CCM Site Visit to Upper East Region

9th –11th July 2018

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1. INTRODUCTION

The Malaria/HSS Oversight Committee carried out a three-day field visit to the Upper East Region (UER) from 9th to 11th July 2018. The objectives of the mission were to:

a) Enable new Oversight Committee members to witness IRS and SMC and other malaria related interventions for a better understanding of grant implementation
b) Review the availability of commodities and functionality of the last mile delivery
c) Benefit of the opportunity to review TB and HIV grant implementation in UWR.

The site visit was undertaken to Bolgatanga with visits to Sirigu (IRS and health center) and Navrongo. The team would have loved to visit one of the two NGOs implementing on behalf on NMCP, however, both of them were too distant.

2. PARTICIPANTS

- Jerry Amoah-Larbi (TB Voice Network)
- Isaac Alfred Tsiboe (Stop TB Partnership)
- Mahmood Bill
- Annekatrin El Oumrany (CCM Secretariat)

3. SITES VISITED

a) Regional Health Directorate, Bolgatanga
b) Kangoo, a suburb of Bolgatanga for SMC
c) Sirigu for AGAMal IRS implementation
d) Sirigu CHAG health center
e) Navrongo War Memorial Hospital
f) Regional Medical Stores, Bolgatanga
g) Regional Hospital, Bolgatanga

4. SUMMARY OF CHALLENGES IDENTIFIED AND RECOMMENDATIONS

CHALLENGES IDENTIFIED	RECOMMENDATIONS	TO WHOM	CHAPTER
1. Malaria			
• One of the NGOs implementation areas not perceived as cost-effective by RHD • RHD wishes to be better informed about NGO activities and results	• Engagement of NGOs must be based on priority areas, RHD should be consulted. • Keep regional focal persons abreast of objectives of NGO engagement. • Keep RHDs in copy in communication with NGOs. • Documentation of success story of NGOs	NMCP	5.1
• Facilities test pregnant women consistently for malaria on their first ANC visit. • IPT starts consistently after quickening, which is often much later than 16 weeks	• Ensure that facilities have accurate info and adhere to them	NMCP	5.4, 5.5, 5.6
• Only one facility (Navrongo War Memorial Hospital) equips its admission wards with LLINs	• Explore possibility to provide admission wards with LLINs	NMCP	5.1, 5.4, 5.5, 5.6
• Regional stock out of LLINs during several weeks in Q1, which was not a single incidence	• Explore and address the root causes with VectorWorks	NMCP	5.1, 5.4
• Data from Sirigu CHAG facility indicate that only ANC registrants received an LLIN, leaving possibly out those pregnant women who did not receive a LLIN during their first ANC visit because of a stock out	• Ensure that all pregnant women receive a bed net during the course of their pregnancy	NMCP	5.4
• LLINs ordered by facilities only when they have run out of stock	• Integrate principles of stock management into all trainings	GHS, NMCP	5.5
• Low IPT initiation rates, insufficient documentation why women do not receive IPT	• Address root causes, provide guidance on documentation in all trainings / M&E visits	NMCP	5.4, 5.5, 5.6
• IPT / SP is often refused following side effects	• Ensure that all midwives are aware of possibilities to reduce side effects (e.g. don't chew SP, take SP after having eaten) and advise women accordingly	NMCP	5.4, 5.5, 5.6

CHALLENGES IDENTIFIED	RECOMMENDATIONS	TO WHOM	CHAPTER
2. HIV			
• One out of four facilities visited did not implement PITC and the one claiming to do it tests about 2% of the OPD clients	• Repeat information about PITC and follow up on the implementation through regional and district coordinators	NACP	6.2 - 6.4
• Low ANC / HTS involvement of husbands, vast majority of clients at the ART clinic is female	• Develop a best practice collection to enhance disclosure and HTS of spouses and share with all ANC facilities (possibly video / Whatsapp?)	NACP	6.2, 6.3
• Prophylaxis for baby handed out after delivery only, leaving questions about availability of prophylaxis for those women who deliver elsewhere	• Hand out prophylaxis during ANC visit to those women who intend to deliver elsewhere	NACP / GHS	6.2 – 6.4
• Partly EID only at six weeks (not incorporated into PNC)	• Ensure that national guidelines are known and followed by all facilities	NACP	6.2, 6.4
• Several months before EID results arrive with consequences for start of ART for HIV+ babies	• Seems to be resolved with collaboration with RHD and introduction of sample referral system but spot checks on duration still highly recommended	NACP	6.2 – 6.4
• Follow up procedures on referrals (both in and out) vary from facility to facility	• Standardize follow up procedures and inform facilities accordingly	NACP	6.2 – 6.4
• High loss to follow up at War Memorial (12% within one semester)	• Review and address this issue	NACP / Reg. HIV Coordinator	6.3
• More than half of VL samples rejected by lab as a wrong sample tube was used	• Repeat info on correct procedures and products to be used if this was not part of the training in the context of the sample referral system	NACP	6.3
• Frustrating experience with e-tracker, lots of backlogs due to bad internet connection and server response time. PC distributed for e-tracker are reportedly inadequate (even slower)	• Fast-track introduction of offline system • Review functionality of equipment and replace if necessary	NACP, PPME	6.3
• Outstanding maintenance of the PCR machine	• Support facility in getting maintenance done	NACP	6.4
• Low VL testing rate (1st semester: 794 samples over about estimated 4300 PLHIV on ART)	• Follow up closely with introduction of sample referral system	NACP	6.4
• Stock out of male condoms (still persisting E/08)	• Ensure supply	NACP / FHD	8.1

CHALLENGES IDENTIFIED	RECOMMENDATIONS	TO WHOM	CHAPTER
3. Tuberculosis			
• Screening: inconsistent data capturing: partly differences between midwives' form A and screening tool, in several facilities all ANC registrants considered as screened, no capturing of screening of clients during repeat ANC visits	• Review what exactly shall be captured on the screening tool and form A, particularly for ANC attendants, and inform facilities accordingly	NTP, FHD	7.3, 7.4
• Inconsistent support for the task shifting officer by other staff across facilities, screening only done at OPD, ART and ANC	• Lobby for support of facility leadership to ensure that ICF is not interrupted in times of absence of the TSO and carried out systematically at wards and departments • In-house training for staff beyond the TSO	Regional TB coordinator	7.4
• Inconsistent procedures across facilities to ensure that each TB suspect is actually tested	• Collect best practices and share widely	NTP	7.3
• Referrals of persons, not samples at lower level facilities (e.g. CHPS to health centers), resulting in LTFU	• Ensure sample, not person referrals	Regional TB coordinator	7.2
• No systematic contact tracing	• Review if guidelines exist and are appropriate • If so, create awareness and implementation	NTP	7.2
• Lower level facilities possibly not informed about availability and benefits of GeneXpert and consequently do not send samples / GeneXpert underused	• Ensure awareness of lower level facilities on GeneXpert	NTP, GHS	7.2, 7.3, 7.4
4. Other / cross cutting observations			
• Facility level shortages / stock outs if orders are not placed timely (esp. LLIN)	• Incorporate basic guidelines of order and stock management into trainings	GHS	5.4
• Ineligible charges for NHIS insured clients, e.g. US scan	•	GHS, NHIA, CHAG	5.4, 6.2
• No Maternal and Child Health Record books at the Regional Hospital, use photocopies	• Print, print, print	GHS, FHD	5.5
• Redistributions carried out too late, lack of upfront information	• Address redistributions as early as possible (6 months prior expiry) and keep RMS and regional coordinators informed	All programs	8.1

CHALLENGES IDENTIFIED	RECOMMENDATIONS	TO WHOM	CHAPTER
• Insufficient info of RMS on stock levels at the point when the requisition needs to be submitted and on reasons of reductions of the requisitions	• Inform about shortages before facilities fill their requisitions • Review WhatsApp list to see if all facilities are covered	UER RMS	8.1
• Enormous facility debt at RMS (15m GHS) due to late NHIA reimbursements, RMS cannot pay its suppliers, might affect commodity availability	• Identify a way forward to lessen the amount of delayed reimbursements	MoH, NHIA	8.1
• Sirigu CHAG facility not served by LMD even though it has an ART clinic	• Inform Sirigu about functioning of LMD and offer direct delivery • Review LMD coverage of other eligible CHAG facilities	UER RMS	8.2
• About 100 facilities do not seem to be functional and are not served by LMD	• Review their situation	GHS	8.2
• Staff attrition affecting capacities and service delivery as facility level. Mindset that only official class room training is quality training	• Develop guidelines for training on the job • Implement consistent training on the job	GHS, all programs	8.3
• Facility estimations have turned out to be very wrong when compared to actual data received during or after the site visit = missed opportunity to ask relevant questions	• If facilities are selected before the site visit, ask programs for facility data for a better preparation (ideal) • If facilities are selected together with RHD, ask regional data officers for data • If the above was not possible, ask the facility for data	Oversight Committees	

5. MALARIA

5.1 Regional Health Directorate

The region has 13 districts and about 315 health facilities, however, about a third does not seem functional as they are not served by the last mile distribution (LMD). Between 2015 and 2017, malaria related case fatality rate among children under five dropped from 0.72 to 0.29. In Q1/2018, no child died. This result is due to intensified efforts including extensive case management training for healthcare providers as well as Seasonal Malaria Chemoprevention (SMC). Particularly SMC reduced malaria incidence among children to such an extent that the children's wards are almost empty.

The LLIN mass distribution is expected to take place in August. The training for the use of the electronic forms for net points LLINs distribution was delayed but carried out in the meantime. Most hospital wards are not equipped with LLIN. During a follow up call, the Regional Malaria Focal Person confirmed a stock out of LLIN for several weeks during the first quarter 2018. He confirmed that this happens from time to time.

The first round of SMC was concluded successfully, the second round was just ongoing during the time of the CCM visit. No challenges were reported and the intervention was in good progress. SMC is also carried out in the three districts covered by IRS, while those districts are excluded from LLIN mass distribution. Acceptance among parents and caretakers was described as without problems; all relevant stakeholders have been engaged in the preparation of the SMC campaign to ensure information and buy-in of the community members. These efforts and the impact of the SMC has been so successful that communities keep emphasizing the need of SMC continuation.

The region faces a shortage of ACTs, which is at the same time a national shortage. The last stocks were received three months prior the CCM visit.

There are two NGOs contracted by NMCP in the region. While one of them is reported to do a good job, the impact of the other NGO is not felt at the level of the RHD. It was mentioned that this NGO works in a too small community. Its efforts are likely to have a bigger impact if the place of the intervention had been implemented elsewhere. It was also mentioned that oversight on the NGOs is less effective as the NGO representatives spend more time in Accra than on the field. The RHD proposes that DHD and RHD provide oversight on NGO implementation as particularly the RHD does not have much information on the activities carried out by NGOs at the district level. Another proposal concerns the implementation of those NGO activities through community health volunteers.

5.2 Seasonal Malaria Chemoprevention, Kangoo / Bolgatanga

Seasonal Malaria Chemoprevention (SMC) started in the Upper East Region in 2016 and has been carried out ever since. Extensive mobilization of community support has taken place though radio, durbars, meetings with opinion leaders and traditional authorities before the actual start of the annual activity. Community volunteers adopt a house to house approach, initially to verify the number of eligible children (3-59 months), and subsequently to help parents and caretakers to give

the medication to their children. Health staff supervises the work of the community volunteers and meet with them after each round to discuss their experiences. SMC is undertaken in four rounds at monthly intervals during each of which the children receive the treatment on three subsequent days. The CCM team joined the community volunteers during their second round.

While there was initially a target of 30 houses per day per community volunteer, it was reduced to 30 children due to non-availability of many of the children during the day. It is however necessary to reach out to all care takers of eligible children of the community. In Kangoo, there are two community volunteers for about 55 children. Providing SMC is a full-time job. The volunteers told the team that they work from 7:30 to 5pm daily using their private bicycles as they have to cover large distances.

The team found them experienced and very committed. They pointed out that they hardly face any challenges with the SMC administration as parents have seen the impact in the past. This was confirmed by one of the mothers who brought her baby immediately the community volunteers arrived at her house. She is determined to protect her own and her children's health. She told the team that she received a LLIN during her first ANC visit and since slept under it. She has also taken several doses of SP. After having seen that her older child did not get malaria for almost a year ever since they had benefited of SMC, she did not hesitate to accept SMC for her baby. The team was impressed by her knowledge on options for malaria prevention.

Among the minor challenges, the community volunteers complained about the poor dissolve rate of the SP drug (10 to 15 min), the quality and quantity of markers and chalks for household identification, and the reported inadequate volunteers' allowance.

5.3 Indoor Residual Spraying in Sirigu (AGAMal)

The team arrived in Sirigu during pouring rains and witnessed how rains bring IRS activities to a complete halt due to the impossibility to bring personal belongings outside as a preparatory activity for IRS. The spray men hence had to wait for the rains to stop, which provided the team with the opportunity for an in-depth discussion.

The IRS activities in the three districts (Builsa North and South and Kassena Nankana West) in the UER are coordinated from UWR. Until 2014, the entire Upper East Region benefited from IRS. Since AGAMal has started spraying the three districts again in 2017, lots of requests from other districts and institutions in neighboring districts were received to extend coverage – which had to be declined by AGAMal for budgetary reasons.

AGAMal works with a team of 95 in UER, including 71 spray men, office and security staff. All of them are temporarily employed for a period of four months (including training and exit medicals) and then reemployed as much as possible in the subsequent year. More than 250 men applied initially to become a spray man but only 71 were engaged. Most of them have worked as spray men in the previous year; only 15 are entirely new and received a more intensive training.

Before the actual start of IRS, AGAMal engages with the key stakeholders, incl. chiefs, assembly men, Ghana Education Service, Ghana Fire Service, media and Ghana Health Service to ensure their buy-in and support. The SBCC group informs the communities in collaboration with GHS volunteers about

the risks related to mosquitoes and malaria as well as about the preparatory work before the spray men come in.

Kitchens, store rooms and barns with animals or animal food are not covered by IRS to avoid contamination of food items and to avoid allegations that the insecticide had killed any animals. Such allegations have been raised in the past. These allegations made people scared and affected AGAMal reputation and community acceptance.

The actual IRS activities started on 30th May 2018, which is much later than expected. While the team believed that the clearing had taken too long, the AGAMal headquarter team confirmed later that the supplier had challenges to ship the goods timely. During the six weeks of activities, 12 days were lost to rain.

Every morning starts with a safety brief that also includes health talks. A weekly curriculum is upfront developed. The team was very impressed with the rigorous safety methods and procedures that ensure among others that no bottle of insecticide can go unaccounted for.

The team had a long conversation not only with the field officers but also with about 20 spray men. They made a very committed impression on the team and seemed very proud to be part of a team that improves the living and health conditions of the communities. They emphasized that beyond the tangible impact on the mosquito population and reduction of malaria, IRS kills a variety of insects resulting in a better sleep comfort. Some of the "old" sprayers expressed fears that IRS could be again discontinued and described malaria resurgence in the communities after IRS was stopped in 2013.

Beyond the rains that make roads difficult to pass and unpacking of household items into the open impossible, concerns for privacy and possibly fears of theft make people hesitant to accept IRS for their structures. The scent of the insecticide, even though it fades within a few days and is much less intense than the one previously used, is a common cause of complaints. Rumors persist in some communities, such as the insecticide causing impotence, which can be usually rectified through the AGAMal sensitization.

Once the rains stopped, the team witnessed IRS at the girl's dormitories of the Sirigu Senior High School and visited the site where the used cans and equipment were cleaned by AGAMAL. The team was impressed with the safety measures put in place by the AGAMAL spraying team.

5.4 68 Martyrs of Uganda Health Centre (CHAG), Sirigu

At this CHAG facility, malaria remains the number one reason for OPD visits with 4981 clients in 2015, 8632 clients in 2016 and 6860 cases in 2017. In spite of various interventions, a clear downward trend in morbidity cannot be observed in this neighborhood.

Diagnosis: The first means of diagnosis is microscopy, RDTs tend to be used only in situations of power cuts when microscopy is not possible. At the first ANC visit, pregnant women are systematically tested for malaria. Data for the first semester 2018 show that all suspected malaria cases were tested.

Commodity security: The facility obtains RDTs either from the DHD or the RHD free of charge based on monthly requisitions. There is an occasional stock out of RDTs, the last one occurring in February 2018. ACTs are mostly available, a stock out occurred once in 2017. In most instances the facility can borrow from other facilities to avoid a real stockout. SPs have been in stock during the past 12 months. There was a stock out of LLINs in Q1/Q2 at facility level. The Regional Malaria Coordinator confirmed that there was a regional stock out of bed nets during several weeks in the first quarter.

ANC: At the first ANC visit, all pregnant women are tested for malaria and G6PD. They receive a LLIN and information on how to hang and wash it. However, data that the team received after the visit indicate that out of 141 ANC registrants in the first half year 2018 only 32 received a bed net which is explained by the fact that the IRS covered districts were initially excluded from ANC bed net distribution. This decision was revised in May 2018, when also the Sirigu health facility received stock. The data seem to indicate however that only ANC registrants received a bed net from May onwards, leaving out those women during whose first ANC visit the LLINs were not available. Malaria among pregnant women is rare and mostly only prevalent among those women coming for their first ANC. All women with confirmed malaria received intensified sensitization on the benefits of LLIN.

LLIN use: LLINs are distributed to every single ANC registrant during the first visit. The community health nurses follow up during the home visits if pregnant women and small children actually sleep under a bed net and provide feedback to the ANC staff. If they find that a family with small children has not received a LLIN during the mass campaign, they provide the family with a net.

IPT: Most women start IPT before their 20th week of pregnancy. The SPs are handed out free of charge. According to the data received after the visit, only 92 (65%) out of 141 ANC registrants received IPT1 and 60 (43%) received IPT3, which is below the national average. Adverse reactions, such as dizziness, concern 10-20% of the women who will complain during their next ANC. 20-30% of them will initially refuse the next SP dose. One of the challenges mentioned includes the work of the women on remote farms that may not allow them to come for their next ANC and SP dose as scheduled.

The facility charges 15GHS for an ultrasound even if the women are NHIS ensured.

5.5 Navrongo War Memorial Hospital

Diagnosis: Every pregnant woman is tested for malaria and G6PD at her first ANC visit.

LLIN: At her first ANC visit, each pregnant woman receives a LLIN. The facility hardly runs out of stock. However, the tally card reviewed indicates that the department has run out of stock entirely several times but has been lucky enough to get additional stocks quickly from another department or DHD. She was advised to stock up BEFORE she runs out of stock. The team was informed that all admission wards of the hospital are equipped with LLINs that are used by the clients.

IPT: IPT is initiated earliest at 16 weeks. Quickening must have occurred for a woman to receive IPT, however, no woman starts IPT before 16 weeks. As many as 40% of the women are estimated to complain about side effects, such as dizziness and vomiting, and many of them refuse initially to take the next dose. Even though the midwife feels that all pregnant women except those with G6PD defect are given SP, the IPT initiation rates seems very low for this facility. In the first quarter 2018,

the facility registered 88 women. Provided similar ANC registration rates in the past, IPT1 coverage is slightly more than 50% (46 women) and IPT3 coverage is 35% (31 women). The team had a look at the register and realized that no explanation was provided in the register why a woman would not be provided with IPT. This would be helpful though to determine the performance of the facility in this respect. SP is handed out free of charge.

Commodity security: The midwife and the pharmacist confirmed that for the past 2-3 years the situation for malaria commodities has been quite stable.

Malaria trends: The pharmacist claimed that commodity needs decreased noticeably over the past years, which he attributed to the successful implementation of SMC. However, hospital data do not confirm this. The number of confirmed malaria cases under five years increased significantly since 2015, which may however be related to a number of other factors beyond actual malaria prevalence. Nevertheless, in-patient malaria cases and particularly deaths did reduce significantly since 2012.

5.6 Regional Hospital, Bolgatanga

The ANC department of the regional hospital receives an average of 60-75 registrants per month. The facility confirmed to have enough ANC registers. The majority of the women are in their first trimester when they come for the first ANC visit. Since this is earlier than in other regions visited, the team inquired about the success factors and learned that a lot of education and sensitization has taken place in the previous years, using radio and health talks at the OPD.

Diagnosis: The ANC tests routinely pregnant women at their first ANC visit for malaria and G6PD. The malaria test is always done at the lab, women with malaria are followed up by a doctor. An estimated 10-20% of the pregnant women are diagnosed with malaria during their first ANC visit. During later visits it is reportedly rare to see a pregnant woman with confirmed malaria.

IPT: As all the other facilities visited in UER, the ANC understands that quickening must have occurred in order to start IPT. SP has been available throughout during the past year. About half of the women complain about side effects. It is reportedly not easy to convince the women to accept IPT, there is a large range of excuses. Most will accept after counselling but an estimated 10% will still opt out. The midwives believe that those are mostly due to an empty stomach and advise the women to eat something before they take the SP. The midwife suggested to revise the register to account for more doses of IPT. The register allows only to capture up to IPT5, while there are reportedly a lot of women who receive up to seven doses. According to the forms A however, IPT uptake is much lower than perceived (58% for IPT1 and 37% for IPT3) and also below the national average.

LLIN: During the past 12 months, LLINs have always been available in sufficient quantities. The ANC staff actively follows up if women actually sleep under a bed net. In colder periods, it is estimated that 90-95% do while this percentage drops to 20-30% during the hot season between February and May.

Maternal and Child Health Record Books: There has been a regional training on the use of the new Maternal and Child Health Record Books in February/March 2018 but there have not been any funds

for the training of the facility-based midwives. Also has the regional hospital never received these booklets. The hospital does not have any quantities of the maternal record books, neither the new nor the old version, and makes photocopies for the women.

6. HIV

6.1 Regional Health Directorate

The region contains about 315 health facilities, including 16 ART clinics. Since this visit was supposed to focus on malaria and that the regional HIV/TB coordinator could not participate in this meeting, not much time was accorded to HIV.

The sample transport is usually organized through the DHDs and reportedly functional. Reagents for VL and EID are available in sufficient quantities.

6.2 68 Martyrs of Uganda Health Centre (CHAG), Sirigu

Provider initiated testing and counselling (PITC): Every OPD client is offered an HIV test. While the staff estimated that about 40% accept, the data received after the visit indicate that it is only about 2% (first semester 2018). The reported challenge is that more clients accept than can be handled by the counselor so that some of the clients may actually give up considering the waiting time. However, with 229 clients tested across six months, the waiting time should in most instances not be an issue. Nine HIV+ clients have been identified through PITC in the first half of 2018.

ART clinic: Since February 2018, the facility has had an ART clinic currently taking care of 43 clients. Previously, the closest ART clinic was in Paga.

ANC: All pregnant women are consistently tested for HIV as confirmed by the data. While the facility offers preferential ANC treatment for those who are accompanied by their husbands, only 10% of the husbands actually come. The facility encourages women to disclose their status to their husband but does offer space for safe disclosure. It is estimated that not more than 30% of the women disclose their status to their husband. Older children of women who tested HIV+ are usually invited for an HIV test. Out of the four women tested positive in the first semester 2018, three were enrolled on treatment.

Referrals: There are two functional CHPS close-by who test ANC registrants for HIV and refer HIV+ women for ART to the Sirigu clinic. Before referral, they always call to announce the referral. The women who have been referred in 2018 had all arrived at the Sirigu ANC department and started treatment.

Prophylaxis: Those HIV+ women who are getting closer to delivery receive information on the prophylaxis of the baby and breastfeeding (max. one year). So far, all of them have delivered at the facility, which is fortunate since the prophylaxis (entire bottle) is only handed out to the women after delivery. The syrup has always been available within the past 12 months. After six weeks of prophylaxis, the children are put on Septrin. Once the EID results are in, HIV+ children continue with ART.

EID: Women are informed to come back with their baby for EID six weeks after birth. It is estimated that 80-90% of the women comply. However, while the team did not look into the EID register at the time of the visit, data received later indicate that four women were tested positive in the first semester 2018, and one baby was tested for EID. In the past, the facility noted shortages of DBS but this has not reoccured. The samples are sent to the DHD and from there forwarded to the regional lab. It usually takes two to three months for the results to arrive.

PNC and post-PMTCT: During the PNC consultations, all HIV+ women are reminded to continue with ART. After delivery, HIV+ mothers are referred to the ART clinic. Some mothers experienced adverse reactions to the ARVs but the ART staff was able to convince the mothers to continue their treatment. So far, they have not had any defaulters.

Lab tests: Most of the baseline tests considered as necessary for ART for non-pregnant HIV+ people can be done free of charge at the facility. Clients will have to go to either a private lab or a different facility for liver function tests. Those are available for 25 GHS in a private lab but are not free of charge even in other government facilities that charge at least a top up. These top ups are reportedly very normal and even the regional hospital was mentioned as charging them. However, the ART clinic enrolls PLHIV on ART even though they may not be able to afford the lab test.

VL testing: since the ART clinic was established few months ago, no ART client was eligible for VL testing. Therefore the facility has no experience with the procedures.

6.3 Navrongo War Memorial Hospital

Provider initiated testing and counselling: PITC started in February 2018 at the OPD, male and female medical and surgical wards but stopped in April as test kits and buffer solution disappeared while the OPD shared the location with the emergency ward. During this period, 38 people were tested and seven were tested HIV+. IPTC is anticipated to restart in October, logistical adjustments have been made and a stronger focus on confidentiality will hopefully encourage more people to take the test.

ART clinic: The hospital has an ART clinic that is run by the hospital's pharmacist. By the end of June 2018, 560 clients were on ART (124 male and 436 female clients). The ratio indicates that the facility has not been able to effectively reach out to the male spouses. In the first half year, 69 clients were lost to follow up and 28 were tested positive and enrolled. As a net, the number of clients is shrinking. However, the facility pointed out that some of them return at a later point in time.

ANC: Data provided for the first quarter 2018 prove that all pregnant women are tested for HIV during the first ANC visit. The midwife confirmed that negatives are retested at 34 weeks. The infection rate is very low – in the first quarter 2018 no woman was tested HIV+. Those who have tested positive were all enrolled on treatment and adhere to treatment. Older children of HIV+ mothers are usually tested, it is rare that a woman does not come back with her children. The midwife seemed very committed and assured the team that she personally follows up on every HIV+ woman to ensure that she takes her ARVs. After birth, HIV+ mothers continue their treatment at the ART clinic. All HIV+ women are encouraged to give birth at the hospital and women do comply with this advice.

Referrals: Women who are referred to the hospital from other health facilities usually come with a referral sheet that indicates the type of test used. If the woman has been tested using First Response only, she is retested using Oraquick, otherwise there is no retest. There does not seem to be a consistent follow up on these referrals. The midwife was recommended to provide feedback to the referring nurse/midwife.

Prophylaxis: Prophylaxis for HIV exposed infants is handed out at the labor ward and starts immediately after birth. Mothers always receive a full bottle. After six weeks, the syrup is discontinued and Septrin is given.

EID: Mothers are informed on EID to be undertaken at one week and six weeks after birth. So far, all women have brought their babies. However, in 2018, no EID result has arrived at the hospital, so that HIV+ babies cannot be put on treatment. (At the time of the report writing, the midwife was contacted again to see if the EID results had arrived in the meantime. She confirmed that the results arrived three weeks after the CCM visit and have been coming ever since.)

ART clinic: The ART clinic has 560 PLHIV on treatment. Within the first semester 2018, 28 people were tested positive and enrolled while 69 people were lost to follow up. Out of the 560 people on treatment, an estimated 485 (=87%) were screened for TB.

Viral load testing: While the hospital has not received any EID results in 2018, VL results tend to arrive at the facility within 2-4 weeks. In the first half year 2018, 96 valid VL samples were tested. Another 125 samples were rejected by the lab as the facility used an inappropriate test tube (chemistry tube).

Commodity stability: Both the midwife and the pharmacist confirmed that the HIV commodity stability has improved significantly. Except for cases of national stock outs, the hospital has always had test kits, ARVs and syrup in adequate quantities.

e-tracker: While e-tracker is generally speaking functional, it is frustrating to work with because of the slow internet connection and difficulties to reach the server. The registration of new clients takes almost half an hour, which has resulted in a lot of backlogs. The data officer also complained about the bad internet connection when using the desktop PC provided by NACP, which is why he prefers to work on his personal laptop.

6.4 Regional Hospital, Bolgatanga

Provider Initiated Testing: According to the team's inquiries at the OPD, HTS is offered to OPD clients primarily based on signs and symptoms.

ANC: The ANC department of the regional hospital receives an average of 60-70 registrants and 500 attendants per month. Almost all registrants (97% in semester 1/2018) are tested for HIV. Women who tell the ANC staff that they are HIV+ are not tested again if there is evidence that they are on ART. If this is the case, they continue their treatment wherever they are. Nine out of ten HIV+ women were put on treatment, usually on the same day. Treatment is offered by the ART center, not by the ANC. The ANC only gets ARVs for those who refuse visiting the ART center.

Prophylaxis: All HIV+ pregnant women are advised to deliver at the hospital or other facilities that are known to have the prophylaxis for the baby. The PMTCT nurse follows up on the women after the expected delivery date to see if the women adhere to their treatment and if they have received the prophylaxis. She claims that adherence is high.

EID: EID is done at six weeks only. If necessary, the PMTCT nurse visits the women at home to get the baby's blood sample to ensure that all HIV exposed babies are tested. The results take relatively long to arrive even though the PCR machine is at the same facility. The last results were received about two months before the CCM visit.

PCR machine: For the past 12 months, the PCR machine has been functional. Challenges in the first semester 2017 were resolved. The PCR machine was supposed to be serviced by the 20th June 2018 which was outstanding at the time of the visit three weeks later.

Viral load testing and EID: According to the 2017 GHS report, it is estimated that UER has about 4300 PLHIV on treatment. Up to June 2018, 794 samples were tested for viral load, which seems to indicate a very low coverage and PCR machine capacity use (equivalent to 19 runs with 42 samples = full machine). According to the 2017 GHS report, 253 pregnant women were tested HIV+. In the first semester, 148 babies were tested for HIV; it is however not possible for the lab manager to establish how many of them were tested around 6 weeks of age and how many children are older. It seems from the data that UER has achieved a very large testing coverage of HIV exposed children. The lab manager did not understand the allegations of particularly the Navrongo Hospital that they had not received any EID results in 2018. They run the EID test as soon as they have a minimum of 21 samples, i.e. on average once per month. Within a maximum of 6-8 weeks, each facility should have received their results. The HIV coordinator collects the results and forwards them to the facility.

Commodity security: All HIV commodities have been available during the past year.

Maternal and Child Health Record Books: There has been a regional training on the use of the new Maternal and Child Health Record Books in February/March 2018 but there have not been any funds for the training of the facility-based midwives. Also has the regional hospital never received these booklets. The hospital does not have any quantities of the maternal record books, neither the new nor the old version, and makes photocopies for the women.

7. TUBERCULOSIS

TB grant implementation was not a focus of this site visit. The team made maximum effort though to get some insight into details of TB diagnosis and treatment.

7.1 Regional Health Directorate

Since the Regional HIV/TB coordinator did not attend the team's meeting with the RHD, TB was not discussed in detail.

The sample transport is usually organized through the DHDs and reportedly functional.

The RHD confirms receipt of contact tracing funds but pointed out that the only disbursement received in 2018 arrived in June. These funds are used for the empowerment of community health officers who integrate contact tracing into their home visits activities. In locations where there are no CHPS and community health officers, contact tracing is done by the disease control officers of the DHDs.

7.2 68 Martyrs of Uganda Health Centre (CHAG), Sirigu

Screening and diagnosis: The OPD does not screen clients for TB. Pregnant women are only screened for TB if they complain about cough or are heard coughing. The facility has a microscope for TB diagnosis. The lab in-charge was not at all informed about the availability of GeneXpert and its benefits. All suspected cases are hence tested using microscopy.

Referral: The surrounding two CHPS do not have a microscope, which is why people with signs and symptoms of TB will have to be tested in Sirigu or elsewhere. Generally, the CHPS will not send a sputum sample but refer the patient. However, the team was informed that patients do not take referrals kindly; referrals are perceived as kind of a punishment, which is why the patients may not be willing to comply.

Contact tracing: Contact tracing is reportedly not done systematically. The team could not get information on the decision-making processes and is not sure if contact tracing is really put in place.

7.3 Navrongo War Memorial Hospital

Screening and diagnosis: The hospital has a dedicated task shifting officer at the OPD who uses the screening tool. He is seated next to the OPD reception and screens every OPD client. In the first semester 2018, almost 14% of the OPD clients were screened using the screening tool. Clients eligible for further diagnosis are fast-tracked for their consultation and then referred to the lab for GeneXpert diagnosis and for an X-ray, which are both free at the hospital for TB suspects. Out of the 196 OPD clients eligible for Tb testing, all were tested. It is however surprising to see that among the 34 in-patients eligible for testing three escaped testing. Depending on the workload at the OPD, he may not be able to accompany the client himself. If the task shifting officer does not come to work for whatever reason, TB screening is taken over by other OPD nurses. The TSO has trained them on the screening tool and the basics of TB and was proud to point out that they truly work as a team. TB screening at the wards is done by the ward staff.

Screening of pregnant women: According to the midwife, ANC registrants are consistently screened for TB using the NTP screening tool. Those women eligible for further diagnosis are accompanied to the chest clinic, the chest clinic informs the ANC about the results. The screening results on the screening tool and the midwife's form A differ though. No screening is reported on the screening tool for the first semester 2018, while the form A declares to have screened 30 women between January and February (no results for March). The midwife could not be reached to explain the difference and also the numbers she reports on Form A.

GeneXpert: The hospital has a GeneXpert that is used for all initial diagnoses in addition to X-ray. GeneXpert has been functional for a long period of time, especially since the facility obtained a new UPS. The lab technician pointed out that they sometimes rerun tests at night if they suspect wrong results. GeneXpert is severely underutilized with an average of less than two samples per day.

Referrals: Referring facilities partly send the sputum sample, partly send the person for TB diagnosis. If they send the person, they often call upfront to announce the person.

Enrolment in treatment: Out of the 28 clients tested positive for TB in the first semester 2018, 27 were enrolled in treatment (96%).

Commodity security: Adequate stock levels.

7.4 Regional Hospital, Bolgatanga

Screening and diagnosis: The Regional Hospital has a dedicated Task Shifting Officer. She is the one who weighs OPD clients, which allows her an entry point into the discussion before she starts asking about cough and other symptoms. Since there is only one scale, she gets to screen all OPD clients. However, contrary to the encouraging experience with the TSO in Navrongo, this TSO does not have similar support from the OPD colleagues. When the TSO is not around for whatever reason, TB screening is done by a National Service Personnel but not by other OPD nurses. On average, 6% of the OPD clients are screened using the screening tool. Clients eligible for further TB diagnosis are first sent for a chest X-ray that is free of charge. Based on the abnormality score, a GeneXpert test may be requested. Only once the GeneXpert result is in, the client is allowed to see the OPD prescriber. This way clients are obliged to go through all necessary procedures and the reports show that in the first semester 2018, all clients eligible for TB testing were actually tested. At the admission wards, TB screening is usually not done as it is also evidenced by the monthly screening reports. The TSO has engaged the respective staff repeatedly but it seems that leadership is required to ensure that TB screening is really done.

Screening of pregnant women: All ANC registrants are screened for TB but considering the matching numbers reported across the first semester 2018, it is either only the registrants (and not any women coming for subsequent ANC visits) who are screened or screening during repeat ANC visits is not reported. However, while this facility reports in the monthly midwives return form A that all registrants have been screened for TB, Navrongo War Memorial Hospital reports on the number of women they use the screening too for, which is obviously many less.

GeneXpert: The facility has a GeneXpert machine which is running without challenges. In the first half year, 704 tests were run on GeneXpert (or about 6 samples per day) , a significant increase from the 205 in the same period in 2017. The facility runs all initial tests on GeneXpert while follow up investigations are done through microscopy. The lab manager believes that facilities have all been trained on GeneXpert and will request GeneXpert test instead of microscopy. He has not come across a sample for an initial diagnosis for which microscopy was requested.

Enrolment on treatment: In the first semester 2018, 73 clients were tested positive for TB and 68 were enrolled in treatment (93%, which is above the national average).

8. CROSS-CUTTING

8.1 Regional Medical Stores (RMS)

Commodity situation: During the past scheduled delivery, the UE RMS has not received any ACTs. They are hence below the minimum stock levels and obliged to ration. Malaria RDTs and SPs are however available in sufficient quantities. LLINs are not stocked at the RMS but are sent directly to the DHDs. For ARVs and HIV RDTs, the RMS has sufficient stock; this is also true for 2nd line ARVs. Male condoms are however stocked out. Since December 2017, the RMS has received sufficient stocks of TB medication. Sputum containers have finally arrived in May and are expected to last for about three months.

Requisitions: The electronic requisition system has been initiated with some of the facilities and will be scaled up next year to cover the entire region. The RMS stated that requisitions may be reduced for three reasons:

1. Inflated orders
2. Indebtedness of health facilities to the RMS
3. National or regional shortages

The RMS was informed that health facilities consider it as desirable for the RMS to provide regular information on the WhatsApp platform on shortages of certain commodities instead of merely cutting the requisition.

NHIS indebtedness: The RMS experiences that the facilities have partly not been reimbursed by NHIA for up to two years but they acknowledged that some of them have not even submitted their claims, e.g. in Kassena Nankana. The latest reimbursement took place in May for claims dating from September to December 2016. The RMS still served indebted facilities but may ration the quantities issued. Facilities owe to the RMS about 15m GHS, which are depreciating in value on a daily basis due to the inflation. Additionally, this situation results in the inability of the RMS to pay its suppliers of commodities that are procured on the open market.

Expiry risk: The RMS explained that three types of ACTs risk to expire at the cost of the RMS because they have been taken off from the NHIS list of reimbursable commodities and orders from the health facilities have hence reduced significantly. The NMCP confirmed during the subsequent CCM Oversight Committee meeting that this issue is known and that the DG of GHS has written to NHIA to review this decision.

Redistributions: The RMS is more than ready to reduce expiries but complained about redistributions that take place at the very last minute. One example cited was malaria RDTs that were brought to UER with only one month shelf life left. Since those expiries are foreseeable, earlier action is highly recommended. In cases of urgent redistributions, an upfront notice is desirable to prepare the ground. NACP was explicitly mentioned as one of the programs that take redistributions seriously to manage stock appropriately. High stock levels are always communicated on the RMS WhatsApp platform.

Procurement on the open market: The RMS does not consider facility-based procurement on the open market as attractive as prices are reportedly higher.

Communication between RMS and facilities: While the RMS informed the team about a WhatsApp platform on which stock related information is shared with pharmacists and those involved in requisitions, it should be reviewed if the communication is adequate and really reaches all relevant stakeholders. Facilities expressed the wish that any shortages that are likely to result in reduced commodity quantities allocated are communicated upfront, so that the requisition can be adjusted accordingly. They would also find it useful if the RMS could add an explanation for any reductions.

8.2 Last Mile Delivery (LMD)

Last mile delivery started several years ago with one truck covering sub-district level. The RMS Manager described the previous system as ineffective as it only served those facilities that contributed to the transport cost (149 facilities).

Since 2018, IHS has been supporting the regions with LMD and covers 212 facilities including CHPS. Two distributions have taken place. While all facilities should be served, the team understands that a larger number is not functional as a health facility. Mathematically, this seems to indicate that about 1/3 of the facilities are not functional in UER, which is certainly a reason of concern.

According to the RMS, the LMD also serves the CHAG facilities for HIV and TB commodities. CHAG facilities do not tend to submit requests for ACTs even though they may do so. The team learned however that the Sirigu CHAG facility visited was neither covered nor informed about this service even though it has an ART facility and hands in monthly requisitions.

The Navrongo War Memorial Hospital expressed satisfaction with the “new” LMD, explaining that they come in shorter intervals and the previously charged fees have been waived. The only complaint that the team heard was about the time of the arrival of the truck, which may be as late as 7pm. However, the RMS explained that orders were given to the truck company that no delivery should be attempted after 5pm. If the truck arrives later, the unloading will have to take place in the next morning.

The major challenges include the weather conditions that make roads impassable. The RMS tries to factor this in by supplying larger quantities during the last weeks of dry weather.

8.3 Other

The RHD explained a number of challenges with high staff attrition. The team highly recommended to encourage facilities to implement training on the job during which those who have attended class room type training share their new expertise with their colleagues and engage them at the same time to apply the new knowledge in practice. The mind set must be shifted to using all opportunities for continued learning and not just believing in class room training. The team experienced on various occasions that there is still a long way to go. The midwife at the CHAG facility in Sirigu requested EID training for other midwives of the same facility, while she was trained and takes samples for EID on a regular basis. She never had the idea that she herself could train her colleagues. On the other hand, the midwife at Navrongo War Memorial Hospital offered EID training on the job to colleague of another facility but the latter never accepted the offer.

ANNEX – KEY RESPONDENTS

1. Regional Health Directorate, Bolgatanga (9th July 2018)

Name	Job Title	Contact
Dr. Winfred Ofosu	RHDS	024-4976337
Alhaji Saeed Hussein Yakubu	Regional Accountant	026-2211554
Sydney Abilba	Regional Malaria Focal Person	024-8453632
Peter Boateng	Deputy Director Administration	020-8181061
Augustine Agamba	Ag TB/HIV Coordinator	024-4488836

2. SMC in Kangoo (9th July 2018)

Name	Job Title	Contact
Christopher Abayeta	SMC Volonteer	054-4103457
William Asaah	SMC Volonteer	024-7442857
Eric Dakura	SMC Volonteer	020-8979034
Nelson Akokre	SMC Supervisor	024-7042185

3. AGAMal (10th July 2018)

Name	Job Title	Contact
Musa Abdul Rassac	Zonal Operations Manager	050-1296682
David Adoliba	District Operations Manager	024-4434025
Emmanuel Atignongo	Group Supervisory Officer	024-3639468
About 20 spraymen		

4. 68 Martyrs of Uganda Health Centre (CHAG), Sirigu, 10th July 2018

Name	Job Title	Contact
Francis Adongo	Nurse	024-8763991
Samuel Konlan	Finance Officer	024-5761870
John Bosco Temekuu	Physician Assistant	054-4570563
Martina Siefiire	Midwife	020-7200682

5. War Memorial Hospital in Navrongo, 10th July 2018

Name	Job Title	Contact
Dr. Majeed Alhassan	Medical Superintendent	020-9131333
Joana Mensah	Midwife	024-1920076
Richard Ahinful	Pharmacist	024-6456829
Simon S. Bawa	ART data officer	020-0793366
Umar Osman	Task Shifting Officer	024-5426442
Courage Honorfe	Medical Laboratory Scientist	024-2159136
Kingsley Duodu	Biologist	054-9189465

6. Regional Medical Stores, 11th July 2018

Name	Job Title	Contact
Israel Prince Ahor	RMS Manager	024-3373618

7. Regional Hospital Bolgatanga, 11th July 2018

Name	Job Title	Contact
Zakariah Yakubu	Head of Admin	024-4209094
Anita Odame	Midwife	024-6630677
Gifty Damsongor	Public Health Nurse	020-6414451
Lucy Otu	Community Health Nurse	020-8416095
Samuel Quayson	ART Data Manager	020-9193450
Augustina Yidana	Task Shifting Officer	024-3782344
Jonas Appiah	Biochemistry Supervisor	024-5283485
Dorcas Akasoba	Biochemistry Attache	050-5283485
Isaac S. Wemegah	Lab Manager	020-0620530