Final

Project Evaluation report

Capacity building of the primary health system in Salayea and Zorzor districts, Liberia

Implemented by Curran Lutheran Hospital, Liberia
January 2011 – March 2016

February 2016

Abbreviations

CHC	Community Health Committee
CHDC	Community Health Development Committee
CHT	County Health Team
CLH	Curran Lutheran Hospital
DHT	District Health Team
DKK	Danish kroner (*indicate exchange rate)*
DP	Development Partner
EPHS	Essential Package of Health Services
ET	Evaluation Team
GHCV	General Health Care Volunteer
HCF	Health Care Facilities
HMIS	Health Management Information System
IRC	International Rescue Committee
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MoU	Memorandum of Understanding
OPD	Out-Patient Department
PD	Project Document
PHC	Primary Health Care
PRC	Project Review Committee
RBHS	Rebuilding Basic Health Services

Executive Summary

Background

In 2011, Danida approved a grant of almost DKK 7.2 million (USD 1.3 million at 2011 exchange rate) for support to capacity strengthening of the primary health care system with the aim of contributing to the improvement of the health status of the population of Zorzor and Salayea Districts. The contribution to reduced mortality and morbidity were to be made through strengthening the capacity of the community, clinic and health centers to facilitate access of the vulnerable to primary health services (objective 1) and development of a locally owned feasible funding mechanism to ensure sustainability of a primary health care system in the two districs which can be replicated in Liberia (objective 2).

Overall conclusion

The PHC project has contributed to improved health and access to health care in Salayea and Zorzor districts. Qualitative information and HMIS data suggests that health and access to health care has improved over the project period; sometimes more than in the other districts in Lofa County. Based on HMIS data the proportion of maternal and neonatal deaths in Lofa County that took place in the two project districts reduced to more than half. Some service delivery indicators likewise improved, e.g. OPD visits and institutional deliveries, and severity of patients admitted to Curran Lutheran Hospital decreased. Coverage data such as for immunisations, ANC attendance, institutional deliveries, are limited by being based on estimated population. The comparison of population census data and Household Survey data at start and end of project will provide better evidence when available. It is difficult to quantify how much of any improvement that can be attributed to this particular project, since other partners and contextual changes, e.g. the Ebola epidemic, have also affected the results.

The PHC-project has been very successful in creating ownership in the communities, but less successful in creating ownership within the district health system. All health facilities have functioning CHDCs. CHDC and CHC capacity in leadership, needs assessment and conflict resolution has been imrpvoed an health priorities identified. Communities need to move beyond just resource mobilisation (which they appear to be good at) to develop their capacity to actively manage and demand health services. Access to health care has improved through improved referral services and follow-up after discharge. Establishment of maternity waiting homes and mobile outreach services have especially been to the benefit of vulnerable populations in remote areas. However, it is unclear how the population in remote areas will be served in the future.

The PHC-project has managed to prepare the grounds for locally owned financing mechanism for sustained health service delivery in future. Local ownership appears to be high and task force members are very dedicated. In total, 18 CBHI groups with almost 1,000 members have been established. The process has, however, been slow to take off and much still needs to be done before the CBHIs are fully functional and sustainable. There is a high risk that many of the CBHIs may never become operational after project end.

Overall, the Evaluation Team finds that the project has been relevant, relatively effective – very much in creating community ownership, but less so in developing local financing mechanisms, and relatively efficient. Much has been achieved with small means and impact appears to be positive. However, while social, political and financial sustainability is high as regards the capacity strengthening of communities, financial sustainability of the CBHIs is a concern and efforts are required to mobilise resources for continuation of capacity strengthening of the CBHIs.

Lessons learnt

- Succesful capacity building of community ownership to health promotion, prevention and health services is stimulated by involvement of community leadership, a facilitating approach with continuous follow-up until institutionalisation and emphasis on transparency.
- The introduction of a competitive aspect in which CHDCs compete to be the best stimulates performance. The competition among the CHDCs for the maternity waiting home support (through a

bidding process) stimulated engagement. Some communites that submitted bids but didn't win continued to mobilise resources.

- Recognition of the personal resources (time and transport) invested by volunteer members of CHDCs and GCHVs is important. Exemption from other community work is one way. Standardisation from an early stage could have helped create a smoother and more transparent system without delays. E.g. a flat rate transport reimbursement by distance for long distance travel, a standardised exemption for community work based on flat rate time input for CHDC or GHCV activities, including transport.
- Building local ownership of CBHI, which is to some extent a well-known, yet also new concept, takes time. It is possible to mobilise communities to form CBHI groups. Engagement of community leadership, accountability and transparency is considered important for successful mobilisation.
- Communities can discuss scheme design issues and are willing to accept waiting periods before benefits can be enjoyed, differentiated membership contributions and copayments out of concerns about equity and sustainability.
- The project team did not have much experience in health care financing. Engagement of someone with implementation of objective 2 as their primary focus and in the absence of own experiences engaging with a local expert for regular input and supervision might have improved progress.
- The PHC-project through collaboration with other NGOs and CLH as well as engagement with communities contributed significantly to reducing the spread of Ebola in Zorzor and Salayea District,

Recommendations

The ET recommends that

1) Awareness creation and training of CHDCs in the last two months of the project focus on: Expanding the ownership beyond building infrastructure; Strengthening capacity to make decisions about use of mobilised resources that provide high value for money; and Improving advocacy skills towards district and county authorities
2) The PHC project work with District and community leaders to re-emphasize that participation in CHDC meetings and functioning as GHCV is at par with other community work. It is further suggested to consider a standard amount of time for such functions.
3) A short paper is developed and presented to the CHT describing the mobile outreach team intervention (e.g. combined curative, preventive and promotive services), the target population (number of villages and population; distance to nearest health care facility), level of activities and achievements and resources needed for continuation and replication in other districts
4) The PHC-project and the CBHI task forces focus on getting few CBHIs to work so that members can start benefitting, rather than focusing on expanding to more communities. These CBHIs can then function as demonstration projects, which other communities can learn from. This would go beyond the end of the project period and would then be the responsibility of the CBHI task force, but in the remainder of the project period as much input as possible should be provided to develop a demonstration CBHI, develop a roadmap and thereby facilitate continued work of the task forces.
5) Concrete options for benefit packages at various funding levels and group sizes be developed (using inputs from the expertise in the accounts department at CLH), and presented to the CBHI members to select the preferred options; and constitutions are finalized.
6) The project engages with the CHT to help establish a link to MOH through which technical support on CBHI from its Health Financing Unit can be requested after the end of the project.
7) CLH (together with CHT?) develop and formally submit a brief case for support of minor funding for capacity strengthening and piloting of the CBHI through the funding available for health care financing reform (Liberia's Health Equity Fund)
8) If time permits, capacity of the CBHI leadership in financial management and accountability should be strengthened.

Contents

1. Introduction

Curran Lutheran Hospital (CLH) is owned and operated by the Lutheran Church in Liberia and is situated in Lofa County in the Northern Liberia. The hospital has provided health care to the people in the area since 1924. After being almost entirely destroyed and looted during Liberia's civil conflict the hospital reopened in 2007 and has been completely renovated.

Before the civil war CLH was responsible for supervising 15 clinics and one health center in two districts, Zorzor and Salayea. Non-government organisations have renovated and operated all of these health facilities. USAID through Liberia's Ministry of Health is now responsible for implementing the Essential Package of Health Services (EPHS), and has awarded funds to International Rescue Committee (IRC) for the implementation of this EPHS at the health care facilities (HCF) in Zorzor and Salayea Districts. IRC in collaboration with the County Health Team is responsible for the supervision of the HCFs, and all services provided at these HCFs are free of charge to the general public.

In 2011, Danida through Promissio approved a grant of almost DKK 7.2 million (USD 1.3 million at 2011 exchange rate) for support to capacity strengthening of the primary health system with the aim of contributing to the improvement of the health status of the population of Zorzor and Salayea Districts. The grant covered the period 2011-2015 and was later granted a three months no-cost extension. The contribution to reduced mortality and morbidity were to be made through strengthening the capacity of the community, clinic and health centers to facilitate access of the vulnerable to primary health services (objective 1) and development of a locally owned feasible funding mechanism to ensure sustainability of a primary health care system in the two districs which can be replicated in Liberia (objective 2).

A mid-term review was planned, but due to the Ebola outbreak it was decided to carry out a comprehensive evaluation instead at the end of the project period. The objectives of this evaluation are to undertake a summative evaluation of the relevance, effectiveness, efficiency, impact, and sustainability of the project as well as a formative evaluation with operational recommendations. The evaluation team (ET) comprised the following (all external consultants to CLH): Ulrika Enemark, Health Financing Expert, team leader; Grace Boiwu, Community Health Expert; andRoland Kesselly, Health Economist.

The team visited Lofa County, Liberia, January 25-30, 2016, and included field visits to Salayea and Zorzor districts (cf. Annex 2). Uriah Dolokelen, Acting Project Manager, Milton Daklolo, Project Coordinator, and Edna E Johnson, Technical Adviser, participated in the field visits as resource persons. In Lofa the team met with community and government representatives as well as staff at county, district and service delivery level, developing partners and project staff and management (cf. Annex 3). The ET wishes to thank all persons met for kind and effective assistance, and for sharing their experiences and views. Especially thanks to those who walked hours to attend the meetings. This evaluation report presents the major findings and recommendations of the ET. They do not bind CLH, Danish or Liberian authorities.

2. Overall project progress

Context

Liberia is a low-income country with an estimated GDP per capita of USD 454 in 2013. Although the real GDP growth in 2014 had been projected at 5.8%, it was estimated to have declined to 2.5% or less by the end of 2014 due to the Ebola crisis. (source: MOH Liberia Investment 2015-2020)

Over a 14-year period (1989 to 2003), Liberia went through a civil war that left the health system dysfunctional with the destruction of the infrastructure and severe health workforce shortages. Since 2005,

the country has made great effort to rebuild the health system through reform and introduction of the Basic Package of Health Services (BPHS) under the National Health Policy and Plan 2007 – 2011 and later the Essential Package of Health Services (EPHS) under the National Health Policy and Plan 2011 – 2021. (source: MOH Liberia Investment 2015-2020)

The National Health and Social Welfare Policy of 2011-2021 identified priority areas including deconcentration, access to basic services, increasing the health workforce and expanding the package of health services. The strategies supports the transformation from a highly centralized health system to a decentralized client-centered health care delivery system, focusing on the expended package of health services to be provided through a variety of direct service providers (government, faith-based organizations, local and international non-governmental organizations and the private sector. In order to achieve a more equitable access to healthcare, the government abolished user fees in 2006, yet communities have frequently reported informal payments as a common practice within public facilities across the country.

While looking ahead to a brighter future for the country's health, the government with health partners and donors in 2014 developed a plan for restoring the health system. The goal is to build a resilient health system for restoring gains lost due to the Ebola crisis and provide health security for the country by reducing risks due to epidemics and other health threats. The health sector resilient plan will fast-track progress towards universal health coverage by improving access to safe and quality health services. At the same time it was decided to establish a national health insurance system, Liberia Health Equity Fund, which is still in its design stage. In a more sustained way, the plan hopes to ensure for Liberia, access to safe and quality health services, a robust health emergency risk management system, and an enabling environment that restores trust in the government's ability to provide services.

Overall achievements

The development objective is to contribute to the improvement of health of the population of Zorzor and Salayea Districts, Lofa County, Liberia.

According to the County Health Team, Zorzor and Salayea districts are substantially better off compared to other districts in the county with regard to population health and access to health care. At the beginning of the project a set of indicators were developed to measure health outcomes, awareness of health issues, access to and use of services as well as out-of-pocket health expenditures. The project has carried out three population census data collections (2011, 2012 and 2015) in all the communities in the two districts, as well as a household survey to establish the baseline. The household survey will be repeated at the end of the project period. However, due to delays in the data entry and analysis of the population census data collected in 2015 and delays in the end-of-project Household Survey, which is planned for end of February, data to substantiate the overall assessment of changes in awareness, health and access to health is still outstanding.

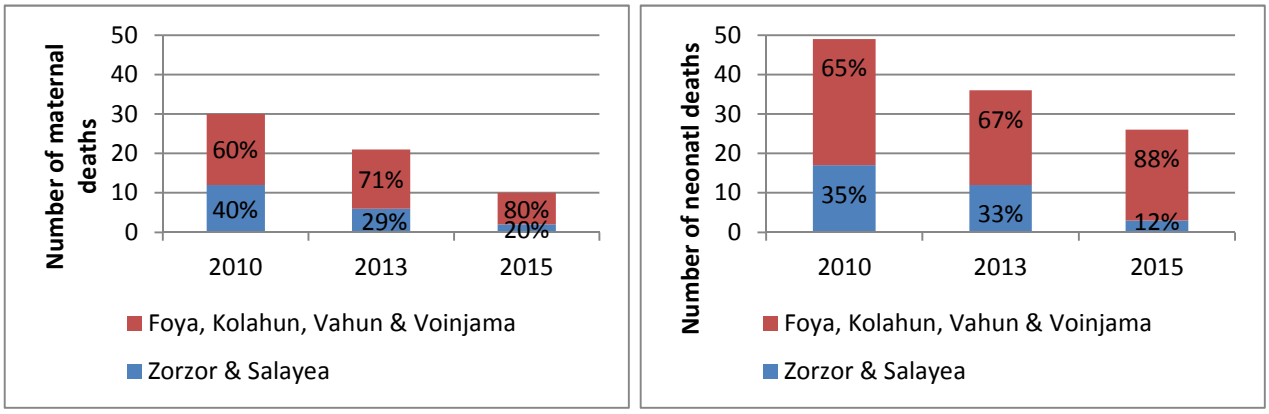
The population census data will amongst other provide information on deaths, birth outcomes and place of delivery. The household survey will provide information on awareness of health issues, access to and use of health services.

Data for a selected number of indicators was obtained from the HMIS system. HMIS data for 2010-2015 was extracted for Zorzor and Salayea districts as well as four other districts in Lofa County (Foya, Kolahun, Vahun, Voinjama for comparison. The following is based on preliminary analysis of these data. The number of maternal and neonatal deaths overall declined from 2010 to 2015, cf. Figure 1 below.

Due to low numbers (fortunately !) of deaths it is difficult to make firm conclusions on changes in mortality rates. However, it is striking that the proportion of all maternal deaths in Lofa that occurred in the project districts decreased from 40% to 20%, and that the proportion of neonatal deaths decreased from 35% to 12% with the major change from 2013 to 2015. These differences could, in principle, be explained by

disproportionate demographic development with relatively higher increase in population in the four control districts than in the project districts, but we have no reason to believe that this should be the case. This implies that maternal and neonatal deaths decreased faster in the project districts than in the rest of Lofa County.

Figure 1. Number of maternal and neonatal deaths in project districts (Zorzor & Salayea) and comparison districts, 2010-2015.



Note: Percentages indicate proportion of deaths happening in project districts.

The number of new OPD cases reported in the HMIS system increased on average 26% annually in Lofa County from 2011 to 2015. The average annual growth in new OPD cases was 35% in the two project districts and 23% in the four comparison districts. In all districts there was a reduction from 2013 to 2014. Unless there is reason to believe that needs for health services has developed faster in Zorzor and Salayea than the other districts, this would indicate either that the completeness of the HMIS reporting system has improved more in these two districts than in the others or that access to health care has improved faster.

According to the HMIS data, the percentage of institutional deliveries increased from 43% in 2011 to 57% in 2015 in Lofa County. The increase was largest in the comparison districts, as it was already relatively high in the two project districts in 2011. In Salayea and Zorzor the percentage institutional deliveries increased from, respectively, 49% and 68% in 2011 to 80% and 68% in 2015. These percentages are based on a projected total number of deliveries. The population census 2011 and 2015 will provide accurate information for Salayea and Zorzor.

The proportion of pregnant women completing four or more ANC visits has decreased somewhat in Lofa, including the project districts. Penta 3 coverage and likewise proportion of fully immunised children decreased in all districts, but Salayea. Measles coverage in less than 1 year olds increased in the project districts, but decreased in comparison districts. In all these parameters and districts a significant drop occurred from 2013 to 2014, probably due to the Ebola epidemic. It could be speculated that the increase in measles coverage in less than 1 year olds in the project districts indicate a more robust system in these two district that could pick up activities faster. The above coverage data are based on projected population, pregnant women and infants. The population census and household survey will, once available, provide more accurate information.

It should be emphasized that the PHC-project has not been implemented in a vacuum. Over the same period IRC has been contracted to operate the county health clinics and Concern International has worked with communities on improved water and sanitation. These two organisations have, however, worked in all districts in the county It is difficult, if not impossible, to disentangle the effects to assess the exact

improvements that can be attributed to the PHC-project. It is, however, our assessment that the project has made a substantial contribution.

Unplanned effects

An unplanned effect was the contribution of the project to address the Ebola outbreak. The PHC Project at an early stage took initiative to mobilise partners and get ready for the Ebola response. Through CHDCs and GHCVs health messages were taken to communities, outreach was used for transportation of materials and it was reported that the house numbering, which was undertaken in relation to the population census, turned out to be very useful for effective follow up of potential cases.

3. Progress on Objective 1: Capacity strengthening of communities and health care facilities

3.1. Objective, strategy and planned outputs

The first objective is to achieve a reduction in mortality and morbidity in the two districts through capacity building of the community, clinic and health centers to facilitate access of the vulnerable to primary health service.

The project intended to provide 11 outputs that would lead to achievement of objective 1. The outputs can be grouped into strengthening of a) governance (by developing a common set of health goals for the catchment population and support the development of functioning Community Health Development Committees (CHDC)); b) the referral system (by creating an effective referral system from community to health care facility and emergency transportation plans); c) information flows (developing effective discharge information system, effective flow of morbidity and mortality data and effective flow of communitcation between district clinics); d) access to quality service delivery (quality assurance plan for health services provided in the community and health facilities, effective mobile outreach services and creation of maternity waiting homes;) and finally to document a tested model for effective community outreached that could be replicated in Liberia.

3.2. Progress and achievements against set objectives and indicators

3.2.1. Governance

Achievements

A series of community and health providers focus group discussions were undertaken in August 2012. Focus groups were selected to include many different perspectives, taking into account gender and age, location by district as well as remoteness. Results were presented in four subsequent community meetings that included representatives from the communities, community volunteers and clinic staff, and a list of eight health goals for the two districts was derived. Each community chose their own highest priorities. The process is well documented (REF).

Sixteen health care facilities (HCF) have a CHDC. The CHDC consists of representatives of the Community Health Committees (CHC) in the villages and towns within the HCF catchment area. The CHDCs received leadership training and hold regular meetings (once per month). They have been regularly supervised by the PHC-Project (Community Health Department). Interviewees emphasized the importance of this continuous involvement to help them institutionalise the meetings. The CHDCs (and clinic staff) interviewed expressed a clear understanding of community ownership of the HCF. The CHDCs in some places have influenced the policies in the communities, for example by providing inputs to the town constitution on regulations that

would promote health, such as cleaning of compounds, ensuring access to clean water etc, as reported in Luyema.

There was a general understanding that the donors would at some point leave and that communities would have to prepare to ensure continued access to health services. Most CHDCs were making efforts to support the HCF either through labour contribution or by development of income generating projects, such as farming, to be able to support the HCF. The stronger CHDCs that manage to generate a high level of community support emphasize the involvement of community leadership and the importance of information sharing, openness and transparency in management of the funds generated from joint projects. Some CHDCs have generated considerable amounts and safe-keeping of the funds are important. Money is sometimes kept in the community bank, or sometimes by the treasurer who is a member of the community. In one community the signatories were three persons from the community (of which two women), while the officer-in-charge was not a signatory as he/she could be transferred.

Challenges

There are still communities that are reluctant to contribute to CHDCs to support their HCF and do not feel comfortable about handing over money to the CHDC. Questions arise about the transparency of use of the money for its intended purpose. Some communities are still not sure if contributions made will be reallocated to other needs without their say in the decision or may be used by the CHDC for their own purpose. This could especially be a problem when there are long distances between communities and the HCF as ownership may be less felt and the access to use services and to monitor activities of the CHDC is less.

While the general impression was that communities took ownership of the HCF, it was also clear that it did not yet fully encompass ownership of the operations of the HCF. The focus appeared to be on infrastructural issues (fencing, buildings), perhaps because that is what people feel comfortable about. But ownership needs to be extended (beyond the infrastructure) and made clearer. For example, several HCFs had motorbikes or equipment that were broken, but neither the HCF staff nor CHDCs seemed to regard maintenance and repair of these as their responsibility since motorbikes and equipment had been provided by someone else. However, maintenance and repair as well as some operational cost can be essential for the capacity of the HCF to be able to deliver services to the catchment population, for example through outreach for which the motorbikes are needed, or for correct diagnosis of malaria for which a functioning microscope is needed.

Many communities have developed income-generating projects to help develop and sustain health care delivery when the donor organisations leave and the government will take over. Few CHDCs have started using those funds and there is less clarity on how the funds are to be used. As mentioned above, there appears to be a focus on infrastructure development. The concern of the ET is that resource mobilisation seems to be relatively effective, but that there may still be a need for improved capacity for decision-making with a wider perspective of options such that the communities benefit most from the sacrificed resources.

The CHDCs have some difficulties engaging with government entities, i.e. the District and County Health Teams (DHT/CHT). They experience that there is no prompt follow up, if any, by the DHT/CHT. One example is lack of response to reported non-functionality of equipment (e.g. microscope). The CHDCs need stronger advocacy skills to challenge the government, to present their case in a way that facilitates decision-making at DHT/CHT level and to feed requests at the right time in the planning cycle.

Some CHDC members travel long for meetings as their communities are far from the HCF. The PHC-project has not paid members for participation, but have reimbursed travel and contributed to feeding at the meeting. District officials and community leaders have agreed in principle that voluntary work as CHDC member or GHCV can be considered a contribution to the community and that these people should be exempted from other community work. However, this does not always happen and members feel they are

being pressed to also participate in other community work. For continued functioning of the CHDC and GHCV system it is important that this agreement is emphasized and practiced. It may be helpful to agree on a standard amount of time that these activities correspond to, so that there is a clear level of exemption from other community work. This standard will vary by community as travel distances differs.

3.2.2. Effective referral services

Before the start of the project many patients arrived at CLH in critical condition due to delays in the referral. With the aim of ensuring timely referrals a number of activities were undertaken. This included health talks by the mobile outreach team and provision of visual aids on danger signs of health problems, emergency transportation plans and display of ambulance cell phone number in the villages. The hospital ambulance service was also provided with support amounting to around 20,000 USD.

Achievements

It was much appreciated that the PHC-project as the only partner had trained communities in the importance of timely referrals and the referral system. Ambulance call information is available in most places and people are aware what to do in case of emergency.

It is the general impression among interviewees at all levels that the referral system has improved. When ready, the end-of-project household survey will provide information on awareness of danger signs and care seeking behaviour, which can be compared to the baseline survey. A hospital record review undertaken in 2010 and 2015 using a patient severity scoring tool indicates that the severity of patients admitted to CLH have reduced, i.e. fewer patients are admitted in critical condition especially among children, cf. Table 1 below. It would be interesting not just to look at the averages, but also the distribution of scores, i.e. the number and proportion of patients in 'critical' condition.

Table 1. Average severity score of patients admitted to CLH

	2010	2015
Children	9.52	6.76
Adults	6.67	5.56

Source: Note on Admission status for adults and children, CLH 2010 and 2015.

How much of this improvement that can be attributed to the PHC-project is difficult to assess. General improvement in services at health clinics, improved access to transport due to economic development and infrastructure may also have contributed to the increase in timely referrals. Nevertheless, it is the opinion of the ET that the project has indeed contributed to the development of effective referral services.

Challenges

Challenges in improving effectiveness of the referral system include lack of access to or poorly functioning cell phone network in some communities. The cost of referral is also a barrier for timely referrals. Ambulances do not always have fuel, so patients have to pay for fuelling but the amount is not known in advance. The ET agrees with the suggestion (made by one OIC) to negotiate a fixed rate per location to be made publicly available. When the ambulance is not available one health staff has to accompany the patient using private transport. The patients do not have funds/refuse to pay for the staff to travel back. This makes staff reluctant to accompany the patients. For this too a standard rate per location could be publisized.

3.2.3. Effective flow of information and communication

Achievements

The efforts to improve the flow of information and communication have included development of an effective discharge information system. A discharge template was developed, printed and distributed. Discharge information is sent to the HCF covering the patient's village as well as the GHCV for follow-up.

Most of the people interviewed were aware how the system worked. There did not seem to be a similar system for follow-up by GHCVs of patients treated at HCF level.

The perception among interviewees was that health outcomes have improved and recovery has been quicker because of improved follow up of patients in the communities as well as by clinics. No hard evidence was available to substantiate this observation. One suggestion is perphas to look at TB cure rates or other similar disease where follow up is of particular importance.

Another focus area has been to strengthen the flow of morbidity and mortality information from communities to clinics to the DHT/CHT. GCHVs have been tasked and trained in provision of regular feedback on morbidity. Clinics send reports to IRC as part of the performance based financing project and to the CHT, but do not regularly get feedback from the CHT. When getting feedback on the performane targets, the clinics only get information on own performance and cannot compare for example with the average of other clinics. Communities generally receive no feedback, although one CHDC chairman reported that they discussed the morbidity reports that was submitted.

Challenges

At community and clinic level some concerns were raised regarding whether CLH will continue the discharge slip system when the project ends. CLH, however, plans to do so as it is already part of routine practice.

A general concern relating to the expected follow up by GHCV relates to lack of compensation, which may demotivate them as they are increasingly allocated tasks by development partners and government agencies.

Systematic feedback of information on morbidity in communities and performance of service delivery at the clinic would enable more proactive management of health promoting initiatives in the communities and of a wider perspective in the decision-making on use of funding, e.g. if communities can help clinics perform better to reach the performance targets. It is suggested that the CHCs/CHDCs request to get such feedback from the DHT/CHT on routine basis.

3.2.4. Quality service delivery

Maternity waiting homes

Achievements

To increase the number of safe deliveries and help management of maternal and neonatal cases communities were encouraged to mobilise resources for development of maternity waiting homes adjacent to the HCFs. Communities were invited to submit a bid for support from the PHC project, with the best community proposal from each district obtaining support. This stimulated resource mobilisation in the communities. Borkeza Clinic in Zorzor district and Yarpuah Clinic in Salayea district won the bid and was delegated the task of constructing a maternity waiting home in December 2013 and were ready to start operations in January 2014.

The establishment of maternity waiting homes have increased the number of institutional deliveries to the extent that the two facilities estimate that there are no community deliveries in their catchment area. The maternity waiting homes can accommodate 10 women and the monthly 'admission' ranges from 3 to 11 women in Yarpuah and 4 to 24 women in Borkeza. In total over the two years 2014-15, 144 women used the maternity waiting home in Yarpuah and 246 women used the maternity waiting home in Borkeza. Women come between 3 and 14 days ahead of the delivery date, most 4-5 days.

A contributing factor to the increase in number of institutional deliveries, however, is that TBAs are encouraged to bring the women to the the clinic to give birth. The TBA will then still receive a token payment from the women and a share of the MAMA kit at the clinic. Also, project activities to increase

awareness in the communities of danger signs in pregnancy and importance of skilled assistance may have stimulated the use of institutional deliveries.

A comparison of the development in institutional deliveries reported in the 2nd and 3rd population census (before and after the establishment of the maternity waiting homes) for the catchment population of the two clinics and for similar clinics without maternity waiting home will indicate the effect of establishing maternity waiting homes.

Challenges

The popularity of the maternity waiting home has created new bottlenecks, e.g. the maternity waiting home in Borkeza is being used, but now the delivery and labour room is too small to accommodate the increase in deliveries.

Effective community outreach services: Mobile outreach team

The mobile outreach team was formed with the purpose of ensuring access to curative and preventive health services for the population not living near a health care facility and in particular those living in remote areas.

Achievements

It is widely appreciated that the mobile outreach team has been able to reach hard-to-reach areas that the clinic staff and other partners have difficulty reaching. The team has been an important factor in ensuring good health of the population in these areas and has contributed to high immunisation coverage in the two districts. Communities appear to have appreciated the outreach clinics, although some communities may not always appreciate the need for help to carry all the materials from road point. Initially there were some concerns about duplication of outreach services from the clinics, but this was resolved and it was agreed that the mobile outreach team would take the clinic vaccinating staff along to do the vaccinations if available on the outreach day. Furthermore, after the clinics got motorbikes from IRC and PHC project the mobile outreach reduced the number of areas and left out those communities close to health facilities.

Over the period 2011-2015 the team has made 986 visits to outreach sites, had almost 19,000 individual patient contacts and participated in 234 Community Health Committee meetings. At the outreach sites, the mobile team has conducted health talks, as well as provided curative and preventive services with an equal split between curative and preventive: 50 % of the contacts were curative care, 27% vaccinations (of which 74% were children and 21% pregnant women), and the remaining contacts mainly concerned ante-natal care (17%) and family planning (6%), cf. Table 2 below.

The average number of contacts per visit across the five years is 19.2. However, over the years the clinics have increasingly improved their capacity to provide outreach services, mainly for EPI, and the mobile outreach team has increasingly focused on the most hard to reach areas. The catchment population in the villages visited by the mobile outreach team covered about 50% of the population in Zorzor and 37% in Salayea district in 2011 (ever visited villages). About 10% (in Zorzor – unclear for Salayea?) of the population served by the outreach mobile team live in villages that can only be reached by foot. (Source: Marked population census village list - Outreach team).

The mobile outreach team has through dedicated work under difficult conditions with no doubts been able to reach population groups that would otherwise not have been reached and has contributed to the high immunisation coverage in the two districts. The combination of curative, preventive and promotive work is a strength which is likely to have contributed to general improvement of health in populations with otherwise limited access to health care, although hard data is not available.

Table 2. Mobile outreach team activities 2011-2015

	Number	Pct
Curative services < 5 years	3626	19%
Curative services > 5 years	5851	31%
Malnutrition	1	0%
ANC	3274	17%
FP	1099	6%
Child vaccination	3757	20%
Tetanus - Non-pregnant	255	1%
Tetanus - Pregnant	1087	6%
Total	18950	100%
Sites visited (health talks)	986	
CHC Meetings	234	

Source: Summary Update on Outreach Team Activities 2011-2015.

Challenges

The main weakness of the hospital mobile outreach service is that it is a relatively costly activity. Five staffs participate per outreach visit. The operational costs (salary, per diem for overnight stays, fuel, etc.) of the mobile team over the five years have been around 120,000 USD. Additional investment costs for vehicle purchase and repair as well as one motorcycle amount to around 77,000 USD, assuming a five year life time for vehicles, which seems reasonable given the road conditions. However, the means of transportation is not used only for the purpose of the mobile outreach team. If it is assumed that 2/3 of the use is for mobile outreach, then the investment costs amount to 50,000 USD and total costs to roughly 170,000 USD. On this basis the average cost per contact has been 9 USD, of which 6.3 USD was operational costs. Activities not only include patient contacts, but also health talks, participation in CHC meetings and supervision of GHCVs. The average cost of a site visit that include all these activities as well as on average 19.2 patient contacts was around 170 USD, of which operational costs amounted to 120 USD. About 30% of all costs are for salaries, 40% for other operational costs and 30% for investments.

It is a general problem in all countries that reaching those living in remote areas is costly, partly due to transportation costs and partly because the population is small. Whether it is efficient to use resources for such outreach activities depends on the value one places on ensuring access to care for these population groups. A number of alternative options could have been considered regarding access to health care in hard to reach areas:

- Establishment of more health clinics. This would provide improved access to care, but is likely to be less cost effective given the low population.
- Mobile outreach team (from hospital or county). The DHT/CHT may want to prioritise the provision of mobile outreach services to remote areas through establishing their own outreach team or contracting the hospital mobile outreach team. This is likely to be more cost-effective than the establishment of HCF in remote areas.
- Mini mobile outreach team – reducing the number of staff participating in outreach services using multipurpose staff who could both vaccinate, and provide ANC and general curative care. However, the workload per staff appears already to be fairly high and salaries only account for 30% of the cost. This likely to be slightly more cost effective.

- Increased clinic-based outreach activities: This will require additional resources at clinic level in terms of operational costs as well as staff time, since personnel going on outreach cannot at the same time do as much work at the clinic. It would have the advantage that travel distances would be less compared to a Zorzor based team. To uphold the service level provided by the mobile outreach team would require the use of a multipurpose health worker as it is unlikely that several staff can be released from the clinic to go on outreach. If additional resources are not allocated there is a risk that clinic-based activities will be prioritised over outreach activities. This is likely to be less costly, but could also be less effective.
- No outreach services in the hard-to-reach areas. Population in these areas will need to seek care at the clinic. There is a risk that immunisation rates, antenatal care attendance and care seeking for curative care and follow-up may decline. Definitely less costly, but also less effective.
- Strengthening the GHCVs in hard-to-reach communities, for example through 3-4 months practical training in vaccination in clinics. This could be a more cost effective approach, which would improve immunisation coverage, but not access to other care. This however also has its challenges, since it changes the nature of the voluntary work.

The mobile outreach team stopped their activities by the end of 2015. Concerns were raised that hard to reach communites, e.g. which can only be reached by walk, will experience a reduction in immunization coverage and use of ANC, family planning and curative services. While women will come to the maternity waiting home in time to give birth at the health care facility, they are reportedly not coming for full ANC. The ET suggests that the DHT/CHT develop a strategy for how to give the population in hard-to-reach areas access to health care in the future.

3.3. Conclusion and recommendations

Overall conclusion

The PHC-project has been very successful in creating ownership in the communities, but less successful in creating ownership within the district health system. Communities need to move beyond just resource mobilisation (which they appear to be very good at) to develop their capacity to actively manage and demand health services. Access to health care has improved through improved referral services and follow-up after discharge. Establishment of maternity waiting homes and mobile outreach services have especially been to the benefit of vulnerable opulations in remote areas. However, it is unclear how this population will be served in the future.

Key lessons learnt

- Succesful capacity building of community ownership to health promotion, prevention and health services is stimulated by involvement of community leadership, a facilitating approach with continuous follow-up until institutionalisation and emphasis on transparency.
- The introduction of a competitive aspect in which CHDCs compete to be the best stimulates performance. The competition among the CHDCs for the maternity waiting home support (through a bidding process) stimulated engagement. Some communites that submitted bids but didn't win continued to mobilise resources. In Gbonya, for example, the communities managed to finalise the construction of a maternity waiting home.
- Recognition of the personal resources (time and transport) invested by volunteer members of CHDCs and GCHVs is important. Exemption from other community work is one way. Standardisation from an early stage could have helped create a smoother and more transparent system without delays. E.g. a flat

rate transport reimbursement by distance for long distance travel, a standardised exemption for community work based on flat rate time input for CHDC or GHCV activities, including transport.

Recommendations

The ET **recommends** that

1) Awareness creation and training of CHDCs in the last two months of the project focus on
    - Expanding the ownership beyond building infrastructure
    - Strengthening capacity to make decisions about use of mobilised resources that provide high value for money
    - Improving advocacy skills towards district and county authorities

2) The PHC-project works with district and community leaders to re-emphasize that participation in CHDC meetings and functioning as GHCV is at par with other community work. It is further suggested to consider a standard amount of time for such functions.

3) A short paper is developed and presented to the DHT and CHT describing the mobile outreach team intervention (e.g. combined curative, preventive and promotive services), the target population (number of villages and population; distance to nearest health care facility), level of activities and achievements and resources needed for continuation in the two project districts and for replication of similar interventions in other districts. It may also be useful to include an outline of alternatives. This would help the CHT make a decision on how the population in hard-to-reach areas should be provided services in the near and medium term in the project districts as well as the entire county.

It is further **suggested** that a) fixed rates per location for ambulance transport as well as for health staff accompanying patients in private transport (to pay for their return travel) is agreed and announced publicly; b) CHDCs request regular feedback of HMIS data from DHT/CHT on health situation and health services in their catchment areas as well as the district; and c) CHT develop a strategy for how to give the population in hard-to-reach areas acces to health care in the future.

4. Progress on Objective 2: Development of local health financing scheme

4.1. Objective, strategy and planned outputs

The second project objective is that communities will have devised locally owned feasible funding mechanism to ensure the sustainability of a primary health care system that through transfer of lessons learned can be replicated in Liberia.

In line with the overall project approach the adopted strategy was to build the capacities of community structures to make their own decision and create a community driven health financing mechanism to suit the needs of community members. The envisaged main outputs were that a feasible community health care financing scheme would have been a) selected, b) implemented and evaluated and c) documented and lessons learned disseminated as a model for community based financing scheme for health care in Liberia.

Planned activities towards the selection of a financing scheme included a cost analysis of health services provided, awareness creation and discussion of alternative options for financing; planned activities towards the implementation included awareness creation and mobilisation of communities and adoption of financing schemes, i.e. training will entail developing awareness messages on CBHI, formation of CBHI, establishment of collection pools, negotiation and choosing among options for benefit packages for members. The

evaluation would amongst other be based on a comparison of household health expenditures reported in the baseline (before) and end-of project (after) household survey.

4.2. Progress and achievements against set objectives and indicators

Achievements

This is a bold and challenging objective which (on a small scale) is in keeping with the overarching goal of Liberian health and social welfare financing policy, to ensure that health services provided to Liberians are affordable, while preventing catastrophic household health and social welfare expenditures.

Overall, the progress has been somewhat slow. The start-up was slow, and later the Ebola outbreak unfortunately emerged at a point in time that was critical for the mobilisation of communities for the selected scheme. The mobilisation was set back almost a year by the Ebola epidemic.

The development of local health financing schemes in Salayea and Zorzor districts has successfully depended upon the same approach for achieving ownership as for objective 1. To form a community owned financing scheme which will be sustained after the project phase major players within the communities were identified and engaged to serve as drivers of the process. Due to limited capacities in such informal settings, however, capacity building is needed.

A cost analysis was undertaken in the first year of implemenation to determine the cost of hospital and primary health care in the two districts. The baseline household survey provided information on household out-of-pocket health care expenditures. To inform the choice of health financing scheme to be selected by the communities, results from the cost analysis and household survey was presented to stakeholders centrally and at the county, district and community levels in the second year of the project. Community representatives and HCF staff participated through meetings in exploring various health financing schemes(continued reliance on user payment, income generation by community, district or county through local taxes, income generation by community through community projects, and community-based health insurance (CBHI)) and identified the most feasible scheme to be CBHI.

Following these meetings, 2 CBHI taskforces were established; one each for Salayea and Zorzor Districts. The task forces include members of the local governance structures such as a Clan Chief, CHDC chairman, community development committee member, women leaders, youth representatives, etc. Both taskforces, with support from the Project staff, have been responsible for creating awareness about health care financing needs and health care financing mechanisms. The task forces have received training from the project and are performing training for their CBHI groups. The task force members generally appeared to have a very good understanding of the principles of CBHI. Since then, the taskforces have worked assiduously and very structured with their level of capacities to mobilise groups and develop constitutions with the assistance of the PHC-Project staff. The six member task force divide into zones and visit communities based on planned schedule. However, the outbreak of Ebola made mobilisation efforts difficult, partly because involved parties were focusing on addressing the crisis, partly because of unease in the communities due to the crisis.

The concept of and need for community-based insurance is being accepted in the communities, but there is still a lot of confusion and many outstanding issues remain. Contrary to for example the familiar susu-schemes, participants do not necessarily get the contributions back or directly benefit on an annual basis, for example if one is so fortunate not to fall sick. The concept therefore to some extent is well-known and yet still is strange, but communities are starting to understand it. However, some communities are concerned about the fairness of the schemes, i.e. who are they trusting with their money and who will really benefit.

The mobilisation of communities to form groups has been relatively successful in view of the short effective time for mobilisation and the newness of the concept. However the enrolment rate is still low. The progress in Salayea presently stands at the establishment of 7 communities with CBHI out of the 10 communities targeted for awareness creation. Within one of the communities, there are two CBHI groups. It was agreed that since there was a large number of the Mandingo ethnic group, they would easily mobilize amongst themselves. Membership ranges between 49 and 78 members per group; monthly payment of dues ranges between, L$20, and L$50. In Zorzor District 10 CBHIs have been established since 2014 with total number of enrolment around 500 persons including children. Monthly contribution rates range from L$25 to L$100. 3 other communities are expressing interest to participate in CBHI and are asking the task force to assist them in the process.

The design of the schemes has been guided by the PHC-project staff, but decided by the communities. Some CBHI have a constitution regulating i.a. fund management, ensuring accountability and how to resolve expected challenges, while others are still in draft form. Contribution levels are decided by the communities, most of which have decided on monthly collections. Some communities differentiate contributions, for example children pay less, the chief pays more.

Challenges

While the CBHI leadership appears to have a very good grasp of the concept, financial management skills are still weak and ordinary CBHI members (and non-members) still needs to develop a deeper understanding of the concept.

Collection of contributions has started, but the groups have not yet agreed how to use the funds (i.e. the benefit package is not agreed). The groups have generally agreed that the pool needs to have a certain level before enjoyment of benefits can start. Safe-keeping practices of the funds vary. Some groups keep the funds in the community bank, while others are keeping them with the CBHI leadership but are considering depositing the money with the health facility.

The lack of a well-defined benefit package is a challenge for the enrolment of members as it is not clear what one gains through participation in the group. Few communities are ready to start registration with health care providers for benefits, but they are uncertain as how to do it. The groups need capacity to develop the benefit package so that the package can be provided within available resources. This is especially important with low enrolment as small pools are less effective and more susceptible to sustainability problems in relation to risk variations Given that services at primary health care facilities are presently free of charge, it would be most relevant to consider ambulance services or hospital services to start with. The accounts department at CLH has very qualified staff that can help in the assessment of the contents of the benefit package against the pool of funds available.

Some concerns have been raised that the amount collected may not be sufficient to pay for service at the hospital. Most/all schemes have wisely chosen a cautious approach by operating with some level of copayment, partly to discourage unnecessary use and partly to avoid bankruptcy when the pool is still small. This copayment could then gradually be reduced if the balance between the contributions in the pool and health care expenditures allows so. However, some schemes seem to have chosen an extremely cautious approach with 95% copayment, which offers very limited financial protection.

Task force members and CBHI leadership include community leaders, which is an advantage in terms of local ownership and mobilisation of group members. However there is also potential for conflicts of interest as insurance group members may find it difficult to raise complaints over the CBHI to community leaders, when they themselves are part of the CBHI leadership.

The selected financing system has been functioning for at least a period of six months in at least 10 communities. However, as implementation has barely started, it is still too early to evaluate the schemes; let alone disseminate a model for community based financing for replication. However, experiences in community mobilisation could be shared. The CBHI is in line with the national health financing strategy and the CBHI pilot have already attracted attention in the MOH and created interest to explore further the feasibility for a drug revolving fund.

Due to the delays in the implementation of the CBHIs the project ends at a time, where the CBHI groups cannot stand on their own. In view of the considerable mobilisation efforts, the ET is very concerned about the future of the CBHIs - and of other community resource mobilisation projects, should this initiative fail.

The project team did not have much experience in health financing and this contributed to the slow start of the implementation as they had to learn along the way. Limited technical support/back-up was obtained a few times from Denmark and MOH, but this mainly helped in the analysis and broad steps to take, and the operationalisation into the day-to-day implementation was a challenge. At the same time there were many other activities that may have felt easier to deal with, so that this objective did not get as much attention. This was possibly further compounded by the high turnover of staff.

4.3. Conclusion and recommendations

Overall conclusion

The PHC-project has managed to prepare the grounds for locally owned financing mechanism for sustained health service delivery in future. Local ownership appears to be high and task force members are very dedicated. In total, 18 CBHI groups with almost 1,000 members have been established. The process has, however, been slow to take off and much still needs to be done before the CBHIs are fully functional and sustainable. There is a high risk that many of the CBHIs may never become operational after project end.

Key lessons learnt

- Building local ownership of CBHI, which is to some extent a well-known, yet also new concept, takes time.
- It is possible to mobilise communities to form CBHI groups. Engagement of community leadership is important in this process. Accountability and transparency is considered important for successful mobilisation.
- Communities can discuss scheme design issues and willing to accept waiting periods before benefits can be enjoyed, differentiated membership contributions and copayments out of concerns about equity and sustainability.
- The project team was slightly disadvantaged by not having much experience in health care financing, and objective 2 did initially not get so much attention. In retrospect, the project should have engaged someone who had the implementation of objective 2 as their primary focus and in the absence of own experiences have engaged with a local expert for regular input and supervision.

Recommendations

The ET **recommends** that

1) The PHC-project and the CBHI task forces focus on getting few CBHIs to work so that members can start benefitting, rather than focusing on expanding to more communities. These CBHIs can then function as demonstration projects, which other communities can learn from. This would go beyond the end of the project period and would then be the responsibility of the CBHI task force, but in the remainder of the project period as much input as possible should be provided to develop a

demonstration CBHI, develop a roadmap for developing the CBHI and thereby facilitate the continued work of the task forces.

2) Concrete options for benefit packages at various funding levels and group sizes be developed (using inputs from the expertise in the accounts department at CLH), and presented to the CBHI members to select the preferred options; and constitutions are finalized.

3) The project engages with the CHT on this component in order to help establish a link to MOH through which technical support from its Health Financing Unit can be requested after the end of the project.

4) CLH (together with CHT?) develop and formally submit to MOH a brief case for support in terms of minor funding for capacity strengthening and piloting of the CBHI through the funding available for health care financing reform under Liberia's Health Equity Fund.

5) If time permits, capacity of the CBHI leadership in financial management and accountability should be strengthened.

5. Sustainability

Financial sustainability

Objective 1 activities: Many of the activities initiated under objective 1 are low cost and would not require major operational costs if any, e.g. ensuring flow of information (printing of forms) or availability of emergency transportation plans. Some of these activities can, in principle, be accommodated as part of the IRC activities, if IRC is awarded a new contract for continued operation in the two districts beyond March 2016. If the IRC contract is not renewed a vacuum could develop which would set back some activities such as outreach, supervision, improved flow of information and community mobilisation. It is unclear to the ET how ready the DHT/CHT are to do take over these activities or whether contracting-out will continue.

CHT may be able to integrate some of the current PHC – project activities in their budget, if the case is presented to them in good time, so that it can be integrated in the annual budget and planning exercise. This is, however, in no way guaranteed. It will be important that the PHC-project prepare the case well.

The hospital mobile outreach team has stopped operations by end of 2015. It is unlikely that the services can be sustained with user payment, so even though hard to reach communities appreciate their services other sources of financing will have to be found, if such activities are to be continued. CLH has a long history of mobile outreach since 1974. Originally the mobile outreach team was established to reach services to a large pouplation that was underserved and recently this was of particular importance in a ruined health care delivery system following the civil war. It was not intended to be a sustained intervention for the larger population beyond those living in hard-to-reach areas, but rather a temporary measure until the health system regained its strength. Nevertheless there is a need for a strategic decision on whether, how and to what extent people in remote villages should be served in the future, cf. chapter 3.2.4 for some options.

The PHC-project has provided part financing of ambulance operational costs (20,000 USD over five years), which has contributed to the improved referral system. In future, this funding would have to come from other sources. Patients are already providing some contributions towards fuel, when taken to the hospital. The CBHIs are considering payment for ambulance transport as one element in their benefit packages.

The project has been successful in building community ownership to a local health agenda and the health care facility through the CHDCs and CHCs. Several CHDCs have developed income-generating projects to provide supplementary financing for their HCF. The CHCs and CHDCs per se do not require much operational funding except perhaps transport reimbursement to those travelling from remote places. The CHC and CHDC income generation projects can contribute to improved sustainability of the health care system in the two project districts. It is, however, important that it is considered carefully how such funds are used. There is a tendency to focus on investment projects, but funding for recurrent costs such as maintenance costs, fuel for motorbikes and medicine is also important. If all funds generated are used for investments, for example for building laboratories, without having ensured financing (from government or own funds) for staff, equipment and operating costs, then it will not be sustainable and non-functioning investment does not represent value for money.

CBHI: The financial sustainability of the CBHIs depend on whether the costs of benefits provided can be met by the accumulated contributions. The likelihood of achieving this depends on the design of the scheme (such as which services are covered, level of copayment if any, having a waiting period before members can enjoy benefits) and the size of the group. The larger the size of the group the less vulnerable the CBHI becomes to otherwise catastrophic events as the risk is spread on many more people. The CBHIs in Zorzor and Salayea are barely operational and have not yet defined the benefit packages. Given the current stage of development and small size of the risk pools there is a considerable risk that they may not become financially sustainable. To facilitate and ensure that the CBHIs are developed and matured into financially sustainable financing mechanisms it is important that they get access to some level of technical support (cf. Chapter 4), preferrably relatively soon in order not to lose the momentum created by the mobilisation efforts.

The development of the CBHI under the PHC project is in line with Liberia's present national health financing reform agenda, which seeks to explore innovative approaches to health care financing. In the 2011-2021 National Health Policy & Plan, and the National Health Financing Policy and Plan, the government has committed to providing health care for its population that are accessible, affordable, efficient and equitable, while preventing catastrophic household health and social welfare expenditure. In fulfilling this vision one strategy is to pilot community-based health insurance and assess modalities for successful implementation on a wider scale in Liberia.

The MOH's Community health financing pre-feasibility study (2011) outlined five preconditions for the establishment of CBHI: 1) access to health care should be a priority need; 2) quality of care should be good enough for enrolment in CBHI to be attractive ; 3) economic growth supportive of community based financing; 4) traditional forms of mutual aid indicative of a potential for community based financing, and 5) promoters which inspire confidence to the population available to initiate community based financing. The ET finds that the situation in Zorzor and Salayea meets these five pre-conditions and should be considered as such pilot.

1. Access to health care has been a high priority in the health sector overall. For Zorzor and Salayea districts, CLH through the PHC-project has helped communities identify and prioritise their needs for health care. Communities have been mobilised to improve health seeking behaviour and stimulated to improve own access to health care. The mobile outreach visits, have helped improve awareness of health issues and need for seeking care at the health facilities. In so doing, most communities are being proactive in seeking for better health care at their closest health facilities.
2. Quality of service delivery and low utilization of services remain a challenge of the Liberian health sector in general. For example, MOH reported a 70% stock out of essential drugs in health facilities and 39% decline in service utilization in 2014. Scoring in the MOH Annual Health Facilities Accreditation put Lofa County at 42% in 2013 for clinical scores (highest county score was 67%). There are, however,

several indications that Zorzor and Salayea districts are better off than the other districts. The PHC-project together with other partners have contributed to improvement in quality of service delivery over the past five years. Maternity waiting homes built by communities themselves are used by pregnant women from long distance communities before giving birth. An improved discharge information system down to community level also help GCHVs making follow up; routine visits from house to house help encourage and ensure the sick or pregnant can seek care at the closest facility.

3. Economic growth in Lofa is not well documented, but in the past the county had a large agricultural production and was able to export its agricultural products. Liberia has had increasing economic growth rates reaching almost 9% in 2013 (Worl Development Indicators). The economy was set back by the Ebola crisis and economic growth was close to zero in 2014. However, the economic activitiy is again picking up and there is no reason to believe that Lofa would not be part of this.
4. Several communities through CHDCs have established community projects to generate support for the health care facilities or have contributed with labour and materials for maternity waiting homes. There is a strong tradition for community work and mutual aid groups (susu) are widespread.
5. A number of community-based national and international NGOs have been active throughout the country. With this, Salayea and Zorzor districts in Lofa County is no exception. Two international NGOs, IRC and Concern, are active. More importantly, CLH through the PHC-project has been engaging community leaders on health care financing issues. A task force on CBHI has been established in each district, with members being community leaders that can inspire confidence. The task forces have been relatively active in promoting the initiation of CBHIs.

With preconditions mostly met, the development of CBHIs within nineteen communities in Salayea and Zorzor districts represents a good pilot demonstration area. With the expectation of generating some good evidences and lessons learned over the years of implementation, the government can build on CBHI as part of their overall health financing reform either as the basis of decentralised system or as a stepping stone and learning lab towards an integrated national system in the longer term. Relying on domestic resources, the newly established CBHIs are expected to raise funding from members to provide financial protection for the poor and alleviate catastrophic out-of-pocket spending by households. CBHIs where effectively implemented provides financial protection for community members in time of need for health care and for health emergencies. Through the preparatory work of the project "Capacity Building of the Primary Health Care System in Salayea and Zorzor Districts", a potential for establishing a strong, well-coordinated and operational CBHI scheme within Salayea and Zorzor Districts exists. The (commendable) focus on development of community ownership, which takes time, as well as delays and set-backs during the Ebola crisis, however, means that it would additional support to strengthen community schemes, keep the momentum and adopt lessons learned from the ongoing pilot activities is required.

The ET strongly recommends that CLH (together with the CHT? Or district authorities?) formally approaches the MOH for minor support through the funding available for health care financing reform to continue the development of the CBHI pilot. It should be of interest to the MOH and the funding required will be minor.

Social/political sustainability at community level

On one hand the project has been able to facilitate the development of strong community ownership with strong support from the community leadership, which bodes well for social/political sustainability at community level. Many of the CHDCs and CHCs appear to see the value of their activities and expect to continue these also after the project ends. The ET is left with the impression that the CHC/CHDC meetings have been largely institutionalised and were impressed with the capacity of some CHDC members. The high

number of institutional deliveries and reductions in maternal and neonatal deaths are likely to be sustained as the value is generally acknowledged and visible as long as the quality of care and financial access is maintained. Communities value the importance of the maternity waiting homes and it is likely that the community support will continue.

On the other hand, without the small contributions to transport and feeding for those travelling for the meetings, there is a risk that members may be reluctant to participate in meetings, which give them no personal benefit save for the knowledge that hey contribute to improved access to health care in their communities.

As regards the GCHVs the challenge will be to avoid a high turnover and difficulty in recruitment as an increasing number of agencies want to use them for reaching communities with an increasing number of activities – without compensation. This may put continuity, experience and quality at risk. The MOH is, however, developing a strategy for GCHVs and there are considerations regarding giving some kind of recognition to this group of volunteer health workers.

For the CBHIs the community ownership is significantly weaker, although the engagement of community leadership appears to be relatively strong. The continuation and further embracement of CBHI, however, will depend on the capacity of the schemes to deliver results as people are still hesitant towards this new concept. The limited achievement this far is fragile and the ET is concerned that the organisations may not be sustainable unless some additional support can be obtained to help facilitate the further development and institutionalization of the CBHI after the end of the PHC-project.

A number of the activities in which the PHD-project has engaged aimed to strengthen the primary health care delivery system, e.g. through mobile outreach, referral services, etc. The continuation of these activities – as well as replication in other areas – would naturally fall within the responsibilities of the DHT/CHT. The question is whether there is an interest to do so. It is the impression of the ET that the sense of ownership is much less developed in the local health administration than in communities, but that there is a willingness to consider timely suggestions as inputs for discussion in the annual planning process. To mobilise interest for replication and provide relevant information for decision-making regarding inclusion of activities it is ***suggested*** to provide documentation in the form of briefs (business case) on individual outputs describing activities, achievements and costs, e.g. feedback along discharged patients to the district, census rounds, mobile outreach team, training of CHCs/CHDCs. A concrete example could be the already well-described goal setting process, which could be presented in summarised form, supplemented with achievements and information on the resources needed to conduct the exercise; the detailed description (Developing Health Goals .. August 2012,) could be attached.

Environmental and technical sustainability

The project does not have any significant environmental effects and use low tech implementation strategies.

6. Programme management issues

The PHC-project is implemented by CLH through the Community Health Department. Traditionally, CLH has been working with community health within the hospital catchment area and before the war CLH supervised health care delivery in the two districts. The PHC project has a focus on strengthening communities and the link to the health system, but also includes some service delivery aspects. In the government structure, the DHT and the CHT is responsible for primary health care and community health, which is provided through government HCF and is not usually implemented through the hospital. This

creates a peculiar situation in which the roles are not completely clear. The hospital as the owner of the project has the oversight, while the DHT/CHT has the oversight over HCFs and GHCVs.

A key collaboration partner should be the DHT in the two districts and the CHT. They were involved in the design phase and subsequently recommended the project. The PHC-project has attempted to involve the DHT and the CHT. The DHT in Zorzor was provided with office space in the PHC office. Also, the CHT and some HCFs were provided with motorbikes to facilitate supervision and outreach activities. The CHT, DHT and other district authorities have been invited in all stakeholder meetings with varying participation, and the PHC project has regularly provided information about activities and progress.

The CHT and district authorities were overall well aware of the project and appreciated its contributions to community strengthening and access to health care. District authorities also mentioned the usefulness of the regular population surveys for their planning. Nevertheless, it was the impression of the ET that there was on one hand a sense of being informed but not engaged in the project; and on the side of the project management a sense of inviting but being met with limited interest. Especially, it was the impression of the team that that DHT was not as interested, and for example mixed up PHC-project and IRC activities. The reason could be change of people involved and insufficient hand-over, Involvement of government structures is a common challenge in such projects, and this project is not doing particularly bad, in fact may be even fairly well in comparison. Nevertheless, it is unfortunate as it is the DHT/CHT that would naturally take over implementation of or replicate some of the activities started by the PHC-project, and the CHT has been designated the responsibility for having functioning community health structures (CHDC/CHC) in the National Community Health Services Policy. A clearer role of the government structuresin the oversight function would have improved sustainability. *Lessons learnt:* In retrospect, it could have been useful to have a Memorandum of Understanding between the local government (CHT/DHT), CLH and Promissio, which spelled out roles and responsibilities and division of labour clearly and which could be referred to as staff change.

At the start of the project, a Project Review Committee (PRC) was formed consisting of the Medical Officer in Charge, Hospital Administrator, Hospital Accountant, Project adviser and Project Coordinator. Quarterly meetings have taken place (although with some gaps), cf. minutes of meetings. The initial confusion about who refers to whom was discussed in the PRC and clarified during project supervision from Denmark; project staff refer to the project coordinator and the project coordinator refers to the medical officer-in-charge. However, it was the impression of the ET that in practice the PHC-project has had a semi-autonomous status. This is a balancing act, as the project being involved with community strengthening (including capacity to challenge service provision) should be at arms-length, but on the other hand CLH as the owner of the project should also be responsible for overall management, including follow-up and monitoring of implementation. The PHC project management has to a large extent been allowed to operate on its own (CLH has contributed significant staff time to participate in some activities, e.g. objective 2). The link with the DMCDD according to the PD has been directly through the PHC-project, but it was agreed at the start of the project that the Medical Officer in Charge would be copied on all correspondence. While providing a more effective line of communication, this has perhaps contributed to a hands-off approach. Coupled with inoptimal information sharing within CLH this has led to some cases where CLH management has not felt adequately informed. *Lessons learnt:* A clear agreement on leadership roles, division of responsibilities and information sharing from the beginning of the project is important.

The PHC-project has been very good in coordinating with other partners such as IRC and Concern World Wide. The PHC project has participated actively in monthly coordination meetings with donors held by the CHT. Initially, there were some misunderstandings and duplication of activities between PHC, DHT and IRC, e.g. mobile outreach team, training activities in the communities. However, the partners resolved the

overlaps and arrived at a division of labour and sharing of responsibilities. The partners now complement each other. The PHC-project has helped collect morbidity reports from GCHVs in remote areas, the mobile team gives lifts to clinic outreach staff and transport of materials, IRC has used some of the materials developed by the PHC-project and provided repeater training, the IRC is responsible for quality of care supervision at clinic level. The PHC project has also complemented the work of Concern that are mainly implementing water and sanitation projects, especially through working with GCHVs in the dissemination of messages in reaching the most hard to reach areas. There is still overlap in the use of target groups, e.g. training of the same people and using the GCHVs for an increasing number of tasks.

Even though the project has been very clear and successful in passing the message that communities should be prepared when the donors leave, the project lacks a clear exit strategy.

7. Summative evaluation

Based on the document review, the interviews and the detailed review and analysis of the project, the ET has assessed the relevance, effectiveness, efficiency and cost-effectiveness, impact and sustainability of the PHC-project.

Relevance

The objectives of the project remain valid. The project has been clearly relevant for the population in Zorzor and Salayea districts and for the district health system. While the health situation is improving as the country is regaining her strength, there is still need for improving health and access to health care of vulnerable men, women and children. The two objectives of strengthening the capacity of the communities and primary health care facilities to facilitate access to health promotion, prevention and treatment, and development of locally owned funding mechanism to ensure sustainability of the primary health care system are both important for the achievement of the overall objective. The objectives are in line with overall Liberian policies and have been addressing the needs of the target population. The facilitative approach taken throughout the project has been consistent with the focus on local ownership. The choices of activities and outputs have overall been relevant for the achievement of the objectives and is expected to contribute to the intended effects.

Effectiveness

The project has been very effective in its engagement with communities and building ownership, although there is still room for further capacity strengthening.

Access to health promotion, prevention and treatment has been improved during the project period although this cannot solely be attributed to the PHC project as other partners have also been working in the same direction. This has been achieved through capacity strengthening of the CHCs and CHDCs to identify, prioritise and address health needs through activities in the community and in support of the HCF; through capacity strengthening of the GCHVs; through improvement of information flows from the communities and the referral system; and through mobile outreach services to underserved and hard-to-reach areas.

The project has been less effective in achieving the rather ambitious objective of a functioning locally owned funding mechanism to ensure sustainability of the primary health care system. After consideration of different financing options it was decided to move to CBHI. Some groups have been formed, but much work remains to be done. The implementation under this component was slow, partly because there was less expertise in this area on-site, partly because the relatively complex project with many different types of activities were time consuming, and partly because the emphasis on building local ownership requires time. When it had finally reached the stage of broader community mobilisation, implementation was set-back for

almost a year by the Ebola outbreak. Taking this into consideration, the ET finds that the project has been relatively effective in engaging community leaders and building local ownership also in this area of support, albeit not in terms of developing operational schemes.

Efficiency and cost effectiveness

The total project budget was DKK 7.2 million (approximately USD 1.1 million) over five years. Most of the implemented activities are low cost activities. In complex projects like this it is difficult to attribute effects to specific activities and it is consequently also difficult to assess cost-effectiveness of specific activities.

For example, the reduction in severity of patients admitted to the hospital could be a result of more effective referral system, brought about by a number of activities, including educating communities and GCHVs in particular on danger signs for illness and care seeking needs, display of ambulance cell phone number in the communities and supplementary support of 20,000 USD for operational costs of ambulance services. As regards the individual activities, it is the impression that the project has generally been cost-effective.

The largest single activity in terms of cost is the mobile outreach team. The average cost per contact of 9 USD (including investment costs) on one hand appears to be high even taking into consideration that other activities like health talks, participation in CHC meetings and supervision of GCHVs also takes place. On the other hand, given that the objective is to provide services in hard-to-reach areas, then other alternatives may come out with similar levels of cost-effectiveness as it is by nature more costly to provide services in remote areas, where low populations result in smaller effects. The least cost-effective is most likely construction of clinics in such areas, the most cost-effective could be outreach from the local HCF, which is likely to be less costly, but could also be at risk of having less effect. In a larger context, say, aiming to increase the proportion of women with at least four ANC visits, it is clear that it may be more cost-effective to focus efforts on women in towns as the additional costs of getting one woman in town to attend all the ANC clinics is less than the cost of getting to a woman in a remote area. Whether the latter can be considered efficient depends on whether reaching women in remote areas is valued on its own.

Overall, the ET finds that the project has been relatively efficient and within a small budget has provided good value for money.

Impact

It is difficult to assess the impact of the project. Partly because end-of-project data collection and analysis is still outstanding, partly because the project has not been operating in isolation and the assessment of how much of any change can be attributed to the project is difficult. Having said this, the analysis of the HMIS data, the reported decrease in severity of admitted patients and the increased use of maternity waiting homes as well as observations by the CHT and other interviewees indicate that population health, health behaviour and access to health care has improved. According to the stakeholders interviewed the PHC-project has provided an important contribution to these achievements in particular through the strong engagement at community level to build capacity and ownership of CHCs/CHDCs.

There is no doubt that the capacity of the CHCs/CHDCs has been strengthened considerably because of the PHC-project with consequent impact on health and access to health care during the project period as well as the future. Community participation through the CHCs and the CHDCs is regarded as key to the success of the provision of the EPHS through an integrated primary health care system (National Communty Health Services Policy 2015 ; Libera Community Health Roadmap 2014). The 2013 Communityp Mapping reported that only 54% of communites in Liberia had an established CHC and only 48% of communities were aware of the CHDC which was attributed to lack of involvement of community leaders. Thanks to the PHC-project all health facilities in the two project districts have CHDCs with participation of community leadership, and the CHDCs have identified health priorities and have received relevant training in areas such as leadership, needs assessment and conflict resolution.

As regards the creation of the CBHIs, which have not started operating, it is too early to have an impact on access to health care.

An unplanned effect was the contribution to address the Ebola outbreak both directly and indirectly through the strengthened community structures.

Sustainability

The project has been very good at strengthening community ownership and at community level the social/political sustainability is deemed to be good. However, the community ownership with regards to the CBHI is fragile. There is a momentum, but sustenance of community ownership will depend on the future performance of the CBHIs.

The CBHIs have barely started operating and are far from functional. The CBHIs are at considerable risk of not becoming financially sustainable, unless funding can be mobilised for limited support for further capacity strengthening and help in finalising the design and the constitutions of the schemes.

Many of the activities are low cost, except the mobile outreach team. Since by nature the PHC-project is mainly concerned with non-hospital activities, CLH may not be able to take on most of the activities as the funds received can only operate at the hospital. The CHT may be able to embed parts of the PHC-concept into their county planning as long as they are fully involved and aware of what is needed.

Overall, the ET finds firstly that social, political and financial sustainability is high as regards objective 1 (Capacity strengthening of communities and health care facilities); secondly that social and political sustainability is promising, but fragile for objective 2 (Development of local health financing scheme) and depending on ensuring financial sustainability; and thirdly that presently this financial sustainability is relatively low an efforts are required to mobilise resources for continuation of capacity strengthening of the CBHIs.

8. Conclusion

The ET finds that the project has been relevant, relatively effective – especially in creating community ownership, and not in developing local finanicing mechanisms; and relatively efficient. Impact appears to be positive, sustainability is however a concern as regards the CBHIs.

The PHC project has contributed to improved health and access to health care in Salayea and Zorzor districts. Qualitative information and HMIS data suggests this, but the comparison of population census dat and Household Survey data at start and end of project will provide better evidence when available. It is difficult to quantify how much of any improvement that can be attributed to this particular project, since several partners and contextual changes, e.g. Ebola epidemic, have also affected the results.

The project aimed to to systematically accommodate community empowerment goals within a traditional approach to programming and to pilot the MOHSW's health care delivery using a system thinking approach. A key implementation strategy across the project was to "put in place mechanisms to ensure maximum participation of individuals and groups in the planning and implementation of project activities", emphasising the facilitating role of the project staff. A major strength of the project is this participatory, facilitating approach of the project staff with focus on consensus building, which has been relatively successful in bringing about a paradigm shift regarding the ownership of and responsibilities for ensuring functioning health clinics and access to health care. Nevertheless, much still needs to be done.

Project implementation was affected by the Ebola outbreak, which limited planned activities for almost a year. Taking this into consideration the progress of the project has overall been very good, although less so for Component 2.

A general weakness of the project is the lack of involvement of the District Health Team (DHT) and the County Health Team (CHT) despite efforts from the project management. This is notoriously difficult for various reasons and perhaps due to the design of the project, see chapter 6.

Chapter 3.3 and 4.3 provides some key lessons learnt and recommendations for the remaining period of the project, mainly with a view to increasing the sustainability of the project. The recommendations and suggestions are also listed in Annex 1. The PHC team has already taken steps towards implementation of some of the recommendations.

Looking forward, should another project build on the present project, the ET would recommend to give priority to continued capacity strengthening of CBHIs as well as of CHDCs and increasingly the CHCs. Furthermore, project management could be strengthened through closer monitoring of implementation. Finally, the ET finds that a continuation of the population census should be a priority, as it provides key demographic information for planning purposes as well as a good basis for quickly undertaking surveys or experiments or other types of investigations that can improve evidence for decision-making.

References

Comprehensive Mapping of Community Health Volunteers (CHVs) and Community Health Structures in All Health Districts of Liberia, Community Health Services Division, Ministry of Health and Social Welfare, June 2013.

DEM 2010 # 01 PHC project financial reports Jul to Sept 2015 (corrected report 17 Nov 15)

Developing Health Goals for the People op Zorzor and Salayea Districts. Report August 2012. Primary Health System Capacity Building Project, Curran Lutheran Hospital.

Future Financing of Health Services in Zorzor and Salayea Districts, Lofa County. Primary Health System Capacity Building Project, Curran Lutheran Hospital

Garyeazon FY, Koikoi TK, Kollie BM, Johnson EE, Yeater D. Household Survey Zorzor and Salayea Districts, Lofa County, Liberia, July to August 2012. Curran Lutheran Hospital - Capacity Building the Primary Health system Zorzor and Salayea Districts.

Liberia Community Health Roadmap July 1 2014 – June 30 2017. Ministry of Health and Social Welfar March 27, 2014.

Lievens T, Witter S. Community health financing: Which role in the health financing of Liberia ? Oxford Policy Management. January 2011

Minutes of Project Review Committee – meetings & Supervision reports.

National Community Health Services Policy. Revised December 2015. Ministry of Health and Social Welfare December 2015.

NN. Admission status for adults and children, Curran Lutheran Hospital 2010 and 2015. Draft, undated.

Status Report 2014. Capacity Building of the Primary Health system Zorzor and Salayea Districts.

Summary Update on Outreach Team Activities as of 2011-2015. James David, Community Liaison Officer, January 18, 2016.

Annex 1: Summary list of recommendations and suggestions

Table A: Recommendations

No.	It is recommended that ..	By when	By whom
1	Awareness creation and training of CHDCs in the last two months of the project focus on: Expanding the ownership beyond building infrastructure; Strengthening capacity to make decisions about use of mobilised resources that provide high value for money; and Improving advocacy skills towards district and county authorities	February-March	PHC team
2	The PHC project work with District and community leaders to re-emphasize that participation in CHDC meetings and functioning as GHCV is at par with other community work. It is further suggested to consider a standard amount of time for such functions.	February-March Continuous	PHC team Community leaders
3	A short paper is developed and presented to the DHT and CHT describing the mobile outreach team intervention (e.g. combined curative, preventive and promotive services), the target population (number of villages and population; distance to nearest health care facility), level of activities and achievements and resources needed for continuation and replication in other districts	April 2016	CLH management
4	The PHC-project and the CBHI task forces focus on getting few CBHIs to work so that members can start benefitting, rather than focusing on expanding to more communities. These CBHIs can then function as demonstration projects, which other communities can learn from. This would go beyond the end of the project period and would be the responsibility of the CBHI task force, but in the remainder of the project period as much input as possible should be provided to develop a demonstration CBHI, develop a roadmap and thereby facilitate the continued work of the task forces.	February-March Continuous	PHC team & CBHI Task Forces CBHI Task Forces
5	Concrete options for benefit packages at various funding levels and group sizes be developed (using inputs from the expertise in the accounts department at CLH), and presented to the CBHI members to select the preferred options; and constitutions are finalized.	February-March Continuous	PHC team, CLH, CBHI Task Forces CLH&CBHI Task Forces
6	The project engages with the CHT to help establish a link to MOH through which technical support on CBHI from its Health Financing Unit can be requested after the end of the project.	March	CLH management
7	CLH (together with CHT?) develop and submit to MOH a brief case for support of minor funding for capacity strengthening and piloting of the CBHI through the funding available for health care financing reform under Liberia's Health Equity Fund	March-April	CLH management
8	If time permits, capacity of the CBHI leadership in financial management and accountability should be strengthened.	March	PHC team

Table B: Suggestions

No.	It is suggested that …	By when	By whom
A	Fixed rates per location for ambulance transport as well as for health staff accompanying patients in private transport (to pay for their return travel) is agreed between CHDCs and CHL (for ambulance transport) and CHDCs and DHTs (accompanying patient) and announced publicly.	March - April	CHDCs (CHL&DHT)
B	CHDCs request regular feedback of HMIS data from DHT/CHT on health situation and health services in their catchment areas as well as the district.	April Continous	CHDCs
C	CHT develop a strategy for how to give the population in hard-to-reach areas access to health care in the future.	April - August	CHT
D	To mobilise interest for replication and provide relevant information for decision-making regarding inclusion of activities documentation is provided in the form of briefs (business case) describing activities, achievements and costs related to individual outputs, e.g. feedback along discharged patients to the district, census rounds, mobile outreach team, training of CHCs/CHDCs.	April-May	CHL / PHC team
E	CLH consider another project building on the present project which should a) give priority to continued capacity strengthening of CBHIs as well as of CHDCs and CHCs; b) continue the population census as it provides key demographic information for planning purposes as well as a good basis for improved evidence for decision-making; and c) put more emphasis on monitoring of project implementation.		CHL management

Annex 2: Itinerary

SCHEDULE FOR THE EVALUATION IN THE DISTRICTS - ZORZOR AND SALAYEA

Date	Time of visit/ departure	Place to visit	District
Jan. 25, 2016	09:00 am 10:30 am 17:30 pm	Team meeting Travel Monrovia to Zorzor; Briefing in Zorzor	Monrovia Zorzor
Jan. 26,2016	7:30am	Luyeama CHDC/CHC, Konia Clinic Borkeza Clinic/(maternity waiting home)	Zorzor
Jan. 27,2016	7:30am - 5 pm	Yarpuah Clinic/(maternity waiting home), Gbonyea CHDC/CHC, Salayea Districts CBHI Taskforces, Salayea City, Salayea District Officials Salayea District Health Team	Salayea
Jan. 28,2016	8am-5 pm	CBHI Taskforce, Zorzor District, Fissebu Town Zorzor District Officials IRC Concern Worldwide, CLH management Team	Zorzor
Jan. 29,2016	6:30am – 4:30 pm	County Health Team	Voinjama
Jan. 30,2016	8:30am – 11:30 am 11.30 – 1 pm 4:30 pm	Team meeting Project staff and Mobile Clinic (CLH compound) Debriefing	Zorzor
Jan. 31, 2016	9 am	Team return to Monrovia	

Annex 3: List of persons met

Borkeza Health Clinic
Oldman David, CHDC Chairman
Ganworoku Koiubah, Screening
G. kolubah B Kalaplee, Dispenser
James K Mezuwu, Lab Aide
Edward Beyan Garku, 2nd screener
Krubo Luther, Cleaner
Lorpu Sumo, CM
James B Momo, Registrar
Roland M Dolo, Officer-in-charge

Luyeama Clinic

Elijah YS Johnson, CHDC F Secretary, Galapetela
Flomo Weegie, CHDC Chairperson, Luyeama
James F Zayzay, CHDC adviser, Luyeama
Henry Zazaboie, General Town Chief, Luyeama
Wilson G Forkpa, GCHV, Vetesu
Korpo Gayduo, CHC, Luyeama
Youngor, Weedor, CHDC, Luyeama
Yassah Yanquoi, CHDC, Vetesu
Deddeh Yekeh, CHC, Vetesu
Micheal N Supu, CHDC Secretary, Luyeama

Konia Health Center
Dorcas M Arku,
Fiztar F Yanquor, CHDC Chairman
Weeder Joe Joe, MCH Supervisor

Gbonyea Community Clinic
Edward F. Mulbah, Registrar, Lorma Village
Milton Darudo
John Varney, CHDC Chari
John Sufonteh, Town chief
Washington Kpawul, GCHV, Kpoto Farm
Orethe G Sumo, GCHV, Willie Town
Stanley K Livingstone, Vaccinator,
Johnson S Kokulo, dispenser
Somtoe Y Forkpa, screener
Garnai, Genrnyan, TBA
Gorpu Fromayan, RM
Helen Mulbah, CM
Edward Barkolleh, CHC Chair
Lanila Folokula, Elder
Sayku Konneh, Elder
Jackson M Flomo, GHCV

CBHI Task Force Salayea
T Benedict Johnson TF Secretary
Moses Koiwen, Chairman
Alice Odo, Chaplon
Mulbah Y Golakpayan, Adviser

District Authorities Salayea
T Benedict Johnson, Paramount Chieft
Moses Koiwen, Development Committee Chairman
Jackson Vesselee, Clerk for District Commissioner

Fissebu
Christin Banah, CBHI TF Chairman
V Mulbah Pewu, CBHI TF Treasurer
Mulbah Zay Zay, CBHI TF Adviser
Sumo Belemah, CBHI TF member
Dark Z Beyan, Deputy town chief
Lavela Papa, General town chief
J Larwobah,
Jerry Korboi
Joseph Forkpa
Kokulo Gorwo
Krubo zumo Siza
Wubu Kolu, Chair lady
David B Flomo, Teacher
Augustine Forkpa, teacher
Charles Howard, FCC

DHO, Salayea District
G Gorpu M George, DHO
J Gayflordallah Argbah, DSO

Yarpuah Health Clinic
List of participants misplaced. Eleven persons participated, including officer-in-charge and other staff, CHDC chairman as well as members from remote villages.

District Officials, Zorzor District
Henry Wolobah, District Commissioner
Zubah Johnson, City Mayor

IRC
Daniel Yatukah, Base manager
Moses Kolubah, Clinical supervisor

Concern International

Curran Hospital Administration

Aaron Collie, Medical Director
Peter Flomo, Hospital Administrator
Steven Payman, Accountant

Lofa County Health Team

Monolu Z She, HR Manager
Abraham B Flomo, Clinical supervisor
A Mark Sesay, Diagnostic Officer
Govego Thompson, M&E Officer

LCL – Mobile outreach team
Nancy Barkolleh, CM
Moors K Robers, LIN/driver
James Baysah, NA
James David, liaison worker
Moses K Yarkpah, supervisore Mobile Team

PHC-project staff
Uriah S Dolokelen, Acting Project Manager
G Milton Daklolo, Coordinator
Stephen Nimely, Data supervisor