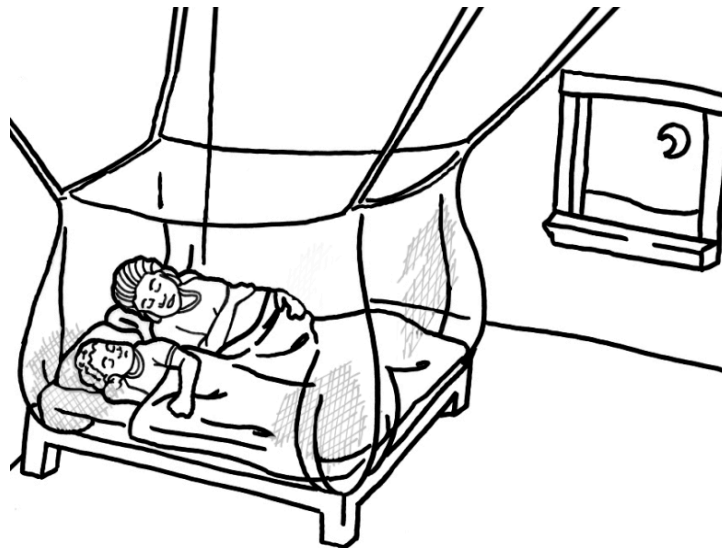


HEALTH FACILITY DISTRIBUTION OF LONG LASTING INSECTICIDE-TREATED NETS (LLINs) IN GHANA



FINAL DRAFT

TRAINING MANUAL

January 2013

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Table 2: Training Content and Agenda

HEALTH FACILITY DISTRIBUTION OF LLINs

Training content and agenda

Session title	Duration	Time	Facilitators
Participant arrival		8:30-9:00	
Introduction	20 min	9:00-9:20	
Unit 1: Role of LLINs in Malaria prevention	45 min	9:20-10:05	
Unit 2: Continuous distribution of LLINs	45 min	10:05-10:50	
BREAK	15 min	10:50-11:05	
Unit 3: Communication and social mobilization	30 min	11:05-11:35	
Unit 4: Roles & responsibilities for distribution of LLINs	30 mins	11:35-12:05	
Unit 5: Logistics	45 mins	12:05-12:50	
Unit 6: Monitoring & record keeping	45mins	12.50-1:35	
LUNCH/DEPARTURE			

TRAINING CONTENT

UNIT 0: Welcome & Introductions

1. Self-introductions

2. Introduction

The Ministry of Health, National Malaria Control Program and its development partners are working towards reducing malaria related maternal and infant mortality by ensuring that all children under five years, pregnant women, and subsequently everybody own and sleep under an LLIN every night.

Ghana has implemented LLIN Door-to-Door Universal Coverage Hang Up Campaigns in all the regions aiming at giving 1 (one) LLIN to every 2 (two) persons in a household and hanging the LLIN on their sleeping places for them. The continuous distribution of LLIN is a complementary strategy to maintain and sustain gains made through the universal coverage campaign.

3. Training overview

This workshop will be held within a day with the aim of training ANC and CWC staff to effectively manage the distribution of LLINs to pregnant women and children due for the measles booster dose. It is expected that at the end of this training program, participants will fully understand the entire continuous distribution strategy.

UNIT 1: The Role of LLINs in Malaria Prevention

1. Learning objectives

At the end of the session, participants will be able to:

- Describe how malaria is transmitted
- Explain the preventive tools used in malaria control
- See malaria as a dangerous disease and as a major public health problem in Ghana
- Describe the differences between ITNs and LLINs
- Describe the role of LLINs in the fight against malaria in Ghana, and hence the reason for the planned activities

2. Questions addressed are:

- Why is malaria an important disease?
- What causes malaria and how does it spread?
- What are the effects of malaria on the community, and who are the groups of people most vulnerable to malaria?
- What are Insecticide Treated Nets (ITNs) and Long-Lasting Insecticidal Nets (LLINs)?
- Why are LLINs effective in preventing malaria?
- Are the nets safe?

Malaria is an acute illness caused by malaria parasites. Acute means that it appears and progresses very fast. Human beings are infected through the bite of an infective female *Anopheles* mosquito, meaning the female *Anopheles* mosquito has previously taken up the parasite from an infected person.

There are many types of mosquitoes; some that bite in the daytime and some in the early evening. The malaria-carrying *Anopheles* mosquito usually bites at night and is the only one that can transmit malaria. You can only get malaria by being bitten by one of these infective mosquitoes.

Some people believe that one can get malaria by eating mangoes or maize, drinking dirty water, or walking in the rain. **This is not true!** Many people believe this because malaria is most common during the rainy season, when mangoes and maize are plentiful. Actually, the reason that there is more malaria when it rains is because there are more breeding sites for the malaria transmitting mosquitoes (mosquitoes lay their eggs in water and the young mosquitoes live in water as larvae before turning into the flying adults).

- In Ghana, malaria kills more children than any other disease; most children who die of convulsions and anaemia (lack of blood) have actually died of malaria.
 - Cause of children absenteeism to school and affects children IQ
 - The commonest cause of convulsions and loss of consciousness among children is malaria and not bad spirits or witchcraft, as some people believe.
 - Malaria is a leading cause of abortions and stillbirths in pregnant women
 - Families lose a lot of money not only on treatment of the sick but also on transport to health facilities. They also lose a lot of time meant for gainful work.
- Pregnant women and children under five years are most vulnerable (malaria is most dangerous in these groups of people and often result in death).

The environmental conditions in most parts of Ghana favour mosquito breeding all the year round resulting in **transmission of malaria throughout the year**. Fortunately, the mosquitoes transmitting malaria bite mainly during the night. This makes the mosquito net an excellent tool to prevent malaria if it is used properly **every night**.

About ITNs and LLINs:

- Insecticide-Treated Nets (ITNs) are mosquito nets that are treated with a safe insecticide.
- The protection that mosquito nets provide against malaria is doubled when the net is treated with insecticide because the net kills/repels mosquitoes **in addition** to stopping them from reaching and biting the person.
- Conventionally, nets were treated by dipping them in an insecticide solution - and to ensure its continued insecticidal effect, the net had to be re-treated at least once a year because the insecticide washes off quickly.
- In contrast, a Long Lasting Insecticidal Net (LLIN) is a type of ITN, which does not need to be re-treated if handled with care. LLINs are factory-treated mosquito nets made with netting material that has insecticide incorporated within or bound around the fibres. The insecticide on the net lasts for the lifetime of the net (usually 3 years or 20 washes). All free net distributions in Ghana should be LLINs.
- All of the nets to be distributed in this campaign are LLINs
- The insecticides used for ITNs and the World Health Organization (WHO) and the Ministry of Health approve LLINs to be safe.

About the beneficiaries:

Ghana has, in the past, distributed nets to pregnant women and children under five. Currently, Ghana has adopted the universal coverage policy of LLIN distribution. This approach has ensured that one (1) LLIN is distributed to every two (2) people in a household. To ensure the maintenance of the universal coverage, other Continuous LLIN distribution channels are being engaged. Among these Continuous LLIN distribution channels is the Primary School Based LLIN distribution.

The shift towards universal coverage is to ensure that all people at risk of malaria are targeted with a cost-effective and proven technology for prevention of the disease by virtue of economies of scale. Secondly, high population coverage achieved through mass LLIN distribution and sustained through continuous LLIN distribution channels increases the potential to reduce overall disease transmission.

3. Take Home Messages

Communicate these in a participatory manner, posing questions to the audience etc.

- Malaria is the number one killer disease and cause of fever in Ghana.
 - The malaria carrying mosquitoes bite mainly at night and indoors.
 - The good news is that malaria is preventable by sleeping under a LLIN every night.
 - The LLINs do not need retreatment.
 - The insecticide in LLINs is safe. The Ministry of Health in Ghana and the World Health Organization has approved this.
- These nets are distributed to all pregnant women visiting ANC for the first time and children 18 months to 24 months due for the measles booster dose.

UNIT 2: Continuous LLIN Distribution

1. Learning objectives:

By the end of the session, participants will be able to:

- Explain the continuous distribution LLIN strategy
- Describe the key channels of continuous distribution of LLIN to be engaged
- State the key target beneficiaries of the various channels
- State the main objectives of continuous distribution

2. Questions addressed are:

- Why continuous distribution of LLINs?
- What are the objectives of the Continuous distribution strategy
- What are the key selected channels?
- How are these channels to be implemented?
- When is the continuous distribution strategy starting?

At the end of 2012, Ghana delivered 11 million LLINs to households through its universal coverage campaign.

To maintain universal coverage after the campaign is completed, Ghana aims to target a variety of population groups with LLINs using a continuous distribution system, integrating LLIN distribution into ANC, EPI, and through schools, with a complementary retail sector active in urban areas, where nets will be available for sale according to free market principles.

Ghana's Continuous Distribution Strategy is to use the following channels to 'push' nets into households periodically throughout the growth of the household from couple to family and beyond.

- **ANC (targeting pregnant women at their first ANC visit)**
- **EPI (targeting 18 month old children receiving their 2nd measles vaccination)**
- **Primary Schools (targeting children in primary 2 and 6)**

Complementing these push strategies, additional 'pull' strategies will provide coverage for the remaining households where nets are needed:

- Sales of LLINs to students in secondary schools
- Open retail sales in urban and peri-urban areas
- NGO, CBO and FBO distributions at the community level
- Workplace programs to encourage employer purchase of LLINs for among employees

Using NetCALC® to model LLIN coverage, the following steps would have to be taken in LLIN supply to maintain the target of 90% ownership.

- In 2012 approximately 1.6 million LLINs would be needed for distribution through the ANC and EPI channels.

In 2019, 3.7 million LLIN will be needed with net needs increasing with population growth in subsequent years.

- An additional 500,000 nets would need to be sold or distributed each year through retail and other pull channels.

The success of the continuous LLIN distribution mechanism depends on a well-designed and implemented behaviour change communication strategy. It will also depend on a solid supply chain system supported by accurate data reporting and effective support supervision. Supervision will be integrated into routine support supervision activities and tools.

The continuous distribution strategy is led and overseen by the National Malaria Control Programme (NMCP) with support from a number of donors and implementing partners. The NMCP is responsible for coordination, strategic planning, advocacy, procurement and distribution, data collation and sharing, and quality control

Why Continuous LLIN Distribution

Previous Malaria prevention strategies aimed for high ownership and use of LLINs by the vulnerable groups. More recently the goal has shifted to “Universal Coverage” where every person in a malarious region sleeps under an LLIN.

It is aimed that this UC in addition to providing personal protection to the population covered will lead to a decline in malaria transmission levels.

Operationally, UC= 1LLIN to 2 people in a household

Ghana expects to have delivered 11 million LLINs to households through its Door-to-Door Distribution and Hang UP Universal Coverage campaign.

AFTER UC CAMPAIGNS WHAT NEXT?

- How can populations not reached by campaigns be served?
- What strategies can be used to sustain Universal Coverage?
- How do we maintain gains made?

To maintain universal coverage after the campaign is completed, Ghana aims to target a variety of population groups with LLINs using a continuous distribution system.

Ghana’s Continuous Distribution Strategy is to use different channels to ‘push’ nets into households periodically throughout the growth of the household from couple to family and beyond

What are the objectives of the Continuous LLIN distribution Strategy?

- Provide LLIN for replacement and “add-on” to sustain “universal coverage”
- Avoid oversupply (spill-over) by combining “push” and “pull” systems
- Use the household as entry point for LLIN with intra-family or intra-community redistribution based on need
- Utilize all suitable channels with combinations of free, subsidized and at cost nets where possible

What are the key channels?

- Ante Natal Clinic (ANC)
 - Pregnant women attending Ante Natal clinic for the first time
- Child Welfare Clinic (CWC)
 - Children 18 months to 24 months due for measles 2 (Booster dose)
- Primary School Distribution
 - Pupils in Primary 2 and Primary 6

UNIT 3: Communication and Social Mobilization

1. Learning objectives:

At the end of the session, participants will be able to:

- Explain the benefits of using LLINs
- Describe strategies to promote and influence the correct use of LLINs among beneficiaries
- Explain ways of preventing leakage of nets
- Explain possible ways of communicating malaria information to children
- Explain social mobilization plan - including community/ parents involvement

2. Issues addressed are:

- The role of health workers vigilance to prevent leakage
- The importance of promoting proper use of LLINs
- Frequently asked questions about LLINs that may help provide information to support proper use
- How to incorporate topics on malaria in school subjects
- Mobilisation for support from parents of beneficiary pupils

Please write the objectives and questions to be addressed on a flip chart. Ensure the session addresses them.

IEC/BCC activities

Counselling/Talk sessions provides a good platform to talk about key issues related to net use and should be linked to the IEC/BCC materials that will be distributed and displayed at health facilities tailored to emphasis malaria issues to reinforce messages and effect behaviour change

Regarding leakage, stress that:

This routine ANC/CWC distribution is to support the earlier LLIN campaign and will result in protecting the entire community from malaria only if the LLINs actually reach the people they are intended for, are not sold, and are used by the pupils (and their family members where necessary) who receive them.

Two things are important for this:

- 1) LLINs are not stolen or diverted at any level.
- 2) Recipients of the LLINs actually sleep under the LLINs every night.

Key messages for LLIN beneficiaries¹

It is important that the same messages are delivered through multiple channels, this provides reinforcement of the messages in different ways the beneficiaries can relate to: seeing, hearing, doing, repeating the cycle. For example, seeing a poster about how to hang an LLIN properly, hearing a radio spot that talks about the benefits and importance of sleeping under an LLIN, especially among beneficiaries, in an LLIN hanging demonstration. Over and over—the messages echo through word of mouth, throughout the school/ communities, and the cycle repeats itself.

Facts about Malaria:

1. Mosquitoes transmit malaria
2. The malaria-carrying female *Anopheles* mosquito usually bites at night and is the only one that can transmit malaria.
3. Malaria is serious, and it can be fatal
4. Children under 5 and pregnant women are most vulnerable
5. Malaria transmission occurs year-round
6. You can prevent malaria in your home
7. There is an effective treatment for malaria
8. LLINs are an effective means of malaria prevention and control
9. LLINs are safe for the general population, including children under 5 and pregnant women
10. LLINs must be used every night

Actions:

1. Acquire an LLIN
2. Sleep under an LLIN every night

Benefits of LLINs:

1. LLINs protect all populations at risk from malaria.
2. LLINs protect the pregnant woman and her unborn baby from malaria
3. LLINs protect the pregnant woman from anemia
4. The child will not be born small or sickly, since the mother's use of an LLIN helps prevent her and her child from contracting malaria
5. It will ensure that the pregnancy goes to full term
6. LLIN prevents school absenteeism due to malaria

Why is malaria prevention important?

- In Ghana, malaria kills more children than any other disease; most children who die of convulsions and anaemia (lack of blood) have actually died of malaria.
- The commonest cause of convulsions and loss of consciousness among children is malaria and not bad spirits or witchcraft, as some people believe.

¹ Adapted from PMI Communication and Social Mobilization Guidelines and NMCP/ProMPT materials developed

- Malaria is a leading cause of abortions and stillbirths in pregnant women.
- Families lose a lot of money not only on treatment of the sick but also on transport to health facilities. They also lose a lot of time meant for gainful work.
- Pregnant women and children under five years are most vulnerable (malaria is most dangerous in these groups of people and often result in death). Even when a pregnant woman feels healthy, malaria infection in the placenta can harm the development of the baby.
- Repeated malaria infections can harm the growth and development of children.
- Malaria causes children to miss days at school.

How does the LLIN work?

- The LLIN works as a physical barrier to some extent, but that is not all it does. Because it has insecticide, it gives double the protection than an ordinary net with no insecticide. The insecticide on the net repels the malaria mosquitoes or kills them when they land on the net while trying to bite the person sleeping inside.
- Since the malaria transmitting mosquitos bite at night, the net is very useful at protecting people who are usually asleep at this time (underneath the LLIN).

What types of nets are distributed?

- The types of nets going out in this school distribution exercise are Long Lasting Insecticidal Nets (LLINs).
- The insecticide in these nets lasts for the lifetime of the net (usually 3 years or 20 washes, whichever comes first) so they do not need to be re-treated.

Why can I still see mosquitoes around my LLIN?

- A common complaint is that people still see mosquitoes, even when they are using a net treated with insecticide. It is very important to understand that even if you see mosquitoes you are still being protected from malaria.
- Even if you still see mosquitoes in the house and you even see some resting on the net and not being killed, you may be seeing a type of mosquito called *Culex* mosquitoes that DO NOT carry or transmit the malaria parasite. The insecticide will still be keeping away and killing the *Anopheles* mosquitoes that do carry malaria.

How do I hang the LLIN?

- For rectangular nets, use the four loops on the net to tie the net up. You can hang it in many different ways, whatever works well for your sleeping place. You might use sticks attached to the bed at each corner and hang the net from these. Or, you might hang it from the wall or ceiling – you could hang it from nails sunk in the walls, on strings or poles

- That you can run across your room. Or you might find another solution for hanging it that works better for your space.
- For conical nets, hang the net to the roof directly above the centre of the bed.
- Lower it to cover the users every night and tuck the edges of net under the mattress or sleeping mat so no mosquitoes can sneak in.
- Lifting up the net in the daytime can help prevent it from being snagged and/or torn (if a net is accidentally torn, it can easily be repaired by sewing up the hole – and the net will work effectively, just as before).

Who should sleep under this net?

- Ideally, everyone in the family should sleep under an LLIN every night. More than one person can share the net. If for some reason there are not enough nets in the house to cover everyone, then you should at least make sure that the beneficiary and younger sibling sleep under a treated net, every night.

When should the LLINs be used?

- The LLIN should be slept under every night, all year round.
- There are times when you might see fewer mosquitoes around but they never disappear completely so it is important to still use the nets even at these times. It only takes one female Anopheles mosquito to catch malaria!

Are young children safe under an LLIN?

- Yes. Young children are very safe under a treated net. The amount of insecticide used to treat a net is so little that it cannot harm people sleeping under the net, including babies.

Are pregnant woman and unborn babies safe under a LLIN?

- Yes. The insecticide is not at all dangerous for pregnant women or to the unborn babies.
- In fact, they will be extra safe under the net. The net will protect the mother throughout the pregnancy from getting a malaria infection, which could hide in the placenta and stop the baby from growing properly or even cause a miscarriage.
- It is important that a pregnant woman sleeps under the net throughout the pregnancy and does not save the net until the baby is born.

What about the side-effects people get from new unopened LLINs?

- Side effects from LLINs are rare and not serious. They will only last for a short while if they do occur.
- This effect may be (sneezing, sore eyes, itching skin, and burning sensation) and may come from freshly opened net packages. New nets should therefore be aired for a day or two to avoid these side effects. These nets are LLINs and so do not need retreating.
- To be sure to avoid any side effects, the new nets that are handed out **should be aired for a day before use**; this will allow any excess build-up of insecticide to disperse. It should be stressed that this is only for one or two days after which the LLIN should be hung over the sleeping place and used.

How should I care for my LLIN?

- The net fabric can get dirty, tear or burn like any cloth. Avoid closeness to open fires such as candles.
- If you would like to wash it when it gets dirty then do so. Do not use strong detergents or bleach, as this will cause some of the insecticide to come off.
- The insecticide in the LLIN only lasts for 20 washes.
- Dry the nets in the shade (out of direct sun-light) after washing.
- If holes appear in the net due to wear and tear, just sew the holes up, as you would do for any other fabric. This will ensure that the net lasts up to the intended lifetime.

Aren't LLINs a fire risk?

- LLINs give no more risk of fire than any other cloth hanging in your house.
- The chemical does not make the net any more flammable than any other fabric.
- In fact, the nets are treated so that if they do catch fire the flames quickly die out.
- Of course, it is important to be careful with open flames near the nets - just as you would with open flames near any other things hanging in your house. Keep the hanging net well away from open flames.

Are there any other benefits of the LLINs apart from protection against malaria?

- Yes, insecticide treated nets can sometimes kill other domestic pests (fleas, lice, bedbugs, cockroaches) that come in contact with the net.
- Yellow fever is also another serious disease that is transmitted by mosquitoes. LLINs can therefore help protect you from other mosquito-borne illnesses.

3. Take-home messages

What to do to ensure LLINs are taken up and used by the targeted group?

- Every pregnant woman attending an ANC for the first time will receive 1 LLIN.
- Every child 18m – 24 m due for measles 2 (booster dose) will receive 1 LLIN
- Ensure beneficiaries ANC and CWC cards and other available record books are completed multiple uptakes by beneficiaries.
- Health workers should not take money from beneficiaries before an LLIN is given
- Use available forums to discuss benefits of LLINs:
 - Correct use of LLINs all year round reduces frequency of malaria illness in the household.
 - As a result, expenditure on malaria treatment and travel to seek treatment, and general workdays lost is reduced.
 - The above savings can be put to better use such as used for family development resulting in better living standards.
 - Children can attend school regularly and not miss lessons
- The importance of being responsible with the LLINs and not selling them on.
- LLINs are strictly for pregnant women attending first ANC and children due for the measles booster dose.

UNIT 4: Roles and Responsibilities for distribution of LLINs

By the end of the session, participants will be able to identify and perform specific roles assigned to all persons involved in the LLIN distribution as follows:

HEALTH FACILITY LEVEL	
Health Worker	<ul style="list-style-type: none"> • Register pregnant woman on first visit • Properly document LLIN (net) given (ANC register & booklet) • Properly document LLIN given to child at measles immunization • Collate monthly ANC/EPI data and net stock
Health Facility In-Charge	<ul style="list-style-type: none"> • In charge of net stock and supervises implementation at health facility (HF) • Review ANC/EPI data and net stock and forward to sub-district • Makes monthly requests to district level for restocking of nets • Trainer of health workers at district level
SUB-DISTRICT LEVEL	
Sub-district Head	<ul style="list-style-type: none"> • Review and approve monthly ANC/EPI data and net stock received from all HFs • Endorse monthly HF requests for action by district storekeeper • Supervise and monitor HFs in sub-district
DISTRICT LEVEL	
District Health information Officer/ Disease Control officer	<ul style="list-style-type: none"> • Receive and review monthly ANC/EPI data and net stock for onward submission to RHIO • Trainer of Health Workers at district level
District Health Promotion Officer	<ul style="list-style-type: none"> • Responsible for BCC, education, and social mobilization for net use • Support monitoring and supervision of district level Continuous Distribution (CD) activities
District Supply Officer	<ul style="list-style-type: none"> • In charge of storage and security of stocks at district level • In charge of logistics flow and ensures availability of stocks • Receives and approves sub-district requests for sub-districts/ HF • Prepares quarterly requests for district
District Malaria Focal Person	<ul style="list-style-type: none"> • Reviews and approves ANC/EPI data from sub-districts • Endorse monthly sub-district requests • Trainer of Health Workers in district • Monitor and supervises activities within district • Coordinates CD activities in district
District Director of Health Services	<ul style="list-style-type: none"> • Custodian of nets for district • In charge of CD activities at district level • Review and approve monthly sub-district ANC/EPI data and net stocks for onward forwarding to Regional level • Review and endorse quarterly requests for nets for district • Trainer for Health Workers at district level

ANC Records and Reporting

Health Facility Level

- ANC nurses record the receipt of the LLIN in the pregnant woman's Maternal Health Record Book, recording "Net given/[date]/[location]".
- ANC nurses record the receipt of the LLIN in the Health Facility's ANC register, using the column adjacent to the "ITN" column (which is currently used to record use of LLINs).
- Total LLINs distributed per month is tallied in the NMCP Antenatal/Maternity Month Malaria Data Returns form which are sent to the sub-district, along with stock remaining.
- A requisition is made to the district level monthly for restocking, and is approved by the Health Facility Head, then sent to District level.

Subdistrict Level

- The Subdistrict In-charge compiles the ANC reports from all health facilities and sends to District Director of Health

District Level

- District Health Information Officer keys in ANC data into the DHIMS, and sends the DHIMS file along with hard copies to Regional Health Information Unit. District Director of Health endorses and sends to the Regional Information Unit coordinator.

EPI Records and Reporting

Health Facility Level

- Nurses record the receipt of the LLIN in the child's Road to Health booklet, recording "Net given/[date]/[location]".
- Nurses record the receipt of the LLIN in the Health Facility's EPI Tally Sheet register.
- Total LLINs distributed per month is recorded in the monthly returns, which are sent to the sub-district, along with stock remaining.
- A requisition is made each month and is approved by the Health Facility Head.

Sub district Level

- The Sub district Leader (Head) compiles the EPI reports and sends to District Disease Control Coordinator

District Level

- District Health Information Officer keys in EPI data into the DHIMS, and sends the DHIMS file along with hard copies to Regional Health Information Unit. District Director of Health endorses and sends to the Regional Health Information Officer and Regional Disease Control Officer.

ANC/EPI Outreach

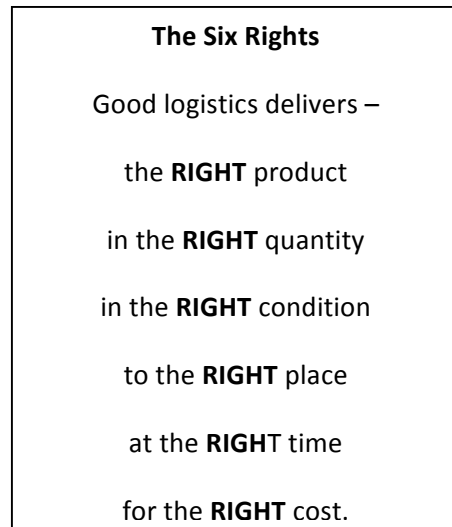
Outreach activities will target the same groups as ANC/EPI (i.e. first-visit ANC and children needing measles vaccinations), but are done in rural and hard-to-reach areas. LLIN should be carried along as part of regularly scheduled outreach activities, with quantities based on previous data on number of first-time ANC and measles vaccinations given.

UNIT 5: LOGISTICS

(Applicable to District Training of Trainers; Training of head teachers/School SHEP coordinators)

Purpose of the Logistics System:

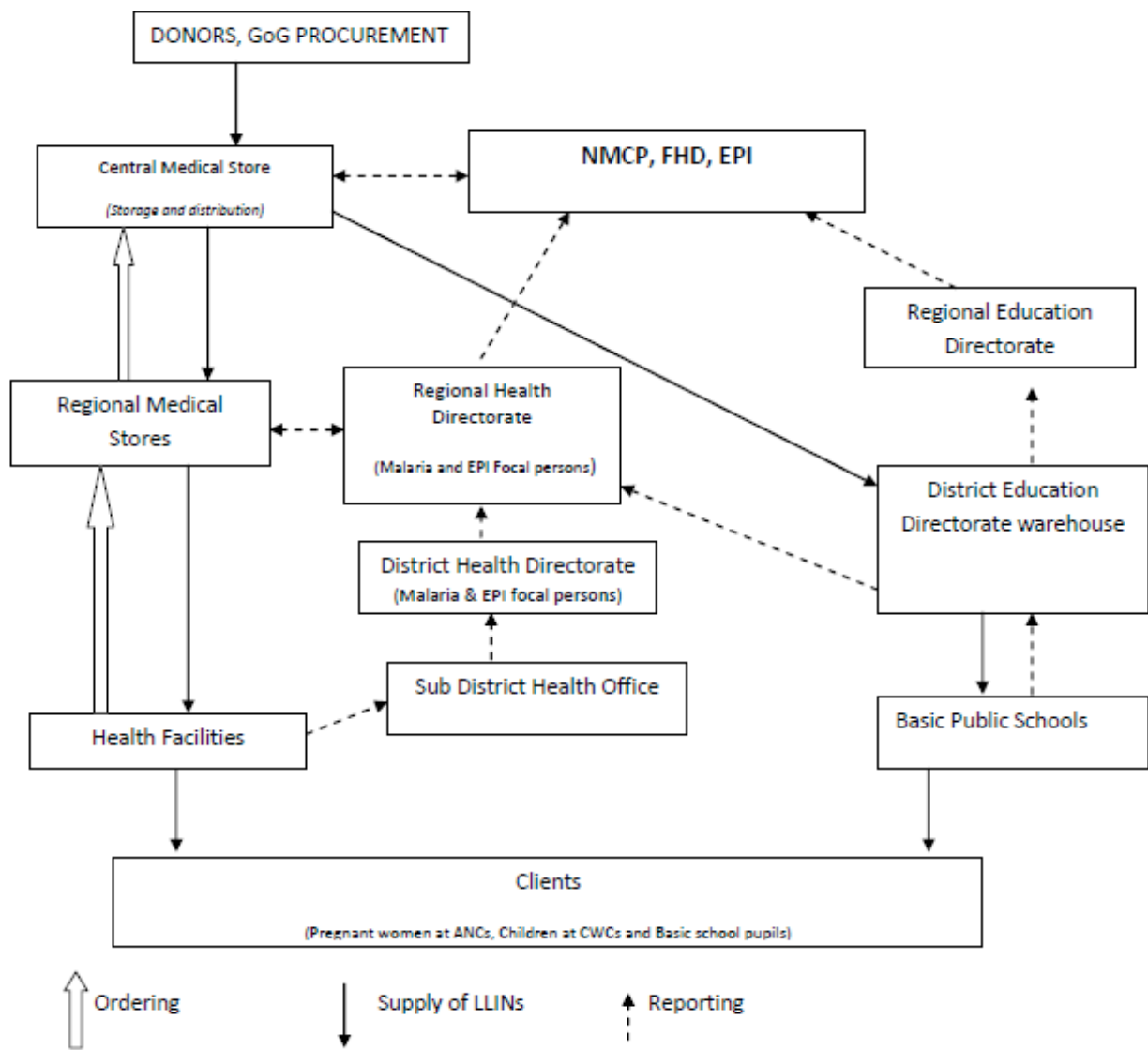
The purpose of logistics management for the continuous LLIN distribution is to ensure the “six (6) rights” are achieved.



- **The Right Goods:** This implies that we are able to identify the type of products or commodities required for the continuous distribution to be successful. This will therefore include the LLINs and any associated tools for tracking, record keeping and reporting.
- **The Right Quantity:** This implies that having identified the right goods or products, we are able to estimate the right quantity of the products or goods. This will largely be based on the right data on schools population for the targeted classes.
- **The Right Condition:** The right products in the right quantity are maintained, stored appropriately and delivered in the right condition.
- **The Right Place:** The right quantities of the right products must be delivered to the right place to ensure a successful distribution exercise. The respective schools’ allocation will therefore have to be delivered according to the allocation to ensure the right quantities are delivered at the right places.
- **The Right Time:** All products needed for the distribution exercise must be allocated and distributed in a timely manner for the exercise to be completed successfully. This implies that LLINs must be available at the district stores at the right time to be able to distribute to the schools in time for distribution to the pupils when school reopens.
- **The Right Cost:** All the activities in the other “Rights” must be done in a cost effective manner to ensure effective use of resources.

For the logistics system for the distribution exercise to be effective, all the 6 rights must be achieved

Flow of LLINs and Information



This refers to how LLINs will be moved from the central level down to the level of Health Facilities where they are distributed to beneficiary. The flow of the LLINs will be as above

Inventory Levels

LEVEL	MINIMUM STOCK	MAXIMUM STOCK
Central Medical Store	6	12
Regional Medical Store	3	6
Health Facilities	1	3

Ordering and Receiving

- Ordering for LLINs at all levels will be done using the existing ordering forms for health commodities.
- Start up estimated quantity will be delivered from the RMS to all facilities (*District health Directorates to provide data on most recent 3 months ANC attendance for each HF. This will be used to estimate initial 3 or 6 months supply*)
- Information on quantities of LLINs being transported to each HF in each district to be share with DHDs
- Requisition for LLIN will be made alongside the report if stock level is at the minimum for HFs. Quantities of LLINs requested from HFs to be endorsed by district malaria focal persons before RMS supplies to the HFs

Reporting

- Monthly reports on LLIN distributed and stock at hand from the health facility will be sent to the district through the sub-district, as part of regular monthly reporting for ANC and EPI activities.
- Districts will report to the regional health administration (regional malaria focal persons and copied the regional EPI focal person) on a monthly basis as well.
- Reports to the central level will be sent to the NMCP, and copied the FHD and EPI on a quarterly basis.
- These reports will be compiled using the existing malaria and EPI reporting forms.