K4Health Malawi

April 2011

Summary:

- *District Learning Center answers clinical debate in Salima Hospital*
- *mLearning prompts community health workers to refer back to their training material and promotes knowledge acquisition*
- *Salima reports on average 4 visitors to the District Learning Center per day and 512 SMS messages exchanged through the hub*
- *Nkhotakota reports on average 5 visitors to the District Learning Center per day and 436 SMS messages exchanged through the hub*
- *Capacity building continues for Ministry of Health Managers of District Learning Centers*

National Level Activities

Capacity building of MOH and Taskforces

As the demonstration project approaches conclusion in June 2011, activities are increasingly focused on transitioning K4Health interventions to permanent structures of the Ministry of Health (MOH). In April, these activities were directed to the Health Education Unit – which will take leadership of the project as of July 2011. Likewise, the KM National Taskforce will have responsibility of updating the e-Toolkits and MOH Data Clerks will manage the Learning Centers and the mHealth components at district level.

Health Education Unit training

Mr. Harold Mtambo from the Ministry of Health - Health Education Unit is receiving training for six weeks (two hours per week) in the various aspects of the K4Health project at the National level. The training has slowed because Mr. Mtambo has limited computer skills and requires additional time to become proficient. Areas covered during the training include:

- Overview of the key components of the project: Toolkit development, District Learning centers and mHealth (Frontline SMS)
- K4Health website – eToolkits: updating K4Health WebPages

Task force Training on eToolkit updating

Due to difficulties in scheduling, we are conducting one to one trainings for the National Taskforce on Toolkit development. Toolkit training was completed in April for one Family Planning subgroup member and National Taskforce member, Ricky Nyaleye from PSI.

Monitoring and Evaluation

In April, the monitoring and evaluation focus was to prepare for the end line study. The study will use a mix of quantitative and qualitative methods to assess the mHealth component and the District Learning Center interventions. Five data collection tools have been developed for the end line assessment:

1. LQAS survey for mHealth
2. mHealth Focus Group Guide
3. DLC User Survey
4. DLC Focus Group Guide
5. Net-Mapping Field Guide

For the mHealth component, Lot Quality Assurance Sampling (LQAS) will be used to sample among CHWs in the target group and the control district of Nkhatabay. In addition, focus groups will be conducted with CHWs (FLSMS users). For the DLC intervention, the DLC User Survey will be used in coordination with the DLC log book and FLSMS monthly monitoring statistics. To complement these quantitative data, focus groups will be held with district-level respondents in both Salima and Nhkotakota. Finally, Net-Mapping will be conducted at national and district level as part of the end line study to assess the extent to which stakeholders perceive communication and information sharing has changed among health service providers since the beginning of the project. The end line activities will run from May to June 30th.

District Level Activities

DLC Managers training

At district level, training continues for MOH assigned Data Clerks to manage the DLCs. Apart from the daily mentorship, the formal trainings will run for six weeks (two hours per week) and will conclude by May 16th. Mr. Ofter Phiri is being trained in Salima and Mr. Davie Kanyangala for Nkhotakota.

Areas covered so far include:

- DLC Operational guidelines
- FLSMS application
- Uploading contacts and editing
- Sending and receiving messages
- Setting up auto response and auto forwarding functions

The Data Clerks have been oriented in the operations of the FLSMS application, supporting DLC visitors with internet services, web searches, toolkits, and management of FLSMS and DLC databases CDS ISIS for windows[1], and monitoring DLC registers.

DLC Visitors

In the month of April, a registered total of 272 unique visitors were made to the two DLCs with a total of 129 from Salima and 143 from Nkhotakota. The multiple purposes of visits are outlined in the table below.

District	Attending Basic Comp Training		Accessing web based info/email		Responding to messages from CBDAs and HSAs		Sending and receiving reports		Toolkits	
	F	M	F	M	F	M	F	M	F	M
Salima	0	1	42	133	2	2	1	8	1	1
Nkhotakota	4	12	54	136	7	13	2	3	0	1
Total Activities*	4	13	96	269	9	15	3	11	1	2

**Note: Due to the more detailed visitor register we are now using, users are reporting multiple activities while visiting DLC, thus the total for activities is higher than the visitor count.*

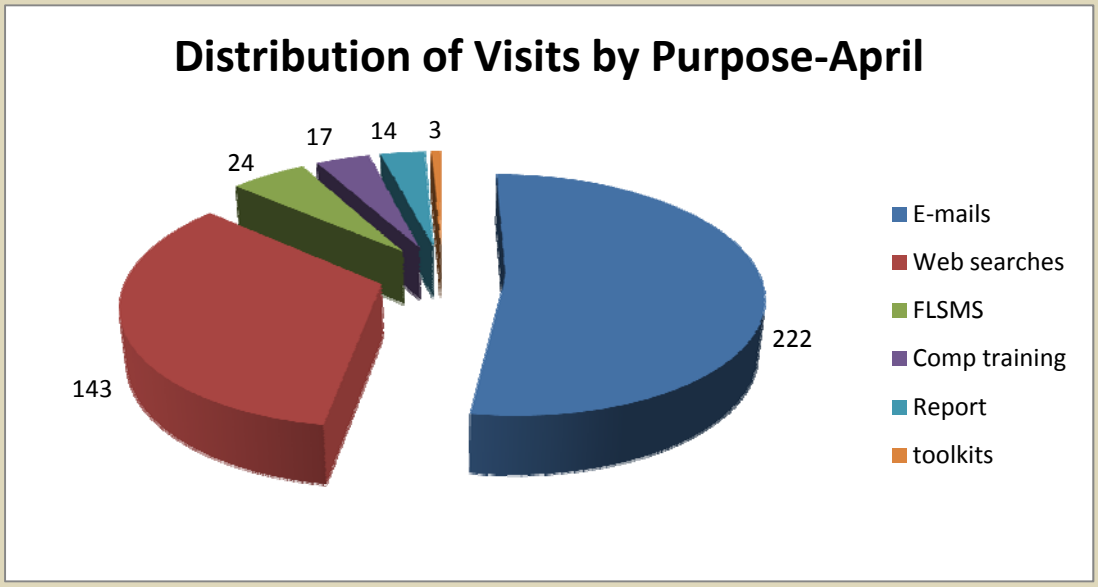
The purpose of the visits to the DLCs in order of frequency were accessing web based info/email (365), responding to FLSMS messages (24), attending and practicing

[1] Resource library management software developed by UNESCO

computer training (17), sending and receiving reports (14), and accessing online toolkits (3). Of the total 272 visits to the DLC, 64 were registered by females and 208 were males. The gender break down of the visits by district show that 35 and 29 were registered in Salima and Nkhotakota respectively for females and 94 and 114 visits were registered in Salima and Nkhotakota respectively for males. Overall, male visits to the DLC represent 76% of the total visits and the remaining 24% represent females. Sending and receiving e-mails is featured high on the use of the DLCs and males continue to be using the learning centers more than their female counterparts.

Nkhotakota distributed posters from the DLC on HIV/AIDS and ART guiding booklets to 157 CBDAs and their supervisors as well as various FP posters to 124 DMPA providers. This print material was provided to the learning center by the DEHO (District Environmental Health Officer).

The pie chart below illustrates the purpose and extent to which people visit the DLC



Front line SMS

Closed User group

During the last week of April we finalized the process of establishing a Closed User Group for Salima with ZAIN/AIRTEL. All CBDAs and HSAs who received mobile phones are now in a closed user group which means they can send messages to the hub or to each other without incurring a cost. The cost is absorbed by the project at the end of the month. Also, if they want to send personal messages outside of the user group, they can do so at their own expense. We are testing the functionality of the system in May.

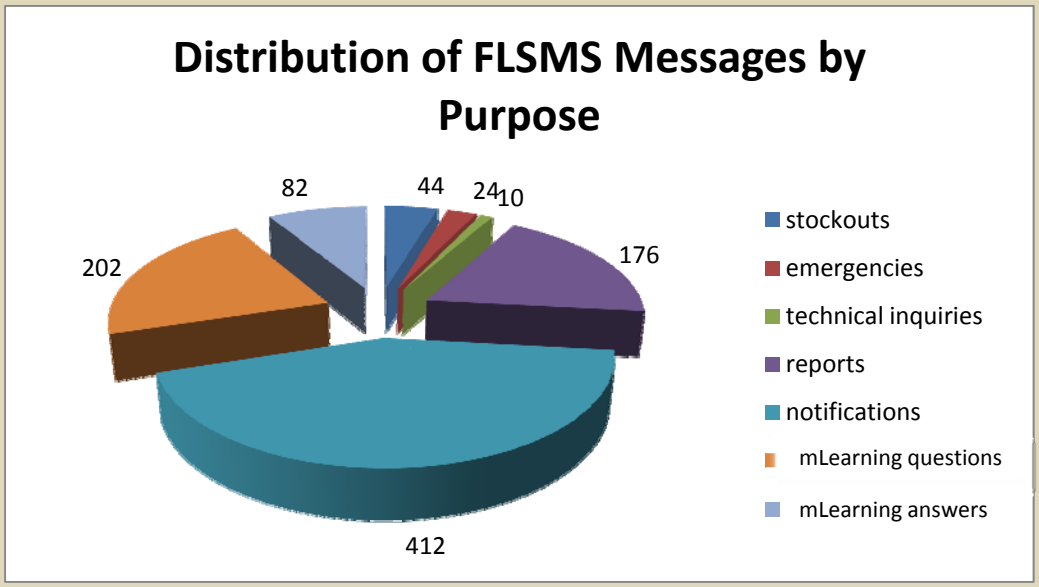
Analysis of FLSMS data through SPSS reflects a drop in the number of messages sent from 3901 in March to 950 in April. The distribution of message by purpose is as follows; 362 messages were received at the hub and 588 messages sent from the hub. Further

analysis show that 412 (43%) of the messages were notifications, 42(4%) were on stock outs while 185 (20%) were on technical issues. 202 (21%) and 82 (9%) were on mLearning questions and answers respectively. The hub received 4 and 20 emergencies messages in Nkhotakota and Salima respectively.

The drop in the number of messages is attributed to the interruption of the system in Salima during the process of transitioning to a reverse billing system. This has been done to let charging for the airtime to be done on a single hub number rather than on each user number. The transition is still in process and is expected to be finalized in May.

District	Purpose for Sending/receiving message							Total
	Stock-outs	emergencies	technical inquiry	report	notification	mLearning question	mLearning answer	
Salima	18	20	2	176	20	202	76	512
Nkhotakota	26	4	8	0	392	0	6	436
Total	44	24	10	176	412	202	82	950

The table above is graphically presented in the pie chart below:



mLearning

K4Health Malawi is in the process of testing an mLearning initiative. The effort initially

involved Q&A between district experts and the Community Health Workers (CHW) to identify gaps in knowledge on common side effects of DMPA and Oral Pills, and myths in the two contraceptive methods. The initial assessment observed that:

- Only 30% of the targeted CHW were responding to the questions
- All the responses given were correct

Analysis into why CHWs did not send responses, revealed they either had no air time or were unsure of the correct answers, so chose not to respond. To address the two issues an effort was made top-up their phones and the messages were resent. In addition to sending additional airtime, the CHWs were tracked to make sure they responded to the questions which they did. All of the responses were recorded as correct.

On further investigation, we found the majority of CHWs that were unsure of their answers, referred to their training materials. After conversations with CHWs, new critical knowledge gaps identified, for example counseling skills and infection prevention which will now be incorporated into future weekly automated messages.

Key lessons:

- mLearning encourages CHWs to refer back to their training materials hence promoting knowledge acquisition
- mLearning can also assist to identify more areas of knowledge gaps

Stories of Interest

Bringing care closer to the people

On April 6, Mr. George Mayenda an HSA supervisor went to the Group Village Headman Sesani on a monthly supervision. During the visit Mr. Mayenda visited St. Cipriano Faith-Based Organization (FBO) which provides home-based care (HBC) to HIV /AIDS affected patients and households. During the visit, Mr. Mayenda discovered that the FBO had no supplies and patients were struggling to get drugs for opportunistic infections. The supervisor sent a message to the HBC Coordinator through the hub, "St. Cipriano, an FBO in my area has no HBC drugs." In reply the community HBC responded, "I will visit the CBO on April 9th." The coordinator visited the FBO and brought with her basic drugs from the DHO to support the FBO.

Learning Center Answers Clinical Debate

It is April 8th at a daily clinical meeting in the Salima District Hospital. A debate ensues on management of Cryptococcosis Meningitis (HIV related fungal meningitis) among clinical specialists. Steve Kumwenda, a young clinical officer explains:

"There is a patient whom I have been seeing for the past eight weeks. Before admission on April 6, he called me from his home and told me that he was having fever regardless of anti-malaria treatment. I met him at the hospital where he had already been admitted and his wife told me that he was experiencing confusion at times. When I saw him, I did not witness the confusion. Thus I recommended him to continue his current treatment.

The next day, it was reported during the morning meeting that in the night he was so confused that it compelled the clinician on call to consider performing a lumbar puncture (a medical procedure to test cerebral spinal fluid for abnormalities) to rule out cryptococcal meningitis. The lumbar puncture was not performed due to lack of guardian consent. The clinician reported to have administered 800mg of Fluconazole (treatment for the condition) as the initial dose for cryptococcal meningitis."

In the meeting there were about 30 clinicians, nurses and diagnosticians. On point of correction, Mr. Kumwenda told the gathering that the initial dose should be 1200mg of of Fluconazole for one week, then 800mg for 1 week and finally 400mg of for 2 weeks.

During this discussion it was found that only one person knew that Fluconazole can be started at such a high dose. The District Medical Officer asked if there was anyone who might have heard or read that Fluconazole can be given at such a high dose and requested that if such information is found, please present to her.

When the morning report finished, Mr. Kumwenda went straight into the learning center to visit one recommended web sites posted at the learning center; http://emedicine.medscape.com/ and immediately found the higher dose in question and its clinical benefits. It was also found that at times the dose goes as far as 2000mg once a day.

The following day, during the morning report meeting, Mr. Kumwenda shared this information and consequently it was confirmed that the referral central hospital, Kamuzu Central Hospital starts with 1200mg once a day and has recommended that Salima District hospital should be starting with an initial dose of 1200mg once a day of Fluconazole for 1 week, then 800mg for 1 weeks and finally 400mg once a day for 2 weeks.

Some Messages for the month

1. "Chididi Health centre has run out of stock for HTC testing kits."

"Any member of staff coming from there should pass by my office to collect the kits."

2. "You have trained us on cycle beads but you did not tell us on how we should be reporting, tell us quickly."

"We are currently liaising with FP advisor from MSH LL to send reporting forms soon."

3. "Would you please attend to our order of 5 cartons of RTUF, we have a session of Friday."

"Will send immediately there is an ambulance coming that way today or tomorrow."

Upcoming Activities for May

- End Line Evaluation begins
- Capacity Building Training continues for MOH

See the K4Health Malawi Toolkits at
http://www.k4health.org/malawi#toolkits

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