phones for sales representatives to help keep track of sales and distribution efforts. MEDA will be conducting weekly analysis of the hotline calls where previously this analysis was done quarterly. The hotline helps identify the extent of LLIN stock outs and provides information which can then be passed on to A-Z.

It was agreed this quarter that from this point on MEDA will train A-Z representatives on how to recruit retailers, how to use the mobile reporting systems and on the use of the retailer agreement for the subsidized LLINs. These activities will be formally introduced to MEDA Regional Managers in a training session to be held in April 2010. In addition, the focus next quarter will be on increased cooperation between A-Z sales representatives and MEDA Regional Managers. It is expected that as a result of this increased cooperation, the district government officials will be oriented on A-Z activities and route plans will be created for A-Z sales representatives so that more efficient LLIN distribution will be made possible.

Strategy 3: Support the development of improved systems for management, training and monitoring & evaluation

3.1 Human Resources

3.1.1 Training

This quarter MEDA began plans for internal training sessions to be held in April 2010. Regional & Zonal Managers, coordinators and team leaders will be trained on the Universal Coverage Campaign, strategies to improve the TNVS, and improved monitoring & evaluation methods. In addition, the performance assessment process will be introduced.

3.1.2 Employee Recruitment

Five new employees were recruited this quarter including four Regional Managers and a Team Leader for Human Resources. In addition, the position of Deputy Operations Manager was created and assumed by the former Team Leader for U5CC, Ricki Bezuidenhout. Total MEDA staff at the end of the quarter was 88.

3.1.3 Special Events and Visitors

During the quarter the Country Manager and Operations Manager attended the annual MEDA retreat in Waterloo, Canada. The Operations Manager also attended a Malaria in Pregnancy (MIP) meeting in Mwanza region where several TNVS issues were discussed.

MEDA Tanzania received external auditors from Ernst & Young, MEDA headquarters staff from Waterloo Leah Katerberg and Scott Ruddick, security consultant Andrew Charles Watt, and CIDA consultant Kelly Babcock. The Zonal Manager in Mwanza also hosted

USAID/CDC visitors who were conducting a fact finding mission on management of severe malaria in children.

3.2 Risk Management for Minimizing Fraud

During the quarter there has been a decline in the number of suspected vouchers recorded during voucher fraud analysis conducted by MEDA. This decline is a positive sign that innovations being deployed by MEDA to mitigate voucher fraud are effective.

Four key strategies employed to minimize fraud are as follows:

- Introduction of an LLIN barcode in the LLIN bag for the new LLIN vouchers assures us of a net getting into the hands of eligible beneficiaries, and that we have active and authentic retail outlets;
- Involvement of police detectives upon identification by MEDA of suspected fraud or theft;
- Disciplinary action taken by DMOs and DEDs against staff confirmed to have stolen or forged vouchers – e.g. some staffs have lost their jobs;
- Performing random spot-checks at beneficiaries homesteads to ascertain if they actually received and redeemed their voucher.

In the future, MEDA plans to introduce a retailer barcode that will also track net sales and will provide an extra level of voucher fraud prevention in addition to the voucher and net barcodes already in use.

3.3 Monitoring and Evaluation

MEDA's Monitoring and Evaluation Department attended a training session on USAID's Monitoring and Evaluation Management System (MEMS) so that indicator data for USAID cooperative agreements can be inputted successfully into their online database. In addition, M&E staff attended a Malaria M&E Network Meeting at MoHSW. Key deliverables from the M&E department this quarter included a draft AMCC M&E plan, improved tools and methods to collect RCC data, and a pilot plan to determine the potential advantages and challenges the new tools may face in the field. These tools and methods, as well as results from their piloted use in the field, will be discussed in detail in the next quarterly report.

3.4 Voucher Tracking System (VTS)

The Voucher Tracking System (VTS) experienced a considerable setback this quarter when the voucher scanner broke down in the second week of January. Spare parts were ordered, however the scanner was not up and running until March 8th. This created a gap in scanning voucher during the month of February.

3.5 Information Technology

3.5.1 Mobile and Web Reporting

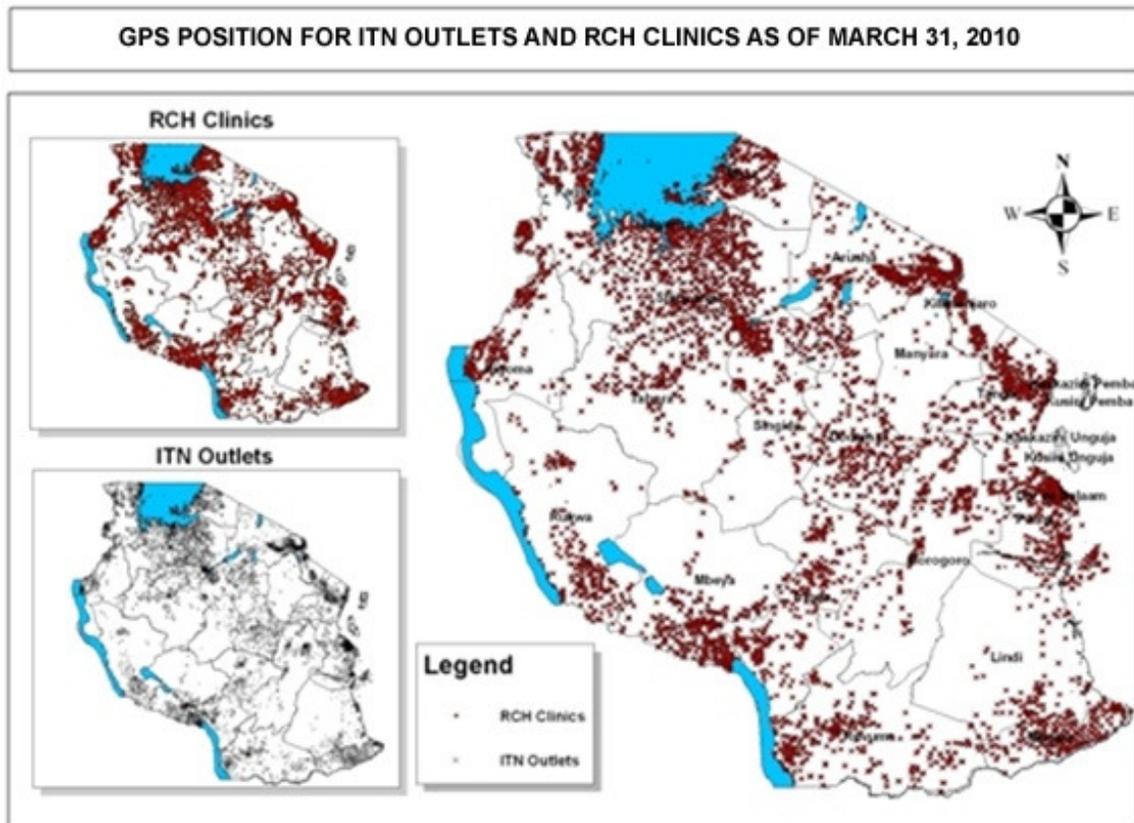
MEDA has created mobile web forms that use the GPRS (Internet) connection available on most mobile phones to manage the retailer database. Each time an A-Z Sales Representative recruits a retailer, they will enter some basic data (retailer name, contract number, location, date recruited, etc.) into a form on their mobile form. At the click of a button, this information gets sent to MEDA and is automatically entered into a centralized

database. These forms will provide real-time data on retailers to MEDA which will then be supported by the A-Z weekly reports and hard copies of retailer contracts. MEDA is also researching an SMS-based reporting tool that will pave the way to real-time information collection from the retailers. The SMSes could be used to track bed net stocks and sales on a weekly or daily basis. Outgoing mass messaging is also a benefit of this SMS system, where MEDA could send short messages to all retailers, DMOs, focal persons, etc.

3.5.2 GPS/GIS Data

No new GPS data was collected this quarter. So far, mapping has been completed for 4,084 of 4,428 (92%) clinics currently in the program. Mapping of TNVS retail and wholesale outlets stands at 4,315 out of a total 6,646 (64%). The combined percentage for total GPS mapping for TNVS stakeholders remains at 74%. In the future, A-Z will be collecting GPS coordinates of any retailers that have not previously been mapped. Map 1 below depicts clinics and retailers for which we have GPS coordinates.

Map 1: Mapped Retailers and Clinics



3.6 Fleet Management

3.6.1 Procurement of Services

This quarter MEDA's tender evaluation committee received and evaluated bids for provision of general vehicle services in Dar es Salaam. The recommended garage was reported to MEDA senior management for approval. MEDA's tender evaluation committee also received

and evaluated bids for the provision of a vehicle tracking system for MEDA vehicles. Currently only 15 of 32 MEDA vehicles are equipped with a vehicle tracking system. The committee made recommendations and submitted a report to senior management for action. Vehicle tracking systems for remaining MEDA vehicles will be fitted later in 2010.

3.6.2 PowerTrack Reporting

PowerTrack is a vehicle-based computer which monitors operations of the vehicle and driver behaviour, including marking the vehicle's GPS position every 10 seconds. The data from the onboard computer is then transmitted via mobile link to the head office every two hours. This quarter Coordinators began using data generated by PowerTrack to compare with data reported by Regional Managers in monthly reports. Of particular interest are fuel reports which can be compared with receipts submitted. Over-speeding and sharp breaking are also monitored. Next quarter, a "Best Driver Award" will be given using data produced by this system. In the near future the system will be able to report number of clinics and retailers visited every month and average time spent during the visit

Strategy 4: Support acquisition and nightly use of LLINs through behaviour change communication activities

This section of the report refers to Behaviour Change Communication (BCC) activities funded through the PMI AMCC grant and implemented by Population Services International and John's Hopkins University (JHU). This quarter JHU did not implement any activities. Therefore the following narrative refers to PSI activities only.

4.1 Planning

4.1.1 AMCC Start-up Preparations

PSI created a job description for an AMCC Manager and started the hiring process. In addition, the procurement process of vehicles and Mobile Video Units began; PSI sought out authorization from MEDA to procure those products. PSI and MEDA also met this quarter to discuss the modalities of voucher promotion to consumers and retailers. As a contribution to the AMCC M&E plan, PSI created and submitted a list of indicators to MEDA to be integrated into the Performance Management Plan. PSI also started developing an M&E plan for FoQus qualitative research (about the use of free nets) to be carried out in August and Trac household surveys being implemented currently.

4.1.2 TNVS Related Activities

This quarter, PSI contracted a design company (DJPA) to design headscarves for consumer promotion of vouchers. These headscarves will be placed inside the LLIN bags when they are packaged at the factory. When the woman goes to redeem her voucher for the net she will also get the head scarf which is a popular item of clothing for rural women. The head scarves have been attractively branded with the TNVS – Hati Punguzo Mpya logo and the Malaria Haikubaliki logo which will serve as further promotion of TNVS. The final headscarf design is shown below in Figure 1.

Figure 1: Headscarf Design for Voucher Promotion



4.1.3 UCC Related Activities

UCC Task Force meetings were attended by the acting AMCC Manager (Godfrey Mbaruku) and field preparations began which included the creation of a field rollout plan for community mobilization and a procurement plan.

UCC logo options were designed, circulated and voted on by partners. The winning design is shown below (Figure 2).

Figure 2: UCC Logo “Get a net, use it daily”



PMI Quarterly Report - data collection table – MAINLAND 2010

Insecticide-Treated Nets: USING PMI FUNDS – 2010 Implementing Partners: MEDA, PSI

Where a "/" is shown, the data does not pertain to MEDA's PMI funded activities

<i>Indicator</i>	Jan–Mar	Apr–Jun	Jul–Sep	Oct–Dec	Annual Target	Comments
Number of vouchers procured:	500,000				TBD	LLIN IV only
Number of vouchers distributed:						
(a) To health facilities (RCH)	440,950				TBD	LLIN IV via DMOs
(b) Voucher issued to target group (infant &PW)	194,625				TBD	Equal to the number of stubs returned
Number of ITNs procured through:						
(a) TNVS (Voucher redeemed)	116,594				TBD	Infant vouchers only
(b) U5CC	871,080				871,080	As per AMCC budget
(c) Universal coverage	600				TBD	For the UCC pilot in Mwanza
• Number of ITNs distributed:						
(a) campaigns – U5CC	871,080				871,080	Distributed in Coast zone, as per AMCC budget
(b) campaigns – Universal coverage	600				TBD	For the UCC pilot in Mwanza
(c) health facilities (ANC or child health clinics)	/					
(d) private /commercial sector through retail shops (TNVS)	116,594				TBD	Equal to the number of IV returned
(e) Unsubsidized commercial sector	/					
(f) other distribution channels (specify)	/					
Number of ITKs/IRKs procured for:						
(a) TNMs for bundling	/					
(b) stand alone sales through retail shops	/					
Number of ITKs/IRKs distributed as stand alone for retail shops	/					
Number of ITKs/IRKs sold as stand alone to customers by retail shops	/					
Number of ITNs re-treated with PMI funds	/					

Global Fund Quarterly Report - data collection table – MAINLAND 2010

Insecticide-Treated Nets: USING GLOBAL FUND RCC FUNDS – 2010 Implementing Partners: MEDA

All data is cumulative unless otherwise specified

Strategy	Indicator	Measure	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3 rd Quarter	4th Quarter	1st Quarter
			2008	2008	2009	2009	2009	2009	2010
			Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23
Objective 1: Provide to pregnant women through RCH clinics a discount voucher that will cover approximately 90% of the cost of a Long Lasting Insecticidal Nets (LLINs) at a commercial outlet									
Strategy 1.1	PW Vouchers Procured	Target	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Actual	5,350,000	5,350,000	5,650,000	5,950,000	6,150,000	6,150,000	6,650,000
	PW Vouchers distributed (Indicator 1)	Target	5,140,000	5,380,000	5,620,000	5,860,000	6,100,000	6,340,000	6,580,000
		Actual	5,090,316	5,292,554	5,610,204	5,910,404	5,978,929	6,424,078	6,900,150
	PW Voucher Cumulative Redemption Rate	Target	Tbd	Tbd	Tbd	Tbd	Tbd	Tbd	Tbd
		Actual	76%	75%	74%	73%	71%	71%	70%
	Vouchers Redeemed/ Returned (n) (Indicator 2)	Target	3,368,096	3,621,999	3,875,903	4,145,119	4,414,335	4,683,551	4,952,767
		Actual	3,136,007	3,308,815	3,510,260	3,637,445	3,754,538	3,835,985	3,965,214
	Proportion of PW receiving PW vouchers irrespective of number of visits (Indicator 3)	Target	65%	70%	75%	80%	85%	90%	95%
		Actual	n/a	n/a	n/a	n/a	Pilot	93%	95%
	Proportion of women attending ANC receiving voucher at first visit (Indicator 4)	Target	43%	51%	58%	66%	74%	82%	90%
		Actual	n/a	n/a	n/a	n/a	Pilot	85%	86%
	Mean gestation at first ANC visit (Indicator 5)	Target	-	20 weeks	-	-	-	20 weeks	-
		Actual	n/a	n/a	n/a	n/a	Pilot	Data ambiguity	51% attend at less than 20 weeks
Strategy 1.2	Risk Management systems for reduce misuse and fraud	Actual	Record keeping system to document movement of PWVs and IVs developed	Record keeping system to document movement of PWVs and Ivs in place	Record keeping system to document movement of PWVs and Ivs in place	Record keeping system to document movement of PWVs and Ivs in place	Record keeping system to document movement of PWVs and Ivs in place	LLIN Barcodes introduced	LLIN Barcodes required for voucher redemption
Strategy 1.3	Retailers registered to Accept Vouchers (Indicator 9)	Target	7,000	7,250	7,500	8,000	8,500	9,000	9,500
		Actual	6,659	6,662	6,648	6,661	6,646	6,646	2,603
	Number and (%) of Faith Based and Private Sector clinics included in TNVS (Indicator 6)	Target	Tbd (30%)	Tbd (40%)	Tbd (50%)	Tbd (60%)	Tbd(70%)	Tbd (80%)	Tbd (90%)
		Actual	n/a	n/a	n/a	n/a	Pilot	160 of 178 (90%)	345 of 390 (88%)
	Number and (%) of RCH clinics including TNVS in outreach services (Indicator 7)	Target	Tbd (30%)	Tbd (40%)	Tbd (50%)	Tbd (60%)	Tbd (70%)	Tbd (80%)	Tbd (90%)
		Actual	n/a	n/a	n/a	n/a	Pilot	424 of 711 (60%)	993 of 1,653 (66%)
	Number of districts including ITN related activities in their district budgets (Indicator 8)	Target	30%	40%	50%	60%	70%	80%	90%
		Actual	n/a	n/a	n/a	n/a	Pilot	40	88 of 134 (66%)

Proportion of villages having at least one TNVS retail outlet accepting vouchers (Indicator 10)		Target	30%	40%	50%	60%	70%	80%	90%
		Actual	n/a	n/a	n/a	n/a	Pilot	39%	39%
Objective 2: Distribute a LLIN to all children aged between one and five via U5CC and Infant Voucher Scheme (IV)									
Strategy 2.1	Number of LLINs distributed to children under five (Indicator 11)	Target	1,804,900	4,512,251	7,221,601	7,221,601	7,221,601	7,221,601	7,221,601
		Actual	380,458	113,560	0	435,112	4,467,866	562,112	2,267,728
		Actual	380,458	494,018	494,018	929,130	5,396,996	5,959,108	8,226,836
Strategy 2.3	IV distributed	Target	Tbd						
		Actual	2,066,625	2,122,575	2,474,385	2,704,275	2,769,800	3,228,250	3,669,200
	Redemption Rate for IV	Target	Tbd						
		Actual	63%	1	1	60%	58%	58%	57%
	Number of IVs redeemed/returned	Target	Tbd						
		Actual	718,057	862,190	998,930	1,098,732	1,193,684	1,257,020	1,373,614
Objective 3: Monitoring, Evaluation, and Administration of TNVS									
Strategy 3.2	Number and (%) of retailers mapped cumulatively	Actual	2,991 (43%)	4,076 (60%)	4,314 (65%)	4,296 (62%)	4,296 (62%)	4,296 (62%)	4,315 (64%)
	Number and (%) of Clinics Mapped Cumulatively	Actual	3,592 (82%)	4,375 (91%)	4,078 (92%)	4,040 (91%)	4,040 (91%)	4,040 (91%)	4,084 (92%)

APPENDIX B: INCIDENT REPORT ON DUMILA VILLAGE LLIN THEFT

Report from the Zonal Manager:

1st April, 2010

To: Country Manager
MEDA-Tanzania

Dear Madam,

RE: Report on 306 Stolen LLINs in Dumila Village, Kilosa, MOROGORO.

I first heard the information on stolen nets in one of the local radio station (Radio Abood) on 20th March 2010 at 8.30 pm while traveling from Morogoro to Ifakara, Kilombero district. I called the RM-U5CC(Agapiti Manday) in Kilosa the next day who informed me that about 6 bales were found in that morning and assured me that there was no problem to worry about.

Upon your e-mail receipt I contacted the Dumila Ward Executive Officer (WEO), Mr Thomas Mbwilo at and 19.30 hrs on 1st April 2010. The following were the WEO's explanation:

“On 20th March 2010, second day of LLINs issuing, Dumila village executive officer (VEO) reported missing of 120 nets (3 bales) at one of the issuing points. After getting proof of the disappeared nets, the Ward Executive Officer (WEO) reported to police at Dumila station. The issuing exercise was stopped to give room for police follow up.

Police conducted searching within the village the same day. On 21st March 2010 236 net were found abandoned under the tree at market place. It meant that more than expected nets were stolen. All registers were reviewed and found that 306 nets were stolen. Referring to 236 found nets, 70 nets were still missing. The VEO and two volunteers were locked up at Dumila police station.

On 31st March 2010, the Dumila police station commander handled over 236 nets which were found by police to WEO and allowed him to arrange for issuing to remaining registered children.

On 1st April 2010 morning, the VEO and two volunteers were sent to court.

Village council had a meeting on 1st March 2010 and decided that LLINs re-issuing will be conducted on Saturday, 3rd April 2010”.

The WEO assured the ZM that together with the 236, the remaining buffer stock of 245 nets will suffice the remaining U5s need in Dumila village.

The WEO explained to me that rumor on the matter was exaggeration by political part leaders who are against the village government.

The ZM will keep in touch with the WEO to be updated on the matter, and will keep HQ posted on that.

Sincerely,

Rausa Kaganda

Zonal Manager, MOROGORO

Report from the U5CC Backstopping Manager:

01/04/2010

To: Country Manager
MEDA

REF: **Explanations on how the stolen LLIN impacted the U5 who have been denied LLIN and How the matter was handled.**

On 20th March 2010, the Village Executive Officer of Dumila Village with two of his Volunteers while heading to the issuing point stole 120 LLINs which were supposed to be distributed to children Under five, also while distributing the nets in the issuing point they also misplaced 186 nets. This totaled to 306 LLIN which is equivalent to 7 bales and 26 nets.

On 21st March 2010, myself, accompanied with the District Malaria Focal Person ordered the Ward Executive Officer (WEO) to release 168 Nets which were the estimate of Unregistered U5s in Dumila Village, and 138 Nets which were in the Ward level buffer stock. This means that all 306 stolen nets were replaced immediately and Children Under Five (U5) in Dumila village were provided with LLINs without any child denied their right to a Mosquito net.

This matter was seriously handled by the District authorities.

The District Commissioner (DC) as the head of the Security and Peace in the District (Ulinzi na Amani) ordered the Village executive officer and the Volunteers to be locked up in Police immediately. This order was executed and all victims were locked up immediately. The VEO is currently out on bail, and the case is in court.

Also I accompanied the Division secretary, DMFP and the Ward executive officer to the issuing points to make sure all Nets (306) which were released were distributed correctly on the 21st March 2010.

236 out of 306 Nets which were stolen have been handed over back to the Ward Executive Officer from the Police. Also the ward has an addition of 245 Nets from the buffer stock and 236 which were found by the police and handled to the WEO, this totals to 481 Nets.

Kindly be informed that Dumila ward had a Ward buffer of 303 Nets and VEO estimate of unregistered U5s were 266. This means that we were prepared for any emergency which would have happened. Also we had the ability to transfer Nets from other wards or Districts if there was a drastic need to do the needful.

Sincerely yours,
Agapiti Emmanuel.
Regional Manager-U5CC

MEDA TANZANIA

UCC Mwanza Pilot

Final Report

2/1/2010

List of Acronyms

BCC	Behaviour Change Communication
DMO	District Medical Officer
KPMG	Klynveld, Peat, Marwick, and Goerdeler
LLIN	Long-Lasting Insecticidal Nets
MEDA	Mennonite Economic Development Associates
MEO	Mtaa Executive Officer
MoHSW	Ministry of Health and Social Welfare
NMCP	National Malaria Control Program
RMO	Regional Medical Officer
SOP	Standard Operating Procedures
U5s	Children under the age of 5 (Under 5s)
U5CC	Under 5 Catch-up Campaign
UCC	Universal Coverage Campaign
UCRC	Universal Coverage Registration Card
VCP	Village Chair Person
WEO	Ward Executive Officer
WVT	World Vision Tanzania

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Executive Summary

With the pending launch of the Universal Coverage Campaign (UCC) the program partners, MEDA and World Vision Tanzania along with NMCP guidance, engaged in a pilot implementation to test and evaluate the proposed changes to program design. The primary outcome of pilot activities aimed at collecting information, gaining field experience, and building recommendations where possible for contribution to the future planning and decisions regarding the UCC program design and training.

The pilot was designed to gather both quantitative and qualitative results measuring the effectiveness of training activities and program design. The consequent results from the pilot activities measured a selection of training and program design variables which were analyzed for their effective performance in the full UCC program.

There are a number of specific recommendations which can be implemented in the final World Vision Tanzania training sessions such as use of role playing; emphasis on registration, reporting, and use of U5CC for verification; include breaks; and extended training time. There are also a number of specific recommendations to the program design, materials, and standard operating procedures which can be implemented immediately by MEDA. These include forming a UCC Taskforce; entering home for net verification; only require one person from each house to go to issuing; maintain that individuals registering during issuing can only receive one LLIN; revise reporting forms; and instruct that U5CC Register Book only be used as a tool for verification. These and additional recommendations can be found in detail the Discussions and Recommendations section.

Finally, the report identifies four pending issues which need to be discussed and fully considered for a successful UCC program launch. The pending issues are distribution of volunteers for registration, transportation of UCRCs back to MEDA HQ, redistribution of excess LLINs, and high volumes of beneficiaries during issuing. The UCC Taskforce and other stakeholders should use this report as a guideline for future discussions regarding planning in order to successfully launch the UCC program later this year.

Background

Universal Coverage Campaign Overview

The Universal Coverage Campaign (UCC) is a program owned by the Ministry of Health and Social Welfare (MoHSW) which will provide free distribution of long-lasting insecticidal nets (LLIN) to households with sleeping spaces not currently covered by an LLIN. The UCC is designed to compliment previous campaigns [Tanzania National Voucher Scheme, Under Five Catch-up Campaign (U5CC), Upgraded Voucher Scheme] and to abruptly increase LLIN ownership among community members to a minimum target of 80% sleeping space coverage. Although the UCC standard operating procedures and activities are based upon the successful logistics model of the U5CC, there are a number of significant differences currently proposed.

Program Design Background

The UCC program will involve registration of sleeping spaces rather than individuals (i.e. U5s). An implication is that anyone could potentially be eligible to receive the new Universal Coverage Registration Card (UCRC) during registration (Appendix A). Another change is that one UCRC represents one sleeping space that is not currently covered by an LLIN. During issuing volunteers will be removing a barcode from the LLIN bag which will then be placed on the UCRC to indicate that an LLIN was distributed at issuing. After issuing the UCRCs will then be scanned at MEDA HQ. Therefore, a process for UCRC transportation back to MEDA HQ must be developed and MEDA's scanning capabilities must be scaled-up. By the end of the campaign, MEDA will have an electronic record of each LLIN issued and scanned image of each UCRC used during the campaign. These records and images can be used for auditing as well as monitoring and evaluation purposes.

Materials Background

The materials being tested in the UCC pilot include the new UCRC, a registration tally sheet (Appendix B), LLIN material sample, inkpads during registration, and the U5CC Register Book. The main purpose of the UCRC is to provide an electronic record of each LLIN recipient which can be easily accessed by various stakeholders through MEDA's database. It replaces the U5CC Register Book and U5CC Eligibility Card. The tally sheet is intended to assist volunteers in calculating the number of eligible sleeping spaces by enabling them to systematically work through the process and record each step. In addition, it provides a record of the number of households registered, which is not otherwise currently captured by the UCRC.

The purpose of the LLIN sample is to provide a tangible example of an LLIN in order to avoid confusion between the volunteer and beneficiaries during registration with regards to the number of LLINs present in the household. The U5CC Register Book can be used as both a registration route guide and a tool for verifying the number of LLINs received by a household during the U5CC. This will help to minimize overlap between the two campaigns. Lastly, the UCC program is currently designed to have beneficiaries provide their thumbprints during both registration and issuing as a fraud mitigation method and to act as a record that a net was

provide to a beneficiary. The use of inkpads during registration was not a component of U5CC and, thus, the feasibility of this process must be tested during the pilot.

UCC Pilot Overview

The UCC Pilot in Mwanza was designed to test the proposed changes in a small scale setting before full implementation of the UCC program. The pilot aimed at gaining insight as to how the changes affect both training and program design. The field activities took place between January 10th and 19th, 2010 in the villages of Kabusungu, Kayenze, and Nyafula within the ward of Sangabuye (Ilemela District, Mwanza Region). A full calendar, narrative of the scheduled pilot events, and list of participants in the pilot activities can be found in the UCC Mwanza Pilot Planning document. The pilot simulated a full World Vision Tanzania (WVT) training session at both Division and Ward levels. Each village simulated the registration of approximately 200 beneficiary sleeping spaces using the proposed procedures and new materials. Three days later, one issuing point per village was used to simulate the full issuing procedures and the use of the new issuing materials. The pilot also tested the UCC forms and reports to be used by local government stakeholders and program partners. The village registration reporting at the village and ward level occurred the day after registration and, similarly, village issuing reporting was the day after issuing. The pilot activities primarily tested the program design and new materials; however, the team also collected information and gained field experience that will contribute to the future planning and decision-making of the UCC. MEDA, WVT, and NMCP provided staff during the pilot to observe the simulated processes, measure variables, and document findings.

Pilot Objectives

The primary objective of the UCC pilot was two-fold, (1) to measure the effectiveness of the proposed training done by both WVT and local officials, (2) to test the proposed UCC program design and variable materials. The outcome of the UCC pilot with respect to the primary objectives will be recommendations for contribution to the future planning and decision-making regarding the UCC.

The secondary objective of the UCC pilot was to gather data and field observations to enable better logistical planning by MEDA and partners during full implementation. The outcome of the secondary objectives will be statistics and feedback captured during registration and issuing activities.

Method

The UCC pilot was administered by 12 observers from three of the UCC partners (WVT, MEDA, and NMCP). Every observer was given an Observer Material Package created to standardize the process of recording data. Observers were instructed not to interfere with the pilot operations and to simply accompany and observe MEOs and volunteers during their activities. During registration, each volunteer had two observers accompanying them from house to house. During issuing, each issuing point had four observers recording data and observations from the activities of the two volunteers. At least one observer monitored the registration and issuing reporting process at both village and ward level.

The training was assessed for the level of understanding of participants as well as their satisfaction. The program design was assessed for its efficiency, realistic implementation in full program, and the usability of materials.

Effectiveness of training

The training was evaluated by gathering quantitative and qualitative measures pertaining to both the level of understanding of participants and their satisfaction. The quantitative data was gathered using a questionnaire for MEOs and volunteers. The qualitative data was gathered by recording observations, areas of confusion, and conducting interviews.

On the training days, the observers were instructed not to participate, but rather only to monitor discussions and note any confusion. After the two days of training, there was an Observer Training Meeting where each observer presented and discussed their observations from training. The following day the observers distributed a training questionnaire to the MEOs and volunteers which aimed at assessing their feedback and satisfaction with the training (Appendix C). Following the questionnaire, the observers interviewed the MEOs and volunteers using three open-ended questions relating to their level of understanding (Appendix C).

Lastly, training was assessed through monitoring the performance of the MEOs and volunteers during registration, issuing, and reporting. Observers recorded both questions that were asked by the MEOs and volunteer and significant procedural errors. This data pertains to the participants' level of understanding.

Effectiveness of the Proposed Program Design

The proposed program design was tested by comparing it to two different program designs. Simply put, the procedures, policies, and materials differed between the three villages. The data collected generally focused on the overall efficiency of the program design and the usability of the materials involved; however, analyzing the effects of specific variables independently was necessary to minimize skewed results due to confounding variables. The approach was to set one village as the control village (Kabusungu). The comparison variables were then changed in the other two villages – assuming the variables being changed were mutually exclusive. The

table in Appendix D shows the variable for the three villages with the variables affecting registration and issuing.

Both quantitative and qualitative data was gathered to analyze the effects of each variable. The quantitative data was gathered using the Observer Material Packages and a questionnaire. The qualitative data was gathered by conducting interviews with MEOs and volunteers and by documenting the implications of each variable.

The Observer Material Package was used to record data that provides quantifiable effects of a variable. For example, the issuing times increased by X amount, if the volunteers sat at two separate desks during issuing – the data recorded also provides averages that are useful in UCC future planning (secondary objective). The following data can be extracted from the Observer Material Packages used by each observer:

- Average Time to Verify Number of UCRC at Household
- Average Time to Fill in UCRC
- Average Time to Check/Verify Copy at Issuing
- Average Time to Issue a Net
- Average Time to Verify Number of UCRC at Issuing Point

The questionnaire (Appendix E) distributed to MEOs and volunteers at end of the pilot focused on the usability of the materials and gathered feedback on Standard Operating Procedures. Following the questionnaire, the observers interviewed the MEOs and volunteers using four open-ended questions relating to their level of understanding (Appendix E).

Discussions pertaining to observations were held during two separate Observer Meetings. Any data the observers noted during the pilot activities was discussed over two observer meetings. The first meeting conducted after the registration activities focused on the usability of materials and the effects of the comparison variables during registration. The second meeting conducted after the issuing activities focused on the issuing materials, variables, and procedures.

Limitations

The primary limitation of this pilot was its relatively small size and compressed schedule. Only 600 beneficiaries across 3 villages (mitaa) were involved as it was not possible to run larger pilot due to time and budget constraints. The implications of the small size include:

- Inaccurate estimates for time to register a full village since volunteer fatigue during the later days of registration could not be simulated
- High volumes of beneficiaries at issuing point could not be simulated which influences the estimated times of each issuing activity and crowd control issues.
- The effectiveness of Behaviour Change Communication (BCC) was not tested

Another major limitation of the pilot stems from the accuracy of the time data. Despite efforts to standardize the method of timing each activity, observers may have interpreted the start and end point of each activity differently. The small sample size of 6 volunteers allows for individual performance to influence the results. Furthermore, it was noted that volunteers tended to stray

from the specific operating procedure for their assigned village and often were not consistent in with their procedures. Therefore, it is difficult to isolate which activities had the most significant affect in the time required for registration or issuing.

Results

The results were gathered by compiling all the data after the pilot. Information was attained from different pilot activities and are presented in this section as training and program design results. A summarized results table can be found in Appendix F. All questions were rated on a five point scale with 1 being the most positive and 5 being the most negative pertaining to the question.

Training Questionnaire

Questionnaire	Volunteers								
	1	2	3	4	5	6	7	8	9
Q1) Procedure for registration is easy to follow	1	1	1	3	3	3	1	2	2
Q2) Procedure for issuing is easy to follow	1	1	2	2	2	2	1	1	1
Q3) The training material is useful	1	1	1	2	1	2	2	1	1
Q4) The trainers are helpful	1	1	1	1	1	1	1	2	1
Q5) 1 day of training is sufficient	1	1	1	4	1	5	2	2	2

Based on the training questionnaire results, MEOs and volunteers generally felt very satisfied with the training and subsequent level of understanding. The results of Question 1 illustrate that the registration is a difficult procedure to follow while being trained.

Observer Feedback Results - Training

Three separate feedback meetings were held to gather direct feedback from the staff observers from MEDA, NMCP, and WVT. The tables below aim to capture the fact-based observations and consensus resulting from pilot activity observations rather than individual personal opinions.

Observer Results – Post –Training Meeting	
Strengths	<ul style="list-style-type: none"> • Energy level, enthusiasm, and regular breaks kept attention level high. • WEO, MEOs, and volunteers without previous experience in U5CC had high level of understanding • Role-plays were very effective means of demonstrating SOPs • Listing materials required and tasks to complete for each activity • Sample calculations of sleeping spaces and nets showed concept understood • High-level of understanding observed and in-depth questions asked
Identified Areas for Improvement	<ul style="list-style-type: none"> • Lacked training on how to use U5CC register properly in field • Questions asked about how to treat lost cards • Missing step-by-step instructions on registering unregistered peoples on final day • Many questions regarding who must thumbprint cards during registration and issuing when beneficiaries are not home. • Training did not fully cover processes to be followed after registration and issuing – reports, forms, and data flow. • Sleeping space definition requires additional training and examples • MEO, VEO, and VCP supervisory roles during registration and issuing days can be more detailed
Other	<ul style="list-style-type: none"> • Lack of proper lunch breaks or provision of food & drink will cause dissatisfaction • Concerns over lack of per diem payment for WEO, MEO/VEO for Day 2 training • Currently no logistical method to make volunteer payments on Day 2 • Need exists to train on importance of record keeping after training and campaign • Training on crowd control issues and dividing village by issuing days can be developed

Training Short Interviews

Questions	Volunteer								
	1	2	3	4	5	6	7	8	9
What part of training helped?	use of examples	explaining difference to U5CC	- use of examples	knowledgeable trainers - how to calculate sleeping spaces	-understood all parts	- role play - hand-outs	- role play - facilitator was happy and smiling	- use of board - role play -examples	-facilitator -role play -hand- outs
What do you recommend adding to training	increase training time	increase training time	- increase training time - provide food and drinks	- increase training time - increase allowance - provide identity(t-shirt, caps, and ID)	- increase training time - more exercises - provide food and drinks	- no break for volunteers - use more pictures - provide identity (caps) - increase training time - increase allowance	- increase training time - provide snacks	- increase training - provide utensils (pens, notebook, etc.)	- select educated volunteers - increase training
Any other comments/ recommendations	(none)	(none)	- went well - trainers are friendly	- better exercise than U5CC - good system for selecting volunteers	- trainers are friendly - I enjoy fighting malaria	- consider travel in allowance - schedule was too compressed, not real	- ensure use of LLIN - eliminate misconceptions	- increase allowance	- provide caps, shirts -sustenance allowance is small

Please note that boxes filled in as red contained responses that were generally negative or are things to improve, whereas the boxes fill in blue contained responses that were generally positive. From the interview results above, the participants felt that the use of examples, like how to calculate the number of sleep spaces, was good during the training. The role playing is also a key strength. The participants all recommended increasing the training time. Also, some of the participants recommended providing food and drinks during training. Overall, the MEOs and volunteers felt the training went well and felt that the trainers were very friendly and enthusiastic.

Program Design Results

During the pilot activities, five sources of data were used to gather program design information: MEO and volunteer questionnaire, observer notes on registration, observer notes on issuing, MEO and VEO interviews, and timed data from observers. The results provide information from multiple perspectives as to what worked and what did not work. However, it is important to note that each village used different materials and procedures as per Appendix D.

Program Design Questionnaire

Questionnaire	Volunteers								
	1	2	3	4	5	6	7	8	9
Q 1) Ink pads were easy to use during registration	1	1	1	1	1	1	3	3	1
Q 2) Tally sheet was helpful to calculate the number of sleeping spaces	1	1	1	2	1	2	3	1	1
Q 3) The LLIN sample was helpful during registration	1	1	1	3	1	1	1	1	3
Q 4) I learnt the registration card quickly	1	1	1	2	2	2	3	1	1
Q 5) Registration card is easy to use when registering and issuing	1	1	1	1	1	1	3	2	1
Q 6) U5CC books were easy to use	2	1	1	3	1	1	5	5	1
Q 7) I prefer the registration card over the U5CC books	1	1	1	1	1	1	1	1	1

Based on the program design questionnaire, the UCC pilot materials were all fairly well received. Participants felt that: the inkpads were generally easy to use, the tally was helpful, and the LLIN sample was generally helpful. However, participants felt that the U5CC register books were not very easy to use. Participants liked the new UCRC, stating that they learnt the UCRC quickly and that it was easy to use. Finally, all the participants preferred the UCRC over the U5CC register books used to register U5's in the previous campaign.

Observer Feedback Results – Registration

Observer Results – Post-Registration Meeting	
Materials	<ul style="list-style-type: none"> • U5CC register books not used naturally by volunteers for routes or verification. • Variations existed in when a volunteer used verification methods (such as U5CC register book or entering a house) • Half of the volunteers whom had no previous U5CC experience had more trouble using U5CC register books in field. • Most beneficiaries understood uncovered sleeping space question without use of LLIN sample. U5CC campaign and Hati Punguzo are well known. • Tally sheets observed to be helpful and a reminder for volunteer calculations • Extra time and number of items volunteer carries must be considered for materials to be used • Some UCRC carbon copies were illegible due to high pressure required when writing • Registration Date field on UCRC coupon more useful as Issuing date reminder • Perforation in UCRC booklets resulted in torn cards and MoHSW logo on cards from middle and end of book • Missing house number field to record on UCRC card to capture necessary data

Standard Operating Procedures	<ul style="list-style-type: none"> • Large discrepancy between urban and rural registration times required • Confusion noted on part of beneficiary as to sleeping space definition • Volunteers were rarely not allowed inside the homes to verify sleeping spaces • Entering homes is time consuming exercise and many stopped asking to enter • Sleeping space definition confusion recorded when homes have rented rooms • Volunteer reading back of card messages added significant time to process • Person answering questions at household often gave all thumbprints at registration. All beneficiaries registered are rarely present • Thumbprint at registration not achieving targeted fraud prevention
Reporting	<ul style="list-style-type: none"> • MEO's filled out registration reports incorrectly due to ambiguous fields. • Registration reports can be altered to collect better data for use in campaign. • Two MEO's skipped the counting of UCRC coupons in favour of using tally sheet data for registration report. • Method to count number of nets issued for each village was unclear and varied • VCP and WEO not actively involved in report verification – just compiling and signing despite presence of clear errors.

Observer Feedback Results – Issuing

Observer Results – Post-Issuing Meeting	
Materials	<ul style="list-style-type: none"> • Thumbprint at issuing presented no issues • Materials provided for collection of UCRC coupons at issuing point were useful but was not deterrent at village and ward level. • One volunteer placed barcodes in wrong spot over original barcode • Issuing results in garbage which must be have formal guidelines for disposal • Confusion existed over what officials do with excess nets
Standard Operating Procedures	<ul style="list-style-type: none"> • Most households brought only one representative to issuing points for very valid reasons despite instructions • Wait times and surrounding concerns increase with each beneficiary at issuing point • Consensus that proper and accurate registration activities are key to successful campaign. Issuing cannot correct improper registration. • Checking carbon copies goes quickly with multiple cards per household • Two queues at issuing point can lead to inefficiencies and divides UCRC books • MEO and VCP participation level varied but often lacked direction • Errors observed in unregistered persons registration
Reporting	<ul style="list-style-type: none"> • Confusion for new MEO regarding issuing report fields • Lack of understanding observed with regards to the path of reports and what materials are to accompany reports and which stay at each level • Confusion noted over fields in the village transfer form • VCP and WEO not actively involved in report verification – just compiling and signing.

Program Design Short Interviews

Questions	1	2	3	4	5	6	7	8	9
What do you think about asking to enter houses? Is it useful	Useful – for verification and checking LLIN usage	Useful – verification and checking LLIN usage and advise accordingly	Useful - people not willing to let in	Useful – people not willing to let in - time consuming	Useful – verification - checking LLIN usage - community knowledge	Not Useful – people tell the truth - people not willing to let in	Neutral – people not willing to let in - time consuming	Not good – people not willing to let in (especially in urban areas)	Useful – verification - see vulnerabilities of household
Was finding the correct number of sleeping spaces difficult	Difficult – unclear meaning of sleeping space - problems with translation - no incentive	Not difficult – but took time to explain	Not difficult	Not difficult – simple calculation	Not difficult – entering house made it easy	Not difficult	Not difficult	Not difficult – people tell the truth	Not difficult - UCRC easy to use - tools available
How could we motivate volunteers	- pay more - provide identity (T-shirt, cap) - have time for lunch	- mobilize community - provide identity (T-shirt, cap, ID) - increase training time - use local language for mobilization	- use tally sheet rather than entering house	- encourage use of simple language	- increase time for training & registration - pay more - provide identity (T-shirts, caps) - mobilize community	- add volunteers - use tally sheet	- provide identity (T-shirts, bags) - pay more	- improve education - don't use U5CC Register Book - provide water during registration	- provide identity (T-shirts, caps, bags) - don't use U5CC Register Book - mobilize community
Were there any activities where you did not feel prepared? Any other comments	- felt prepared - pay more - registration and issuing on weekends	- mobilize community - not enough time for registration - provide food and drinks for training	- didn't know what to expect from people - provide bag - long walking distance - important to trust people	- felt prepared - not enough time for registration	- felt prepared - increase training time	- felt prepared - effective training - provide bags	- N/A - need break during training - transport for training	- felt prepared - pay more - not enough time for registration - add volunteers	- felt prepared - not enough time for registration and issuing - pay more

The results from the short interviews show that generally participants felt entering the house was useful, most did not find it difficult to find the correct number of uncovered sleeping spaces, and most felt training adequately prepared them. A majority of participants felt that some sort of identification (caps, bags, or IDs) is necessary and most felt that they needed more time for registration.

Time Results Data Table

Time results data were an output of the Observation Material Package. Observers recorded times for various steps in registration and issuing. These times are compiled and summarized below.

	Kabusungu			Kayenze			Nyafula		
	Volunteer 1	Volunteer 2	Mtaa Average	Volunteer 1	Volunteer 2	Mtaa Average	Volunteer 1	Volunteer 2	Mtaa Average
Average Time to Verify Number of UCRC at Household	1.87	1.59	1.73 (1m 44s)	2.71	2.22	2.46 (2m 28s)	1.99	1.27	1.63 (1m 38s)
Average Time to Fill in UCRC	2.24	2.38	2.31 (2m 19s)	1.48	1.18	1.33 (1m 20s)	2.81	1.87	2.34 (2m 20s)
Average Time to Check/Verify Copy	0.67 (40s)			0.67 (40s)			0.3 (20s)		
Average Time to Issue a Net	0.56 (34s)			0.52 (1m 20s)			1.15 (1m 9s)		
Average Time to Verify Eligibility for Registration During Issuing	0.25 (15s)			N/A			1.82 (1m 49s)		
Average Time to Fill UCRC during Issuing	2.21 (2m 13s)			3.04 (3m 2s)			1.82 (1m 49s)		

Time Data – Additional Notes and Conclusions

- The sample of volunteers was not large enough to account for variances in volunteer behaviour when verifying during registration. Thus, given the data it is not possible to conclude whether entering one's house, using the U5CC Register Book, and LLIN sample for verification added a significant amount of time for registration.
- Volunteers in Kabusungu and Nyafula were required to take the thumbprint during registration, whereas volunteers in Kayenze were not. The data suggests that taking a thumbprint during registration adds approximately 1 minute on average to the time required to fill each UCRC.
- Volunteers in both Kabusungu and Kayenze looked up the carbon copy of every UCRC during issuing whereas volunteers in Nyafula did not. The data suggests that it takes 20 seconds on average to look up a carbon copy of a UCRC.
- On average it took volunteers in Nyafula over 30 seconds longer to issue a net than the volunteers in Kabusungu and Kayenze. Therefore, the Issuing Point set-up of two separate desks and queues seen in Nyafula did not optimize the time taken for each beneficiary.

Discussion & Recommendations

Training: Strengths

In general the training was well done. In fact, all nine participants ranked the training materials as either “useful” or “very useful” and the trainers as either “helpful” or “very helpful”. The use of examples and role play were noted by participants as being helpful for understanding. Observers also noted that the role playing was most impactful.

- **Recommendation:** Make the role playing a mandatory part of training at both the division and ward level.

Training: Areas to stress

Registration and proper verification of eligible sleeping spaces is a crucial aspect of the UCC program. Thus, more emphasis must be given to ensuring complete understanding in this area by all participants. Observers noted that it would be beneficial to emphasize the definition of a sleeping space. Observers also noted that many volunteers were unsure of how to use the U5CC Register Books in the field. Reporting was also noted as being a source of confusion and, thus, requires more attention.

- **Recommendation:** Emphasize the process of registration and include a concise definition of a sleeping space.
- **Recommendation:** Spend more time training volunteers on how and when to use the U5CC as a verification tool.
- **Recommendation:** Go over each of the reporting forms and fields with the MEOs/VEOs and WEOs during first day of training. Fill out sample forms together.

Training: Schedule

All of the volunteers suggested increasing the time for training, however, there was very little feedback provided by the participants on what topics should be included during that additional time. If more time is required for specific topics, the training schedule allows for extra time to be taken within the allotted two days of training. Adding time for training may also require an additional break during training. It was also noted by both observers and participants that there was insufficient time provided for a lunch break. WVT noted, however, that break was given during pilot due to a late start on the days of training. Some of the participants suggested that WVT provide snacks and beverages during the training, however, the budget implications would be rather large.

- **Recommendation:** Provide a one hour break near lunchtime to allow the participants to retrieve and eat lunch.
- **Recommendation:** Extend the hours of training within the allotted two days of training to account for the “Areas to Stress” recommendations above.

Use of U5CC register books

The use of U5CC register books during the UCC registration process was a requirement set by NMCP asking the volunteers to use them during route planning and to verify the number of nets issued during U5CC to each household. The pilot results show that the register books are not effective in route planning. Observers noted that it was an effective tool for verifying the number of nets a household received from U5CC; however, many volunteers did not use them in practice due to its impracticability and time needed to verify. The results also showed that some of the volunteers felt they were not useful and not easy to use.

- **Recommendation:** Do not use the U5CC register books as a route planning tool
- **Recommendation:** NMCP should weigh the benefits and costs of using the U5CC register book as a verification tool given this field feedback.

Use of LLIN sample

Most of the participants (7/9) indicated that they found the LLIN sample helpful during registration. However, observers noted that the sample was often not used for its original purpose of providing an example of LLIN material. Furthermore, when the sample was not used observers noted that beneficiaries still clearly understood what was meant by LLIN and U5CC nets; thus, the clarification provided by the LLIN sample does not seem necessary. The UCC Task Force can further discuss the best way to refer to LLINs and U5CC nets during registration.

- **Recommendation:** UCC Taskforce discuss whether the LLIN sample could be better utilized during training of volunteers rather than during registration.

Entering homes to verify sleeping spaces

While there were no specific statistics gathered on the average time taken for volunteers to enter homes and verify the sleeping spaces, we can note from observations that the activity is very valuable but adds a significant extra step to the volunteer workload. Of note, the majority (6/9) volunteers indicated in their surveys that the entering of homes was a useful exercise for verification. Many also noted the additional BCC benefit of checking and promoting bed net usage in the household. The primary limitations identified with this operating procedure were the addition of time during registration, the fact that volunteers will often not perform this task when unmonitored, and the argument that not all beneficiaries will allow volunteers into their home. Despite these limitations, the evidence suggests that the benefits of a more accurate registration, cost savings, and anti-fraud measures of this procedure are very valuable to a successful registration exercise.

- **Recommendation:** The SOP of volunteers entering homes to verify and aid in the calculation of number of sleeping spaces should remain.
- **Recommendation:** Training sessions should stress the importance of this step to all local officials and volunteers with BCC campaigns supporting the effort ahead of registration.

Use of tally sheets

The registration tally sheet was found to be a useful tool and not difficult to learn. The activity of filling out the tally sheet was not separately timed but it was observed to not add a significant amount of time to the registration process. It does, however, add to the volume of items for the volunteer to carry and fill out throughout the day. Observers noted the tally was useful in helping volunteers to make the correct sleeping space calculation; however, the sheet was not always used correctly. Furthermore, the actual calculation was less of a problem compared to having a comprehensive definition of an uncovered sleeping space. It was also noted that a redesigned UCRC coupon could achieve some of the tally sheet functions such as recording number of houses registered.

→ **Recommendation:** The UCC Taskforce should look further into the budget implications and logistical challenge of providing the Tally Sheet and weigh this against the observed benefits.

Each beneficiary required to come to issuing point

The original UCC SOPs outlined that every beneficiary registered for a LLIN should be present at issuing to receive the net for the purpose of reducing fraud. Despite good training and implementation of this procedure by volunteers, it was noted that the majority of beneficiaries did not follow the instruction – mostly for very valid reasons. It was observed that many beneficiaries would have had to leave school or work and others were physically unable to travel to issuing points, so they had their coupons redeemed by others. While it makes the program slightly more vulnerable to small-scale fraud during registration, it is felt that implementing the in-home verification can mitigate this fact. The reduction in issuing point wait times and easier crowd control due to fewer beneficiaries at issuing stations is also a key benefit given the program's high volume.

→ **Recommendation:** SOPs should be altered to reflect that only one representative per household should come to collect all nets during UCC issuing.

Thumbprint during registration

The thumbprint process during registration as outlined in the SOPs did not proceed as expected in most cases. Observers regularly witnessed one beneficiary providing thumbprints for all the cards for the household. The volunteers stated that the ink pads were easy to use, however, its presence adds cost and additional items to carry for each registration volunteer in the program. The quantitative data suggests that the step adds approximately 1 minute to the time needed to fill out a UCRC. The intended purpose of the thumbprint during registration was to deter fraud and encourage beneficiaries to provide accurate sleeping space information. The pilot found the thumbprint does not serve this function because thumbprints are taken *after* the beneficiary provides the sleeping space information. Thus, if one was too lie about their sleeping spaces, they would lie before they realize that their thumbprint will be taken. In addition, it is not effective in mitigating mass fraud through word of mouth since an area is often registered within a short period of time.

- **Recommendation:** The UCC procedure should not involve a thumbprint during registration; the UCRC and the copy should both receive a thumbprint during the LLIN issuing.

Mobilize volunteers

The observers of the UCC pilot discussed the importance of strategies that would mobilize volunteers and encourage them to perform their tasks well. There were cases where volunteers were not following procedure and were engaged in deceptive activities during the pilot in front of observers. On the other hand, there were volunteers that acted as malaria representatives in their community and actively promoted net usage. An important and effective objective of the UCC program should be to increase the latter type of volunteer. A discussion on the potential benefits (reduced leakage and more accurate registration) can be found in Appendix G.

- **Recommendation:** The UCC Taskforce should consider procedures and programs that encourage volunteers to perform their tasks well in order to increase positive program outputs such as accurate registration.

Issuing point set-up

The set-up in Nyafula (See Appendix D), on average, added 30 seconds to the time required to issue a net, and therefore, is a less efficient arrangement for full implementation. Furthermore, the two separate tables required beneficiaries to form two separate queues according to which volunteer registered them. The disadvantage is that a beneficiary may not remember which volunteer registered them and, thus, enter the wrong queue. Also, it was noted by observers that one queue may be long and the other queue may not have any beneficiaries; however, it was not possible for the beneficiaries to receive a net from the other volunteer since the UCRC carbon copies were divided according to registration.

- **Recommendation:** UCC should maintain the use of the issuing point set-up from U5CC.

Verification of carbon copy at issuing point

The verification of each carbon copy while issuing was believed to be an effective way of fighting mass fraud committed through UCRC reproduction. During the pilot, this task added approximately 20 seconds to issuing and volunteers were not always using barcode range training. Although the full program will involve much higher volumes, it is believed that increased training on barcode ranges can keep this time low. It was found that the benefit of reducing fraud outweighs the additional time required. In addition, if the carbon copy receives a thumbprint during issuing, the records remaining at Ward level (UCRC booklets) will have information on which beneficiaries were issued nets.

- **Recommendation:** The UCC issuing procedure should require volunteers to check copies and then thumbprint the copy.

Process for registration of unregistered persons

A major difficulty surrounding registration of previously unregistered persons during the final day of issuing is that verifying one's eligibility is almost impossible. Furthermore, at issuing one is no longer registering a sleeping space in a household as during registration, but rather must be registered as an individual. Observer discussed that having the MEO/VEO verify the eligibility of an individual would add a level of accountability and may deter people from attempting to defraud the program. However, it may be difficult for a MEO/VEO to visit all the issuing points at the required time. The data on the time of this activity is incomplete and suspected to be inaccurate.

- **Recommendation:** An unregistered person can only be registered for, and issued, *one LLIN* during the *final day* of issuing.
- **Recommendation:** Whenever possible, MEO/VEO or VCP should be used for verification of eligibility when an unregistered person is registered on the final day of issuing.

Materials for UCRC collection

Unfortunately, due to the small size of the pilot, proper testing of materials and processes for transporting the UCRC coupons after issuing was not possible (See Pending Issues). The two letter size envelopes used in Nyafula easily fit the 200 UCRC coupons from that village. In Kabusungu, the plastic folders were observed to be effective as well. In Kayenze the volunteers were not provided with any materials to collect the UCRC coupons. Interestingly, the volunteers improvised and decided to use the empty LLIN bales to collect and wrap the coupons. This technique was observed to be as effective as the other materials and there was no associated cost.

- **Recommendation:** Train on how to use the empty LLIN bales to collect and package UCRC coupons at an issuing point.
- **Recommendation:** UCC Taskforce discuss solutions to transporting the UCRC coupons to the district level and back to MEDA HQ (see Pending Issues).

Reporting & forms

The reporting process was simulated as closely as possible throughout the pilot using the latest version of UCC reports and forms. Observers noted that there were multiple mistakes made in the registration reports due to ambiguous wording. This resulted in each MEO interpreting the form differently. Issuing reports were generally well understood but the path of the UCRC coupons after issuing needed clarification from observers. It was observed that registration and issuing reports were not verified before submission which leaves the program vulnerable to shortages and excesses regardless of registration accuracy. In the U5CC, VCPs are required to sign the reporting forms, but there have been complaints by VCPs because they are not being paid for that activity.

- **Recommendation:** MEDA review all forms and reports in light of observations gathered and redesign the registration report to minimize confusion and gather more useful data.

- **Recommendation:** Training should include a formalized section dedicated to reporting. Division level training should involve the completion of each report together with explanations of each field. Training should also ensure that the flow of reports and UCRC coupons is clearly understood by all stakeholders.
- **Recommendation:** UCC Taskforce should discuss ways of motivating the VCPs to thoroughly verify the accuracy of the reports. Training must emphasize the importance of data accuracy to all WEOs and MEO/VEOs and ensure that data is verified by a second source (VCP) before submission.

Universal Coverage Registration Card (UCRC) design

The UCRC design was well received in the field. Volunteers, MEOs, and observers all felt it was easy to use, easy to learn, and well designed for registration and issuing. There are minor design changes that have been communicated to MEDA and will be incorporated; mainly, changing the location of the government logo, deepening the perforation of each card, and adding an issuing date field to the card. In addition, observers felt one drawback in the design is that it does not track the household number – this information would allow reporting on the number of households registered in each village.

- **Recommendation:** MEDA and the UCC Taskforce should incorporate the household number field in the card, especially if the tally sheets are not used.

Moving Forward

Pending Issues

There are still several issues that need to be discussed and resolved before the UCC can be fully launched. These issues include:

1. Distribution of Volunteers for Registration

Even during this pilot it was apparent that villages vary in number of households, distance between each household, and size of each household. Therefore, there will inevitably be unequal workload distribution. Furthermore, the KPMG procedural audits from U5CC have identified the issue of unequal workload for volunteers during registration between villages which affects the quality and completeness of registration data. Since registration is a very crucial step in the UCC the issue of workload and volunteer fatigue must be discussed and creative thinking should be encouraged.

2. UCRC Transportation to MEDA HQ

Since MEDA will be scanning every UCRC that is exchanged for a LLIN after issuing, a process for transporting the UCRCs back to MEDA HQ needs to be developed. Currently, it seems possible for the redeemed UCRCs to reach the district level by following the same path as the issuing reports. However, due to the large volume of

UCRCs being sent to the district level, considerations such as storage and transportation from the district level must be discussed further. It will be important for the process to be communicated and approved by the RMOs and DMOs during or before the courtesy calls.

3. Redistribution of excess nets

Currently, the Standard Operating Procedures for UCC indicates that excess LLINs from a village must not remain at this level, but rather must be sent to the ward level for redistribution. A process for redistributing LLINs from Ward level must be outlined and communicated clearly to the local government officials.

4. High volume during issuing

As mentioned in the limitations, the pilot did not simulate any issues that may arise due to the large volume of beneficiaries during full implementation. This should be a cross-cutting consideration moving forward with planning discussions.

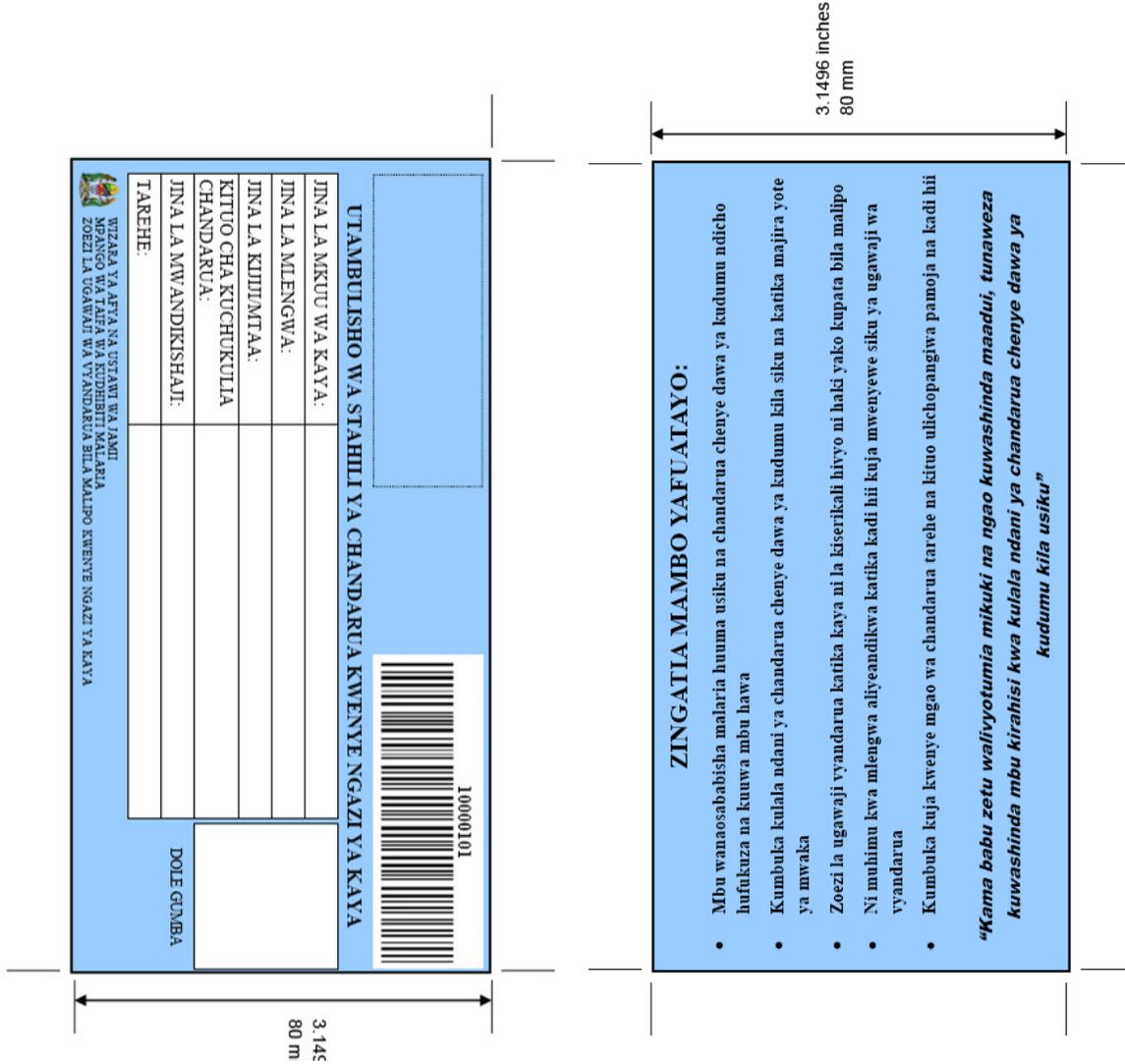
Next Steps

With immediate effect, the pilot findings and recommendations have been distributed to all UCC program stakeholders through this document. Each partner participating in the pilot gained valuable insight into seeing their policies and materials tested in a field setting and are able to begin discussions and revisions immediately based upon this feedback. The following are the next steps:

- Form UCC Partners Taskforce
 - Review pilot report and discuss recommendations
 - Initial meeting Friday, February 5th to discuss sleeping space definition and pilot results
- MEDA with NMCP input to finalize UCC Standard Operating Procedures (SOP's)
- WVT to update training materials to reflect new SOP's and recommendations
 - All partners are invited to contribute to WVT's train the trainer's session
- NMCP to provide a revised schedule for UCC launch
 - Considering LLIN tender timing, donor approvals, and external factors
 - Partners create and share detailed program activity schedule or Gantt chart
- Partners procure and print necessary materials and forms based on schedule

Appendices

Appendix A: Universal Registration Card Design



The front and back of the UCRC design.

Appendix B: UCC Registration Tally Sheet

Universal Coverage Campaign - Tally Sheet

House #	A	B	C	D	House #	A	B	C	D
	Number of sleeping spaces	Number of U5CC nets	Number of Other LLINs	Total Number of UCRC		Number of sleeping spaces	Number of U5CC nets	Number of Other LLINs	Total Number of UCRC
	A	- B	- C	= D		A	- B	- C	= D
House 1:	3	1	1	1	House 1:	3	1	1	1
House 2:	1	0	1	0	House 2:	1	0	1	0
House 3:	3	1	0	2	House 3:	3	1	0	2
1					51				
2					52				
3					53				
4					54				
5					55				
6					56				
7					57				
8					58				
9					59				
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42					92				
43					93				
44					94				
45					95				
46					96				
47					97				
48					98				
49					99				
50					100				

Appendix C: Training Questionnaire

MEO/WEO/Volunteer to fill out:				
Date: _____		Observer: _____		
Ni rahisi kufuatilia utaratibu wa uandikishaji	Rahisi sana	Wastani		Ni vigumu sana
	1	2	3	4
<i>Procedure for registration is easy to follow</i>	Very Easy	Average		Very Difficult
Ni rahisi kufuatilia utaratibu wa ugawaji	Rahisi sana	Wastani		Ni vigumu sana
	1	2	3	4
<i>The procedure for issuing is easy to follow</i>	Very Easy	Average		Very Difficult
Makabrasha ya mafunzo yanafaa kutumia/yanasaidia	Yanafaa sana	Wastani		Hayafai
	1	2	3	4
<i>The training material is useful</i>	Very Useful	Average		Not Useful
Wakufunzi wanasaidia kuelewa/wanaeleweka	Wanasaidia sana	Wastani		Hawasaidii
	1	2	3	4
<i>The trainers are helpful</i>	Very helpful	Average		Not helpful
Mafunzo ya siku 1 moja yanatosheleza mahitaji.	Zaidi ya mahitaji	Wastani		Haitoshi
	1	2	3	4
<i>1 day of training is sufficient</i>	More than enough	Average		Not enough

Open-ended Interview Questions

1. What part of the training helped you understand the procedures for registration and issuing?
2. What do you recommend adding to training to help future volunteers understand registration and issuing better?
3. Any other comments/recommendations?

Appendix D: Comparison of variables by village

Comparison variables	Control village: Kabusungu	Village 2: Kayenze	Village 3: Nyafula	
Registration	1) Use of U5CC registration books for routes [On/Off]	On	On	Off
	2) Ask to enter the homes to verify net count [On/Off]	On	Off	On
	3) Use LLIN sample in registration [On/Off]	On	On	Off
	4) Beneficiary is asked for thumbprint in registration [On/Off]	On	Off	On
	5) Statement that all beneficiaries with cards must come to issuing day to collect nets [On/Off]	On	Off	On
	6) Will be given [x less cards/correct/ x more cards] compared to nets	Less cards *x=5	Less cards *x=5	Correct
	7) UCRC book covers removed and submitted with reports by VEO [ON/Off]	On	Off	On
Issuing	8) Issuing point volunteers are set up as per Standard Operating Procedure [On/Off]	On	On	Off *2 separate desks
	9) Test which participant fills out card for unregistered beneficiaries [VEO/volunteer/none]	MEO	Volunteer	Volunteer
	10) Materials for UCRC collection [cardboard box + elastics/ envelope/ plastic bags]	Plastic Bag	None	Envelope

Appendix E: Registration and Issuing Questionnaire

MEO/Volunteer to fill out:					
Date: _____		Observer: _____			
LLikuwa rahisi kutumia vidau vya wino wakati wa uandishaji	Rahisi sana	Wastani		Ni vigumu sana	
<i>Ink pads were easy to use during registration</i>	1	2	3	4	5
	Very Easy	Average		Very Difficult	
Ni rahisi kufuatililia utaratibu wa ugawaji	Wanasaidia sana	Wastani		Hawasaidii	
<i>Tally sheet was helpful to calculate the number of sleeping spaces</i>	1	2	3	4	5
	Very helpful	Average		Not helpful	
Makabrasha	Wanasaidia sana	Wastani		Hawasaidii	
<i>The LLIN sample was helpful during registration</i>	1	2	3	4	5
	Very helpful	Average		Not helpful	
Wakufunzi wanasaidia kuelewa/wanaeleweka	?	Wastani		?	
<i>I learnt the registration card quickly (Very Quickly to Very Slowly)</i>	1	2	3	4	5
	Very Quickly	Average		Very Slowly	
Mafunzo ya siku 1 moja yanatosheleza mahitaji.	Rahisi sana	Wastani		Ni vigumu sana	
<i>Registration card is easy to use when registering and issuing</i>	1	2	3	4	5
	Very Easy	Average		Very Difficult	
Wakufunzi wanasaidia kuelewa/wanaeleweka	Rahisi sana	Wastani		Ni vigumu sana	
<i>U5CC books were easy to use</i>	1	2	3	4	5
	Very Easy	Average		Very Difficult	
Makabrasha	?	Wastani		?	
<i>I prefer the registration card over the U5CC books</i>	1	2	3	4	5
	Prefer very much	Average		Do not prefer	

Open-ended Interview Questions

- 1) What do you think about asking to enter people's houses during registration? Is it useful?
- 2) Was it difficult finding the correct number of sleeping spaces to register?
- 3) How could we help motivate volunteers to do a great job (entering homes, using U5CC books, etc.)
- 4) Were there any activities where you didn't feel prepared? Any other comments/recommendations?

Appendix F: Summarized Results Table

Variables	Timed data	Questionnaire	Interviews	Observer notes
Use of U5CC Register Forms	---	2/9 felt it shouldn't be used	3/9 felt it was not easy to use	- difficult for one's without experience - not used for routes - used for verification by some
Asked to enter home to verify nets	---	- Useful for verification - people will not let us inside	---	- rarely not let inside actually - time consuming - many stopped doing it
Use of LLIN sample during registration	---	---	7/9 felt it was helpful	---
Beneficiary asked for thumbprint during registration	Adds approx. 1 min to registration	---	-7/9 felt it was easy to use	- often one person did all the fingerprints for a household - all family members are present during registration
Statement that all beneficiaries must come on issuing day	---	---	---	- one person from a household brought all cards, even if instructed otherwise - can't ask all family members to come to issuing
Checking copy (new)	Adds approx. 20 seconds to issuing	---	---	- checking the copy goes quickly
Issuing point set-up	If volunteers each have a desk, adds 30 seconds to issuing of LLIN	---	---	- inefficient to have separate desks, volunteers should share issuing tasks at one desk
Which participant is used to register unregistered beneficiaries (MEO/Volunteer)	- volunteer doing it adds 90 seconds more than if MEO does registration	---	---	- MEO really only approves the registration of the unregistered person
Materials for collecting UCRC coupons	---	---	---	- not necessary to provide it at the ward/ village level

Appendix G: UCC Volunteer Motivation and Leakage Reduction

Noted discussion on role of field volunteer

The UCC program is heavily reliant on its field volunteer for the successful program implementation and accuracy. The proper village registration exercise will allow for the program to meet and exceed the targeted 80% coverage as well as minimize loss due to dishonest registration. In other words, the most effective anti-fraud mechanism is the volunteer.

In one occasion, an observer witnessed a volunteer verbally ask for the amount of uncovered sleep spaces before entering the household. The beneficiary answered five, when the volunteer entered to verify the amount, only two uncovered sleeping spaces were found – this case represented a cost-savings to the program of 3 LLINs (approximately 18 USD) in the few minutes it took to properly verify.

The UCC program budgets for approximately 60,000 volunteers and registration is currently scheduled to be a seven day exercise. Hypothetically, if each volunteer reduced the amount of falsely registered nets by five each day by properly following SOP's and honest verification of nets, the program could reduce the amount of leakage due to fraud by 2.1 million LLINs (approximately 12.6 million USD). It is important to note that the opposite situation occurs as well, where spaces that were actually used for sleeping are not considered until the volunteer enters the household and clarifies sleeping space definition. Creative solutions aimed at encouraging accurate registration and ultimately empowering volunteers, should be actively sought after. Incentives discussed ranged from increasing the number of volunteers in village registration to instructing MEO/VEOs to audit volunteers and provide rewards.

Appendix H: UCC Mwanza Pilot Photographs



World Vision Tanzania trains MEOs and WEO on sleeping space calculations during Division level training simulation



Volunteers complete role-play of issuing activities during Ward level training simulation



Volunteer fills out and removes a UCRC coupon to give to beneficiary during registration exercise



Volunteer applies the barcode to the beneficiaries thumb printed UCRC coupon after removing from LLIN bag