Community health workers during the Ebola outbreak in Liberia


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November 2017

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Keywords: Community health; Ebola; health systems; emergency; resilience; maternal, newborn and child health; Liberia

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Acknowledgements

Particular gratitude is extended to the community members, health workers, and health programme implementers who participated in this research.

We would like to thank the following individuals and institutions for their support and inputs. From the UNICEF Head Office, New York, we thank Nicholas Oliphant, Jerome Pfaffmann, Heather Papowitz, Kumanan Rasanathan, Barbara Bentein and Mark Young, and from the UNICEF Country Office in Liberia we thank Anthony Asije and Yulia Widiati.

Sincere thanks are extended to Deimah Kpar-Kyne who acted as Anthrologica’s Research Assistant for in-county data collection and transcription and to Joanna Clinton who completed a number of transcriptions. We also thank Olivia Tulloch from the Overseas Development Institute for her considered inputs to the overall project. From Anthrologica, we thank Research Associate Penelope Milsom for her contribution to the project throughout, and interns Megan Feeney and Sara Wallach for supporting the background literature review, Beth Vale for transcribing a number of national-level interviews, and Kevin Ritt for undertaking secondary analysis of the national stakeholder interviews.

Finally, we would like to thank the Government of Sweden and the Rockefeller Foundation for support of this study.
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Executive Summary

Community health volunteers and community-based MNCH services pre-Ebola

A 2013 mapping survey showed that there were 8,052 community health volunteers (CHVs) in Liberia, the most important of these were 3,727 general community health volunteers (gCHVs) and 2,856 trained traditional midwives (TTMs). Additionally, community health development committees (CHDCs), made up of community leaders and other trusted community members, played an important role in many communities. These three groups are referred to in this study as CHVs. The roles, responsibilities and level of training of CHVs pre-Ebola were highly dependent on local contexts. According to the Ministry of Health (MoH), ‘Most of the gCHV projects were partner-led with minimal support from the county and district health teams’. Government officials also suggested that implementing partners were not always prepared to support the county health teams, and were liable to set up parallel management systems within vertical programming. There seemed to be little consistency in the level of remuneration or incentives provided in the pre-Ebola period, and again, what was given was largely determined by individual programme implementers.

According to the MoH, CHV roles and responsibilities included, but were not limited to, ten key activities: the implementation of ‘community directed interventions’; linking the community and health facility and supporting outreach services; health promotion for groups and individuals; supporting home and community waste disposal and water and sanitation services; providing antenatal services; providing post-natal services; providing integrated community case management (iCCM); and proper record keeping. gCHVs were able to dispense medicine as part of iCCM to treat diarrhoea, pneumonia and malaria for children under five. They also administered vitamin A and deworming medication to children aged six months and above, monitored children’s growth and carried out ‘essential nutrition action’ when required. TTM focused on helping pregnant women in the community seek antenatal care and plan for facility-based deliveries. CHDCs were described as ‘health advocates’ working between the community and health facility referral staff, often to mediate disputes and to provide a level of accountability through the support and supervision of gCHVs and TTM. They also reported being active social mobilisers and overseeing the maintenance of community-level resources.

Service delivery was hampered by a variety of supply-side bottlenecks, including stockouts and drug shortages, and limited resources (e.g. transportation and incentives). Supervision was not effectively conducted because of the absence of human resources to carry out these activities. These issues influenced the pattern of service delivery at the community level and meant that iCCM and many other services were not effectively functioning in some study areas in the period immediately prior to the Ebola outbreak.

Community health volunteers and delivery of MNCH services during Ebola

During the Ebola outbreak, many community-based MNCH services in ‘hard hit’ or ‘hotspot’ communities were largely discontinued. This gave rise to the revival or continuation of informal healthcare at the community level, including self- or home-based treatment and home deliveries. Resources were redirected towards the Ebola response, and routine health services were put under further strain in the already weak health system.

To ensure CHVs were protected from potential EVD exposure and infection, the WHO and UNICEF, in collaboration with the MoH, developed a ‘no touch policy’. The guidelines recommended that gCHVs avoid all physical contact with patients and based their assessments solely on patient history and observations. However, confusion over the intent and practical implementation of the ‘no touch policy’ was also highlighted
by study participants as a key factor in the discontinuation of MNCH services, and many interpreted the policy as an instruction to cease iCCM entirely.

During the height of the outbreak, TTMs were often the only source of care available to women in need of assistance during pregnancy or delivery, largely because health facilities were closed, health workers refused care for pregnant and delivering women, and women were frightened of seeking care from health workers. However, TTMs were not provided with materials to perform community-based deliveries during the outbreak, nor were they given materials for enhanced infection prevention control (IPC), despite their high-risk work.

In discussing care-seeking behaviours for illnesses during the Ebola outbreak, community members often described self-medicating with drugs purchased from a pharmacy, market or drug vendor, or using home remedies or ‘bush’ medicine at the onset of symptoms. These medicines allowed caregivers to treat their children and family members ‘away from the eyes of others’ to ensure that they would not be accused of having Ebola. However, caregivers concluded that despite their fear, they were more willing to seek care at health facilities on the recommendation of ‘strong’ gCHVs who they had known before the outbreak. Community members also became more willing to follow the health advice of gCHVs after they had experienced their neighbours dying in the community from Ebola.

**Community health volunteers and Ebola-related work**

CHVs shifted into new roles to perform a wide variety of activities in the response including social mobilisation, contact tracing, active case finding and caretaking. Across the four counties, the vast majority of CHVs utilised in the Ebola response were gCHVs who task-shifted from their normal duties to become Ebola response workers. The emergency also resulted in a huge and rapid expansion of workers engaged at the community level that was difficult to manage in terms of human resources. At least at the start of the response, there was a lack of coordination between organisations working in the same geographic location and many gCHVs were recruited by more than one organisation at the same time.

The influx of ‘Ebola money’ dramatically skewed the financing of the health system, particularly with regard to incentives provided to CHVs and other ‘Ebola workers’. The majority of respondents in the study highlighted payment disparities between organisations and activities performed, particularly during the first phase of the response when there was no standardised incentive scheme.

The mobilisation of ‘Ebola task forces’ was seen by many stakeholders to be a useful mechanism to quickly coordinate response efforts and enforce protocols at the community level. Task forces were closely linked to CHDCs, and the existence of a CHDC prior to the Ebola outbreak provided a natural platform for a task force and subsequent coordination activities. Amongst other actions, the task forces oversaw the movement of people in and out of their community; established handwashing stations; monitored individual-, household- and community-level quarantine restrictions; and advocated for the distribution of resources (e.g. WFP food rations to families in quarantine). CHVs had close ties to the task forces in the communities in which they worked (some were also members of the task force) and their duties were more easily carried out in collaboration with this local level structure. The roles that CHDC members described during the response were similar to those of gCHVs; the main difference was that CHDC members undertook these activities largely without the formal support of INGO partners. Like TTMs, CHDC members worked within and monitored their own communities. They were invested in their work as locals and had strong and sustained relationships with community members that were important during the emergency period.

Across the four study counties, gCHVs reported experiencing stigmatisation as potential ‘Ebola carriers’; accusations of witchcraft; accusations that they were spreading the virus so that they could profit from the
response by ‘eating Ebola money’; harassment from families of symptomatic patients they had reported to authorities; mistrust from community members who thought there were ‘spies’ and hid their health status or refused care; anger from their own family members that their work put them and their household at heightened risk; anger from their family and community for not fulfilling responsibilities such as farming and harvesting due to Ebola-related work commitments; and discouragement when they thought they had successfully conveyed key prevention and protection messages yet no behaviour change resulted. Whether EVD-affected communities trusted or feared their gCHVs was, however, highly dependent on context and was influenced by the gCHV’s role (e.g. whether they were working as a social mobiliser or contract tracer); whether the gCHV was known to the community before the outbreak or was perceived to be an ‘outsider’; and the time of the epidemic. Despite these challenges, most stakeholders asserted that the relationship between gCHVs was significantly more resilient than that with health facilities, and gCHVs working in their home communities were better able to gain the trust of their communities.

Many respondents in the study confirmed that the role of CHVs during the Ebola response was central to building trust between communities and the responders, government and health system. CHDCs also proved valuable structures for implementing communication and social mobilisation at the local level and were used to increase community coordination. Stakeholders suggested that communities with a CHDC in place prior to the Ebola outbreak appeared to be more resilient, were better able to rapidly mobilise trusted local personnel, and were more likely to self-mobilise and organised community-led solutions.

**Community health volunteers and post-Ebola community-based MNCH programming**

In 2016, Liberia released the new National Community Health Services Policy. The implementation of the policy rested on the contribution of the newly formed cadre of community health assistants (CHAs), who were expected to fill a major gap in service delivery by being posted to ‘remote’ communities, defined as those which were more than 5km from a health facility. In defining the new CHA cadre, there was a marked shift in government commitment because, for the first time, the policy made provision for community-based providers to be remunerated USD 70 per month for their work. The new policy is more ambitious than the previous community health policy, but at the time of the study, funding had yet to be secured. It remains necessary to define how different types of community-based practitioners will be integrated and how they will relate to and support each other. There is also a risk that cadres such as TTM may be overlooked in the official strategies, despite the significant contribution they had made during the Ebola outbreak and to the resilience of the health system.

Partners discussed ongoing challenges with supply chain management and procurement post-Ebola, many similar to those encountered before the outbreak. Stakeholders confirmed that challenges in supervision were also similar in the post-Ebola period to those experienced before the outbreak, particularly because some of the management structures that were put in place during the response had since been removed. Programme implementers highlighted that the lack of dedicated personnel to supervise CHAs was detrimental to the successful implementation of iCCM.

**Conclusions**

Because iCCM services in the study areas were mostly not functional at the time of the outbreak, it is difficult to assess the effect of Ebola on the provision of community-based curative services. However, the substantial confusion over policy directives regarding continuation or cessation of iCCM services indicates that services would have ceased even if programs had been more functional prior to Ebola, and this is confirmed by the quantitative data from Bong County. Therefore, we can conclude that curative community-based services did
not prove to be especially resilient because of generally weak service delivery, confusion over policy from the central level and the overwhelming nature of the Ebola outbreak.

On the other hand, it is clear that the vast majority of CHVs remained active in their communities and were willing and eager to continue providing health-related services. CHVs played key roles in the Ebola response, carrying out social mobilisation, contact tracing, and active case finding activities in their communities. TTMs not only continued, but increased their maternal health activities during Ebola. They did this largely without support and protective supplies, putting themselves and delivering women at significant risk. Furthermore, despite the mistrust and stigma faced by CHVs because of their ties to health facilities, they were better able to gain the trust of community members because of their longstanding relationships. Respondents at all levels consistently affirmed that CHVs played an integral role in the Ebola response at the community level.

In addition to gCHVs, this study showed the importance of engaging other key community members. Engagement of trusted and respected community leaders and the existence of CHDCs were also crucial to mounting an effective community response to the emergency. Furthermore, TTMs played an important role in maternal health before and during the Ebola outbreak, but were not adequately supported. In an emergency, all of these community actors should be immediately engaged in a coordinated response.

Despite the lack of community-based MNCH services provision during the Ebola outbreak, these findings support the hypothesis that the establishment of strong community-based health services through CHWs, along with engagement of other key community actors, will increase both health system and community resilience in emergencies. However, the findings also highlight the importance of providing clear guidance and support to CHWs to enable them to maximize their potential benefit.

Following the Ebola outbreak, stakeholders at all levels have recognized the importance of strong community-based health systems to achieve increased and more equitable coverage of essential MNCH interventions and to improve resilience of health systems and improved response to emergencies. The new national community health policy provides a strong foundation for strengthening the community health system. However, it is unclear how this policy will be financed. Furthermore, there are critical service delivery weaknesses, especially regarding the supply chain and supervision, that have been present before, during and after Ebola. There is also a need for rigorous assessments of CHV/CHA quality of care and impact of community-based services. These issues will have to be resolved for the initiative to have a significant impact.

Although the Ebola outbreak and its impact could not have been predicted, we can predict that some form of emergency, such as disease outbreak, conflict or natural disaster, will occur again in Liberia. To avoid some of the pitfalls seen during the Ebola outbreak, such as poor coordination of activities and unclear policies, emergency preparedness and response plans should be incorporated into the trainings of CHAs, CHDCs, TTMs, health facility staff, and other actors involved in health service delivery. Finally, in an emergency, a balance must be struck between responding to the emergency and continuation of routine services.
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACF</td>
<td>Action Contre Faim</td>
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<tr>
<td>ACT</td>
<td>Artimisinin combination therapy</td>
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<td>ANC</td>
<td>Antenatal care</td>
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<td>ARI</td>
<td>Acute respiratory infection</td>
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<tr>
<td>BRAC</td>
<td>Bangladesh Rural Advancement Committee</td>
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<td>C4D</td>
<td>Communication for development</td>
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<tr>
<td>CBI</td>
<td>Community Based Initiative</td>
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<tr>
<td>CBO</td>
<td>Community-based organisations</td>
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<td>CCC</td>
<td>Community care centre</td>
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<td>CCM</td>
<td>Community case management</td>
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<tr>
<td>CDC</td>
<td>Centres for Disease Control and Prevention (US)</td>
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<tr>
<td>CDD</td>
<td>Community directed distributor</td>
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<tr>
<td>CHA</td>
<td>Community health assistant</td>
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<td>CHC</td>
<td>Community health coordinator/committee</td>
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<td>CHDC</td>
<td>Community health development committee</td>
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<td>CHSD</td>
<td>Community health services division</td>
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<td>CHSS</td>
<td>Community health services supervisor</td>
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<td>CHT</td>
<td>County health team</td>
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<td>CHV</td>
<td>Community health volunteer</td>
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<tr>
<td>CHW</td>
<td>Community health worker</td>
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<tr>
<td>CIS</td>
<td>Community Initiative Services</td>
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<tr>
<td>CPR-TTF</td>
<td>Crises prevention and recovery thematic trust fund (UNDP)</td>
</tr>
<tr>
<td>CSMC</td>
<td>County social mobilisation coordinator</td>
</tr>
<tr>
<td>EPHS</td>
<td>Essential package of health services</td>
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<tr>
<td>ECAP</td>
<td>Ebola Community Action Platform</td>
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<tr>
<td>ETL</td>
<td>Education through listening</td>
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<tr>
<td>ETU</td>
<td>Ebola treatment unit</td>
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<td>EVD</td>
<td>Ebola virus disease</td>
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<tr>
<td>FGD</td>
<td>Focus group discussion</td>
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<tr>
<td>gCHV</td>
<td>General community health volunteer</td>
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<td>HHP</td>
<td>Household health promoter</td>
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<tr>
<td>HMIS</td>
<td>Health management information system</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>HPG</td>
<td>Humanitarian Policy Group</td>
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<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<tr>
<td>iCCM</td>
<td>Integrated community case management</td>
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<tr>
<td>IFRC</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
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<tr>
<td>IMC</td>
<td>International Medical Corps</td>
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<tr>
<td>IMS</td>
<td>Incident management system</td>
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<tr>
<td>INGO</td>
<td>International non-governmental organisation</td>
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<tr>
<td>IOM</td>
<td>International Organisation for Migration</td>
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<tr>
<td>IPC</td>
<td>Infection prevention and control</td>
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<tr>
<td>IRC</td>
<td>International Rescue Committee</td>
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<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<td>LRCNS</td>
<td>Liberia Red Cross National Society</td>
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<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
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<td>MdM</td>
<td>Médecins du Monde</td>
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<tr>
<td>MNCH</td>
<td>Maternal, newborn and child health</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MPTF</td>
<td>Multi-partner trust fund</td>
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<tr>
<td>MSF</td>
<td>Médecins Sans Frontières</td>
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<tr>
<td>MUAC</td>
<td>Middle upper arm circumference</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
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<td>NDS</td>
<td>National drug service</td>
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<td>OFDA</td>
<td>US Office of US Foreign Disaster Assistance</td>
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<tr>
<td>OIC</td>
<td>Officer-in-charge</td>
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<tr>
<td>OPV</td>
<td>Oral polio vaccine</td>
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<td>ORS</td>
<td>Oral rehydration salts</td>
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<tr>
<td>PACS</td>
<td>Partnership for Advancing Community Based Services</td>
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<tr>
<td>PCI</td>
<td>Project Concern International</td>
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<tr>
<td>PIRI</td>
<td>Periodic intensification of routine immunisations</td>
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<td>PMU</td>
<td>Pentecostal Mission United</td>
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<td>PPAL</td>
<td>Planned Parenthood Association of Liberia</td>
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<td>PPE</td>
<td>Personal protective equipment</td>
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<td>PPERW</td>
<td>Payment Programme for Ebola Response Workers</td>
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<td>PSI</td>
<td>Population Services International</td>
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<td>RDT</td>
<td>Rapid diagnostic test</td>
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<td>RUCEP</td>
<td>Rural community empowerment project</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>SDB</td>
<td>Safe and dignified burial</td>
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<tr>
<td>TBA</td>
<td>Traditional birth assistant/attendant</td>
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<td>TM</td>
<td>Traditional midwife</td>
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<tr>
<td>ToT</td>
<td>Training of trainers</td>
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<tr>
<td>TTM</td>
<td>Trained traditional midwife</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
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<td>United Nations High Commissioner for Refugees</td>
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<td>United Nations Mission for Ebola Emergency Response</td>
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<td>UNOCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
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<td>UN Women</td>
<td>United Nations Entity for Gender Equality and the Empowerment of Women</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USD</td>
<td>United States dollar</td>
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<td>VHC</td>
<td>Village health committees</td>
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<td>WASH</td>
<td>Water sanitation and hygiene</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>YMCA</td>
<td>Young Men’s Christian Association</td>
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Introduction

Background and regional context of EVD in West Africa

The epidemic of Ebola Virus Disease (EVD) that began in south-eastern Guinea in December 2013 spread across West Africa affecting thousands of people in Sierra Leone, Guinea and Liberia, in addition to smaller but connected outbreaks globally (Aylward et al 2014). In August 2014, the World Health Organization (WHO) declared Ebola to be a Public Health Emergency of International Concern. Nineteen months later, when the emergency was declared over in March 2016, the cumulative number of confirmed, probable, and suspected EVD cases in the three most affected countries was 28,610 and the number of confirmed deaths was 11,308 (WHO 2016). Over 16,000 children were registered as having lost at least one of their primary caregivers during the outbreak (UNICEF 2015a). The 2013-2016 outbreak of EVD in West Africa was the largest recorded epidemic since the virus was discovered in 1976 (Bah et al 2014). Unlike previous outbreaks that were largely focused in rural areas, the West African outbreak affected both rural and urban areas, including the capital cities of Freetown, Monrovia and Conakry. Over 90% of reported cases arose from 14 of the three countries’ 67 districts, indicating intense transmission in these areas (Bah et al 2014; Aylward et al 2014).

The Humanitarian Policy Group concluded that ‘at best’, the initial response of the national health systems failed to halt the early spread of the disease, and ‘at worst’ contributed to the epidemic reaching record proportions (HPG 2015). The rapid spread of EVD quickly overwhelmed the fragile public health system. Since the first detected positive Ebola case in Liberia in March 2014, 3,163 laboratory confirmed cases and 4,810 deaths have been recorded, plus an additional 7,515 ‘probable and suspected’ Ebola cases (CDC 2016). Over 5,790 children in Liberia were registered as being ‘directly affected by EVD’ (UNICEF 2015b).

Despite the implementation of several key initiatives over the last ten years to strengthen the health system and address elevated child and maternal mortality rates (such as the Emergency Human Resources Plan in 2007 and the Essential Package of Health Services (EPHS) in 2011), health infrastructure in Liberia remains weak. The 2010 accreditation report for the Basic Package of Health Services indicated that 13% of health facilities did not have access to safe water; 26% did not have a sound structure; 43% did not have a functional incinerator; and 45% did not have a primary power source for emergency lighting. Such challenges disproportionately affected health facilities in rural communities and were compounded by the inequitable allocation of funds. The 2013 accreditation exercise reported that none of the 396 health facilities assessed by the government met the minimal infrastructure standards, only 14% had implemented the EPHS, and out-of-pocket payments remained common (MoH 2015a).

The Ebola crises exacerbated many weaknesses in the Liberian health system. It did not have the capacity or resilience to respond to outbreak of that scale, and the provision of routine health services, even with the support of partners, was severely disrupted (Kieny et al 2014). By September 2014, 62% of healthcare facilities had been closed across Liberia (Iyengar et al 2014). There was a high infection and mortality rate of healthcare workers. By the end of the outbreak, 378 cases of EVD infection in health workers and 192 deaths had been reported (WHO 2015a).

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1 As of September 2014, the 14 most heavily affected districts were Kenema, Kailahun, Western Area Urban, Bombali, Port Loko, and Moyamba (Sierra Leone); Lofa, Montserrado, Bong, and Grand Bassa (Liberia); Guéckédou, Macenta, Conakry, and Boffa (Guinea) (Aylward et al 2014). Two border districts between Guinea and Sierra Leone – Forecariah and Kambia, would later be included as areas of intense transmission.

2 The Government of Liberia classifies ‘affected’ as quarantined, orphaned, or unaccompanied / separated children discharged from treatment centres.
Despite the record high numbers of Ebola-related deaths in the 2013-2016 outbreak, EVD in West Africa may have resulted in fewer deaths than those caused by malaria, diarrhoea and pneumonia. It has been suggested that these treatable diseases, with their disproportionate impact on children, ‘outstripped’ the deaths caused by Ebola by three to four times, largely due to the overwhelmed public health systems (UNICEF 2014b; UNECA 2014; Hayden 2014). Population-based surveys conducted in Monrovia during the ‘late crises’ period and in two subsequent ‘post crises’ periods found that distrust in the government, negative EVD-related experiences and fear associated with seeking care adversely affected the utilisation of health services (Morse et al 2016; McLean et al 2016). Retrospective analysis suggests that there were severe declines in skilled birth attendance, routine vaccinations and treatment for diseases such as malaria, pneumonia and typhoid (Barden-O’Fallon et al 2015; UNICEF 2014a; UNICEF 2014b; UNICEF 2015c; MoH 2015b; Bedford 2015a). Analyses also suggested that women were disproportionately affected by the Ebola outbreak (World Bank Group 2014). In 2014, the UNFPA estimated that during the outbreak, more than 120,000 women would face life-threatening obstetric complications that would require skilled birth assistance and reproductive health services to save mother and baby, both in short supply even during ‘normal times’ (UNFPA 2014). Just prior to the Ebola outbreak in 2014, UNICEF reported that Liberia experienced 990 maternal deaths per 100,000 live births, and 27 neonatal deaths per 1,000 live births (UNICEF 2014c). In 2015, UNOCHA concluded that compared to the pre-Ebola period, Liberia had experienced a 111% increase in maternal mortality rate by May 2015 (UNOCHA 2015).

In re-building the health system after Ebola, it has been widely acknowledged that strengthening resilience at the community level is critical, and there is a resurgence in interest to use community health workers (CHWs) to deliver primary health services. The work of CHWs in the West African Ebola outbreak has been repeatedly highlighted in recent UN, INGO and governmental reports that advocate for increasing the numbers of CHWs globally to build resilience, strengthen health systems, and provide the capacity to respond to community health needs in future emergencies and disasters (UN 2015; Obilade 2015). Recent investments in CHW recruitment and training across the three countries suggests that a cadre of CHWs should play a key role in strengthening public health systems in the context of chronic human resources constraints. In the post-Ebola health recovery plans drafted by the Governments of Liberia, Sierra Leone and Guinea, however, there are limited details about how to develop and operationalise community-level resilience. This study was carried out to provide detailed information on the work of community-level actors during the Ebola outbreak with the goal of informing efforts to strengthen community health systems and build resilience in future emergencies.

**Core objectives and study aims**

The purpose of the research was to provide evidence to help inform the Governments of Liberia, Sierra Leone and Guinea as they implement their post-Ebola health recovery plans and strengthen community-level health systems. The study had four key objectives:

- To document the effect of EVD on decreasing the functionality and utilisation of community-based maternal, newborn and child health (MNCH) services.
- To document and assess the intended and actual contribution of CHWs to the EVD response.
- To identify how CHWs could have been more effectively used and supported in the EVD response.
- To determine lessons learnt and recommendations for early recovery, health systems strengthening, and ensuring future resilience of MNCH services.

While CHW roles and activities are diverse, the study concentrated specifically on MNCH interventions implemented by Community Health Volunteers (CHVs), as CHWs are referred to in Liberia. The full range of MNCH interventions were covered, including activities aimed at promoting MNCH or preventing disease with a particular focus on community case management (CCM) of priority childhood diseases. CCM is an equity-
focused strategy to deliver lifesaving curative interventions for the most common childhood illnesses, particularly in areas where there is little access to facility-based services. In this report, CCM is used to refer only to the CCM of malaria. Integrated community case management (iCCM) refers to the integrated management of childhood malaria, diarrhoea and pneumonia (WHO and UNICEF 2014).

Report structure and outputs

This report focuses on Liberia. Similar country-specific reports have been produced for Sierra Leone and Guinea.

Following the introduction, the study’s methods are outlined in detail. The research findings are then presented in four substantive chapters arranged chronologically. Chapter 1 focuses on community health volunteers and community-based MNCH services pre-Ebola. Chapter 2 focuses on the delivery of MNCH services by community health volunteers during the Ebola outbreak. Chapter 3 focuses on the Ebola-related work conducted by community health volunteers. Chapter 4 focuses on community health volunteers and post-Ebola community-based MNCH programming. Chapter 5 provides overall conclusions drawn from the study. All chapters are structured according to the eight benchmarks iCCM: 1) Coordination and policy; 2) Costing and financing; 3) Human resource management; 4) Supply chain management; 5) Service delivery and referral; 6) Communication and social mobilisation; 7) Supervision and performance quality assurance; and 8) Monitoring and evaluation, and health information systems.³ This structure was developed by UNICEF to facilitate the comparison of any one component across the three distinct periods of study (pre-, during, and post-Ebola). Each chapter is preceded by a narrative that presents the personal accounts of participants engaged in the study.

³ For further details on the eight benchmarks of iCCM refer to McGorman et al 2012; MCHIP 2013.
Methodology

The research was conducted in line with prevailing ethical principles to protect the rights and welfare of all participants. Permission to undertake the research was granted by the Ministry of Health (MoH) of Liberia and supported by the UNICEF Country Office in Monrovia, Liberia.

Rationale for research site selection – Lofa, Margibi, Montserrado and Bong Counties

In selecting the research sites for the study, three key questions were posed:

• Was the location significantly impacted by Ebola? (Did the location have a high-level of EVD transmission at any period during the 2014-16 outbreak?)
• Did the location have established iCCM (or other community-level MNCH programming) by CHVs prior to the Ebola outbreak?
• Did the location’s population have differential levels of healthcare access? (i.e. did locations include communities that had easy accessibility to health facilities and communities that faced more complex access challenges?)

When selecting counties and specific fieldsites that adhered to the above requirements, the aim was to include urban, peri-urban and rural locations; and to ensure diversity in population groups (ethnicity, religion, gender).

In consultation with the MoH and in line with the above criteria, four counties were selected: Lofa; Montserrado; Margibi; and Bong. Within these counties, specific fieldsites (districts and communities) were selected in collaboration with country- and district-level UNICEF staff. The table below outlines key details about the fieldsites and a map of Liberia is presented in Appendix 1.

Data collection

Intensive data collection and in-country fieldwork was conducted over 20 days in February-March 2016 (see Appendix 2). Based upon a rapid review of literature and programme documentation, and building upon a research protocol, a series of methodological tools were developed including semi-structured interview and focus group discussion (FGD) frameworks (see Appendix 3). The tools included a broad spectrum of research questions and probes arranged around six key themes: iCCM programming or other community-based MNCH services provided before, during or after the Ebola outbreak; roles and responsibilities of CHVs during the EVD response; implementing partner coordination; gCHV roles before, during and after the Ebola outbreak; impact of EVD on MNCH service provision; and lessons learned during the outbreak for strengthening health systems in future. The key themes were addressed in each interview and focus group and therefore allowed analysis of themes across participant groups and fieldsites. Specific questions and probes were reviewed and refined during the study. The research was designed to facilitate input from multiple stakeholders using a phased approach, so that issues raised by one group of interlocutors could be discussed with other groups of stakeholders as appropriate. This ensured the collation of in-depth material and the rigour of its validation and triangulation.
### Table 1. Fieldsites

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<tr>
<td>Lofa</td>
<td>276,863</td>
<td>9,978</td>
<td>Mar-14</td>
<td>724</td>
<td>Kolahun</td>
<td>Massabolahun</td>
<td>Peri</td>
<td>7,000</td>
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<td>PMU, Samaritan’s Purse</td>
<td>IRC (PACS)</td>
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<td>Foya</td>
<td>Foya Tenga</td>
<td>Rural</td>
<td>1,000</td>
<td>C</td>
<td>Samaritan’s Purse</td>
<td>IRC (PACS)</td>
<td>2005</td>
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<tr>
<td>Montserrado</td>
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<td>5,397</td>
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<td>Cowfield (Block C)</td>
<td>Urban</td>
<td>3,000</td>
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<td>2014</td>
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<td></td>
<td>St. Paul River</td>
<td>Red Hill Field (Block C)</td>
<td>Peri</td>
<td>4,000</td>
<td>C / M</td>
<td>Save the Children</td>
<td>No</td>
<td>2012</td>
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<tr>
<td>Margibi</td>
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<td>1,332</td>
<td>Kakata</td>
<td>26th Gate</td>
<td>Urban</td>
<td>3,400</td>
<td>C / M</td>
<td>No</td>
<td>Save the Children &amp; IRC (PACS)</td>
<td>2015</td>
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<td>Gibi</td>
<td>Worhn</td>
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<td>Save the Children</td>
<td>Save the Children &amp; IRC (PACS)</td>
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<td>Bong</td>
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<td>8,769</td>
<td>Jun-14</td>
<td>712</td>
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<td>Gbokar Town</td>
<td>Peri</td>
<td>600</td>
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<td>Africare</td>
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<td>Gbomo Town</td>
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<td>460</td>
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<td>Africare</td>
<td>No</td>
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1. Data from 4 July 2015 (Johnston 2015). Data reported does not include suspected or probable cases.
2. International Rescue Committee (IRC); Partnership for Advancing Community Based Services (PACS) Project.
3. Community Health Development Committee (CHDC).
Informed consent

At the start of each interview and focus group, it was made clear to all potential participants that their involvement was optional and voluntary, and would not affect any future medical services and/or community benefits needed or received. The study’s consent form (see Appendix 4) was presented, explained in detail and read aloud for illiterate participants. The contact details of the UNICEF focal person for the research was provided on each consent form and given to community leaders for their records. A copy of the consent form was provided to all participants who requested it. All research participants gave informed consent by signature and/or thumbprint. A small number of illiterate participants who provided their thumbprint.

Participants and recruitment

Study participants were selected using purposive, non-probability sampling. A total of 205 participants were enrolled across the four counties, and 63 data collection activities undertaken. Thirty-four in-depth interviews were conducted with 52 participants, and 29 FGDs were conducted with 153 participants.

At the national level, key informants (policy makers) were selected for interview if they had a detailed knowledge of and/or were involved in community MNCH services either pre- or post-Ebola, and/or with the Ebola response. All national-level interviews were conducted in Monrovia. In addition to UNICEF, 27 representatives from 18 governmental, INGO and NGO organisations were interviewed (see Appendix 5).

At the county and district levels, informants selected for interview included a purposive sample of key community MNCH implementing partners; UNICEF staff involved in the Ebola response; MoH personnel; and representatives from Community Based Organisations (CBOs).

At the community level, informants selected for interview or FGDs included community and religious leaders; caregivers of children under five years; CHVs; traditional midwives and trained traditional midwives (TTMs); and members of Community Health Development Committees (CHDCs).

The number and distribution of participants by county, activity and stakeholder group, and their demographic details are presented in a series of tables in Appendix 5.

Data transcription and analysis

At the end of data collection, the audio recordings of all interviews and FGDs were transcribed into English. The transcripts were reviewed for accuracy and were cross-referenced with the research team’s fieldnotes. Any areas of inconsistency were resolved after an additional review of the original audio file.

Dominant themes were identified through the systematic review of interviews, FGDs and observation. The occurrence and reoccurrence of salient concepts were labelled and emerging trends critically analysed according to the research objectives. All qualitative data were coded and analysed by hand, and the demographic data of participants was analysed in Excel. A sub-set of data, including all the national stakeholder interviews, were coded and analysed using thematic tables in Excel. Having two researchers code the same data is good practice and facilitated the benchmarking of analysis.
Quantitative data

Routine quantitative data on community-based MNCH activities were sought for each of the four study counties. We were only able to obtain data from the main implementing partner in Bong County. Data on the number of treatments for pneumonia, diarrhoea and malaria for children 0-59 months and for children immunized were presented as a monthly trend from January 2013 to December 2015. This allows for an assessment in changes in the level of service delivery comparing the year prior to the start of Ebola, through the Ebola outbreak and after the outbreak.

Methodological limitations and data collection challenges

In qualitative research, there is always a risk associated with misinterpretation and the possibility that respondents provide what they perceive to be socially-correct answers or withhold sensitive information. Attempts were made to mitigate these risks by the research team working closely together to plan translation styles in advance and decide how to best capture colloquialisms, abstractions, idiomatic expressions and jargon. Careful phraseology was used when posing questions. Sections of narrative were back translated to confirm or clarify participant statements. Participants were encouraged to speak openly and the research team did not feel that socially-correct answers biased the findings.

The limited time and resources for this study demanded prioritising engagement with stakeholders at county and community levels. The maximum possible number of interviews and FGDs were conducted at each field site given the time and operational constraints. Accessing a number of the fieldsites was challenging due to poor road conditions resulting in lengthy travel times, and some communities were only accessible by foot.

In Montserrado, many communities and community leaders had noticeable research fatigue. Because of the county’s proximity to Monrovia and its high Ebola case load, it has been the site of multiple research projects since 2014, both during the outbreak and subsequently as part of numerous ‘lessons learnt’ exercises.

It was notable that many of the organisations selected at national, county and district levels were not able to speak in detail about community-based MNCH activities. High turnover of staff meant that many key individuals engaged in CHV programmes before or during Ebola, or those contracted to work in the Ebola response, were no longer working in-country or for the same organisation during the study period. The lack of institutional memory about events and activities both prior and during the Ebola outbreak was exacerbated by poor data collection and limited systematic information management during the response, particularly during the height of the outbreak when responders were, according to one stakeholder, ‘Just trying to keep it together, hour-by-hour’.
The Liberian government needs to do more to empower the County Health Teams so they can take on some of the responsibilities that NGOs are doing in the county... If the Ministry of Health would strengthen the county, make the county their own with health services at all levels, and do continual spot checks, continual supervision, continual monitoring, then things will improve.

I’m not saying NGOs shouldn’t work with the government, but that they shouldn’t be at the forefront. The government itself, through the county teams, should be at the forefront. But right now as it stands, and before Ebola, for most of the activities in the counties, the NGOs are at the forefront. So this tells me that we still have a long way to go.

INGO stakeholder, Montserrado
1. Community health volunteers and community-based MNCH services pre-Ebola

Structured around the eight iCCM benchmarking components, this chapter analyses community-based MNCH programming and the work of CHVs before the Ebola outbreak.

1.1 Coordination and policy

Community health and related policies

In 2011, the MoH launched the National Community Health Services Policy to strengthen existing community health structures and accelerate implementation of a standardised package of community health services. As part of Liberia’s health sector reform, the Community Health Services Division (CHSD) was also reorganised to increase access to basic health services at the community level (MoH 2011a). The CHSD coordinated with County Health Teams (CHTs) and partners to scale-up community health activities across the country’s 15 counties. Its goal was to increase access to health services by providing outreach, health promotion and referral services through integrated case management to communities that were one hour (approximately five kilometres) away from a health facility (MoH 2011a).

The Government’s 2013 mapping survey recorded 8,052 community health volunteers (CHVs) in Liberia (MoH 2013). Of these, 3,727 were reported to be general community health volunteers (gCHVs); 586 traditional midwives; 2,856 trained traditional midwives (TTMs); 238 household health promoters (HHPs); and 645 community directed distributors (CDDs) (UNICEF 2015c). Also recognised were community health support groups such as school health supporters, mass drug distributors and CHV peer supervisors. As the MoH concluded, however, whilst the government ‘Currently recognises the presence of various types of community health volunteers, the policy in the long run is to have gCHVs and TTMs as the only designated community health volunteers’ (MoH 2013). This study focused on the dominant groups of CHVs: gCHVs, TTMs and (to a lesser extent) CHDC members. In discussing CHVs, these three groups were most frequently highlighted by national- and county-level stakeholders, and because their work was the most prominent at the community level.

As a cadre, the community health workforce provided access to primary healthcare at the household level (MoH 2015b), yet their position within the fractured post-war health system was continually influenced by shifts in government health policy, budgetary restrictions and the programmatic priorities of multiple INGOs, NGOs and UN agencies. As a result, the roles, responsibilities and level of training of CHVs pre-Ebola were highly dependent on local contexts. According to the MoH, ‘Most of the gCHV projects were partner-led with minimal support from the county and district health teams’ (MoH 2015b: 9). This view was echoed by INGO representatives engaged in the study who concluded, ‘If an NGO came and wanted to do a project, train some people and work with them, they did. If no NGO was there, nothing happened’. INGO representatives suggested that on a day-to-day basis, they routinely managed CHVs, rather than the CHTs who were their official (government) supervisors. Government officials also suggested that implementing partners were not always prepared to support the CHTs, and were liable to set up parallel management systems within vertical programming. Coordination was further complicated because whilst a CHV may be recruited by the MoH, they were frequently trained by one NGO and hired by another, and their role required them to interface with multiple organisations simultaneously regarding supplies, logistics and supportive supervision (discussed further below).

It was notable that when INGOs started to transfer programme activities to CHTs as part of planned exit strategies and in support of government ownership of community health activities, there was often a ‘slowing
down’ of community health activities and increased challenges related to service delivery, supply chain management and supportive supervision (see below). In Margibi, for example, stakeholders confirmed that the iCCM programme was seen to be running smoothly whilst the INGO implementing partner supplied the programme drugs and closely monitored and supported the affiliated gCHVs, yet when the programme was handed over to the CHT, it ‘came to a standstill’ in under four months.

According to the MoH, CHV roles and responsibilities included, but were not limited to, ten key activities: the implementation of ‘community directed interventions’; linking the community and health facility and supporting outreach services; health promotion for groups and individuals; supporting home and community waste disposal and water and sanitation services; providing antenatal services; providing post-natal services; providing integrated community case management (iCCM); and proper record keeping (MoH 2011b). In terms of delivering the Essential Package of Health Services (EPHS), gCHVs were able to dispense medicine as part of iCCM to treat diarrhoea (oral rehydration solution (ORS) and zinc); pneumonia (co-trimoxazole and paediatric paracetamol); and malaria (confirmed case with artesiminin combination therapy (ACT) for children under five, pre-referral rectal artemether for severe cases, and paracetamol). They were also allowed to administer vitamin A and deworming medication to children aged six months and above, to monitor children’s growth and undertake ‘essential nutrition action’ when required (MoH 2011a).

The box below outlines INGO engagement with gCHVs regarding the provision of iCCM in the four research counties prior to Ebola.

Roles of other community health actors

Trained traditional midwives

TTMs focused on helping pregnant women in the community seek antenatal care and plan for facility-based deliveries. A policy introduced in 2013 prohibited community-based deliveries except in cases of emergency, and as one stakeholder explained, ‘The law was placed one year before Ebola and the TTM were warned not to deliver women in the village but to bring them to the clinic and the staffs at the clinic will do the safe delivery’. gCHVs included in the research appeared to be largely supportive of this policy, but TTMs who had received training by an NGO and/or the government were frustrated by the curtailment of their duties. Community members could not clearly articulate differences between a traditional midwife (TM) and TTM and often used the terms interchangeable along with ‘midwife’ or ‘herbalist’ in reference to older women known to assist with pregnancies and delivery, and with child illness (herbalist only). Community members in all districts acknowledged that despite the policy, routine deliveries had continued to be performed in the community, often at a family’s request.

Programme implementers were concerned about the apparent lack of consideration afforded to TTMs in MoH policies related to community health, and highlighted confusion about how to practically implement the policy prohibiting community-based deliveries. They also expressed concern that TTMs were gradually being transformed into community health promoters, and the important roles they played beyond routine referrals were not recognised. Such roles included personally escorting women to the health facility; assisting with non-medical care and welfare (e.g. providing food and cooking for women at maternity waiting homes); providing psychological support to expectant mothers (particularly first-time mothers); and performing ‘emergency’ deliveries in the community (e.g. at night when health facilities were closed, when women went into early labour and were not able to reach the facility, or when women and/or their families refused to attend the facility). As an NGO worker in Margibi concluded,
Unfortunately, the role of the TTM has been downplayed, they can help to promote the gCHVs, but it does a disservice to them to try and transform them into gCHVs. People love their profession. A TTM has their own role in the community, their own description of services and they like this work. This is the job they want to do, not be converted into gCHV. So, their specialised role needs to be respected. You will be doing the wrong thing if you try to take a TTM and turn them into a gCHV.

Community Health Development Committees

Whilst the roles of gCHVs and TTM were comparatively well codified in programmatic and policy literature (see for example MoH 2013), CHDCs, also referred to as Community Health Committees (CHCs) or Village Health Committees (VHCs), were less clearly defined, despite their inclusion in the National Community Health Services Policy (2011). When asked to describe their role, members frequently suggested that they were ‘health advocates’ working between the community and health facility referral staff, often to mediate disputes and to provide a level of accountability through the support and supervision of gCHVs and TTM. They also reported being active social mobilisers and overseeing the maintenance of community-level resources such as water pumps. Unlike gCHVs who worked within the catchment area of the health facility to which they were linked (and therefore across several communities, see below), CHDC members were based in the communities where they lived (as were TTM). The size of the committee was variable (between five and 12 persons in the communities engaged in this study). Prior to the Ebola outbreak, the CHDCs that were functioning had most often been set-up in collaboration with NGOs to facilitate community-based action or services such as iCCM, or in connection with a serious health concern in the recent past (one study site in Montserrado, for example, had experienced a severe cholera outbreak in 2010, and the responding INGO subsequently established a CHDC).

Coordination and the relationship between gCHVs and other community health actors

In order to better understand community perspectives of gCHVs, it is important to note that they worked within the catchment area of the health facility to which they were affiliated and would have therefore moved between several different communities. They were often referred to as ‘outsiders’ by people in these communities, and even if their home base was in relative proximity, they were seen to be ‘not local’. In contrast, TMMs and CHDC members were only active in their home community. As ‘locals’, TTM and CHDC members had frequent interaction with community members, as opposed to gCHVs who may only have visited a community in their catchment area once each month. As ‘outside’ healthcare providers, gCHVs were often regarded as the primary intermediary between ‘the facility’ and ‘the village’.

In terms of coordination, how gCHVs, TTM and CHDC members defined their roles in relation to other community health volunteers depended on the structures established and supported by INGOs and NGOs at the local level. It was broadly understood that gCHVs had a supervisory role over TTM, and that CHDCs had oversight over both. In the context of women’s health, for example, the need for both gCHVs and TTM was emphasised: TTM (majority female and illiterate) were better placed to speak with women about their personal health; whilst gCHVs (majority male and literate) were able to liaise with the health facility and report on the activities of TTM. Respondents acknowledged that it was more culturally appropriate for TTM to discuss personal health matters with pregnant women (‘All of us live together like this in the community, you know me, and I know you, so when you pass by me I can say, ‘Oh big belly how you feeling?’’), and there were concerns that such questions coming from male ‘outsider’ gCHV would be disruptive and risk making a woman’s husband ‘jealous’ (‘Some husbands are jealous, they will not like to see another man talking to their women, that is why when going to visit a pregnant woman the TTM will do the talking while the gCHV does the writing’). If female gCHVs were present in a community, they would be more likely to be involved in conversations with pregnant women alongside the TTM, although mothers described TTM (knowledgeable elder female community members) as their preferred source of trusted health information, whilst female gCHVs (if not selected from within their own community) were still considered ‘outsiders.’
INGO engagement with gCHVs and MNCH / iCCM in the four research counties prior to Ebola

Lofa
Samaritan’s Purse began working with gCHVs on iCCM for malaria, acute respiratory infection (ARI) and diarrhoea in 2012, although national-level representatives confirmed that the programme had ‘lapsed’ shortly before the Ebola outbreak. Plan International and its NGO partners provided information to caregivers on malaria signs and symptoms, trained gCHVs to treat cases of uncomplicated malaria in children under five at the community level, and worked with TTM to refer pregnant women for preventative malaria services (e.g. bednets).

Margibi
Save the Children operated in three of Margibi’s four districts with an established government health facility: Gibi, Kakata and Manbah-Kaba. From 2010, Save the Children implemented iCCM across these districts and established CHDCs in the programme’s target communities. Plan International and its NGO partners provided information to caregivers on malaria signs and symptoms, trained gCHVs to treat cases of uncomplicated malaria in children under five at the community level, and worked with TTM to refer pregnant women for preventative malaria services (e.g. bednets).

Montserrado
Programme implementers confirmed that prior to Ebola there were ‘not many’ gCHVs working in the county and the provision of community-based MNCH services was heavily dependent on the catchment areas selected by implementing NGOs. For example, community leaders in Red Hill Field (Saint Paul River District) recalled that there were six gCHVs providing iCM in their community pre-Ebola. In contrast, caregivers and community leaders in Cowfield (Greater Monrovia District) had not experienced gCHVs working in their community prior to November 2014 when gCHVs were deployed to respond to the emergency. A number of organisations that were not engaged in the research were also known to have had community-level health volunteers prior to Ebola. For example, BRAC supported community health promoters, an all-female volunteer cadre who delivered MNCH messages in target communities. As in the other counties, Plan International and its NGO partners provided information to caregivers on malaria signs and symptoms, trained gCHVs to treat cases of uncomplicated malaria in children under five at the community level, and worked with TTM to refer pregnant women for preventative malaria services (e.g. bednets).

Bong
Africare began their iCCM programme in Bong County in 2011, scaling up from three pilot communities (Fenie Tolie, Botota and Janjay) to eight clinic catchment facilities in 2012. According to other stakeholders, Médecins du Monde (MdM) also supported community case management in the county prior to the Ebola outbreak, but this organisation was not directly engaged in the study. Similarly, Plan International and its NGO partners provided information to caregivers on malaria signs and symptoms, trained gCHVs to treat cases of uncomplicated malaria in children under five at the community level, and worked with TTM to refer pregnant women for preventative malaria services (e.g. bednets).

1.2 Costing and financing

Prior to the Ebola outbreak, USAID was the major donor for health activities in Liberia. Focusing on Bong, Lofa and Nimba, USAID provided the government with funding to run approximately 102 health facilities across the three counties. USAID did not work directly at the community level, but rather funded the government and supported implementing partners to provide community-based services including iCCM (for example, through the IRC in Lofa County and Africare in Bong and Nimba). Further data about the costing and financing of CHV MNCH activities prior to the Ebola outbreak was not made available during the study.
1.3 Human resource management

Community health volunteer distribution

The Government’s 2013 mapping survey (MoH 2013) identified human resources as the greatest challenge limiting the effectiveness of the CHV cadre. According to national policies, CHVs should have been distributed according to the following ratios (variable for rural populations): one gCHV to 250-500 population; two TTM to 250-500 population; one community directed distributor (CDD) to 100 population; one household health promoter (HHP) to ten households; and one CHV peer supervisor to 5-10 CHVs. In the mapping, 4,418 communities were surveyed in relation to their distance to a health facility, and 57% of communities (n=2,518) were reported to be more than five kilometres from the nearest health facility. A smaller sample of 2,217 communities was surveyed in more detail, and 57% of those (n=1,254) reported to have one gCHV; 28% (n=616) reported to have two or more gCHVs; and 16% (n=347) reported to have no gCHV in post.

Training

The Government stipulated that all gCHVs be trained according to MoH criteria. Standard training modules pre-Ebola included: community health orientation modules; community entry and mobilisation; community development advocacy; community health supervision; record-keeping and documentation (using checklists and supervision tools); technical health modules (e.g. essential nutrition actions, home-based life-saving skills, WASH/hygiene promotion, community-based family planning); and integrated modules on community case management (MoH 2011a). The Government’s 2013 mapping survey reported, however, that CHVs rarely had comprehensive training. Only 58% of gCHVs had received training in diarrhoea prevention and case management; 37% on family planning awareness; 30% on ARI; 29% on essential nutrition action; and 17% on community-based distribution of contraceptives (MoH 2013). Similarly, the mapping indicated that although 85% of TTM had received a formal orientation to community-level work, only 41% had received training on home-based life-saving skills; 24% on family planning awareness; and 10% on essential nutrition action (MoH 2013). Based on the evidence provided by stakeholders in the study (see box below), the training provided to CHVs prior to Ebola appeared to be heavily dependent on partner organisations, their scope of operations and programme funding.

Incentives

The National Community Health Services Policy (2011) stated that ‘CHVs as volunteers shall not receive a monthly salary’ but that the MoH would ensure they received a package of incentives. Stakeholders at all levels, however, agreed that CHVs should be compensated for their work, and suggested that gCHVs should be remunerated (receiving a monthly stipend and transport allowance) whilst TTM should be given material incentives (e.g. raincoats, rainboots, flashlights, and lappas or local fabrics women commonly wrap around their body). There seemed to be little consistency in the level of remuneration or incentives provided in the pre-Ebola period, and again, what was given was largely determined by individual programme implementers.

gCHVs working with the IRC in Lofa were provided with USD 10 when they attended end-of-month meetings at their referral health facilities. gCHVs working with Save the Children to implement iCCM in Montserrado were paid USD 5 per month to reimburse transport costs, but in Margibi, they were paid USD 10. gCHVs in Bong reported that they did not receive a monthly stipend for their iCCM or other community-based work with Africare prior to the Ebola outbreak. Some explained that they were given phone credit (scratch cards) and sometimes received a ‘sitting fee’ (similar to a per diem) for attending trainings. As one gCHV in Bong concluded, ‘When we asked for money, they told us that we are working for our people. But they should help
us with some money so that after the work, we can feed our family’. Africare confirmed that whilst the gCHVs were not paid a monthly fee, they were reimbursed for transportation and communication costs, and were given refreshments during the monthly meetings at their referral health facility. A representative from a district health office in Bong suggested that before Ebola, ICCM ‘Was not active because gCHVs complained of not getting incentives at the end of the month… I am sure that they felt weak because they were not getting anything to run iCCM in their community so the programme was not active as we expected it to be’.

<table>
<thead>
<tr>
<th>gCHV training in the four research counties prior to Ebola</th>
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| **Lofa**
gCHVs reported that the CHT and local hospitals had trained them on HIV and malaria prevention. Samaritan’s Purse and Pentecostal Mission United (PMU) provided training on how to take care of children in the community, and how to refer pregnant women to health facilities. PMU also gave training on the management of diarrhoea, malaria and ARI at the community level.

**Margibi**
In 2010, Save the Children trained an initial cadre of 150 gCHVs to treat common illnesses in children aged 3-59 months using paracetamol (fever), septrim (cold, pneumonia) and ORS (diarrhoea), and to recognise the signs of malnutrition in children using middle upper arm circumference (MUAC) measurements, and to treat with Plumpy’Nut as appropriate. The gCHVs were provided with thermometers, ARI times and rapid diagnostic tests for malaria, although difficulties associated with the regular procurement of anti-malarial medication were reported. gCHVs working with Save the Children in Margibi also reported that they had received supplementary training on malaria management by CONOR, a local CBO.

**Montserrado**
Prior to the Ebola outbreak, Save the Children supported 15 health facilities in four districts of Montserrado (five in Todee, three in Careysburg, four in St. Paul River, and three in Commonwealth) and constructed five maternal waiting homes ‘in the fight to improve maternal health services’. In 2012, Save the Children provided training to gCHVs (in Red Hill Field) focusing on health promotion; community resource mapping; census taking in households with children under five and pregnant women; referral of ill children to health facilities; referral of pregnant women to health facilities for regular check-ups and delivery; referral of women of childbearing age for family planning; and the treatment of mild childhood illness at the community level.

**Bong County**
Prior to the Ebola outbreak, Africare supported health facilities in Nimba and Bong Counties (38 health facilities in Bong alone), and helped construct approximately 15 maternal waiting homes across the two counties. Africare trained an initial cadre of 65 gCHVs on malaria, ARI and diarrhoea prevention and treatment, and provided supplies to enable gCHVs to treat mild diarrhoea in their communities. Some gCHVs also received training on family planning and tuberculosis. Representatives from Africare in Bong noted that an ongoing challenge in the pre-Ebola implementation of iCCM was the lack of refresher training provided to their gCHVs. The cadre was more knowledgeable about the warning signs and treatment for diarrhoea, but less familiar with malaria and ARI diagnosis and treatment options. In 2013, Africare also established and trained local community members for CHDCs so they could monitor the activities of gCHVs and TTMs. gCHVs in Bong reported that in addition to Africare, they also received training from the MoH (on malaria and diarrhoea) and from a wide range of NGO and CBO actors including Save the Children (on iCCM), Project Concern International (on nutrition), Concern Worldwide (on water pump maintenance), the World Bank (on infection prevention and control), and CONOR (on iCCM, malaria control and bednet distribution). TTMs in Bong reported to have received training at their referral health facilities from the CHT. The training focused on the recognition of danger signs during pregnancy and guidance on how to encourage women to attend health facilities for regular check-ups and for delivery. They were also provided with basic training to assist with emergency home births.
Across the four counties, the majority of TTMs were not provided with remuneration. Rather, most were engaged with daily money-earning activities (farming, selling goods at market), and fitted in their community-level health work around these and other household duties. In Bong, however, Africare established an incentive mechanism for TTMs by providing two lappas when they referred a pregnant woman to a health facility for delivery, and reimbursed TTMs and CHDC members for their transport to monthly meetings, where they also provided refreshment. Save the Children in Montserrado was exceptional in providing small monetary incentives to TTMs to refer women for facility-based deliveries: a TTM would receive USD 5 if she referred 10 pregnant women to the health facility for antenatal care, and another USD 5 for every three women she referred who were in labour and subsequently delivered at the health facility.

It was financially challenging for TTMs to care for mothers at maternity waiting homes, and many reported that being away from home and having to support themselves and the pregnant women was burdensome given that they could not engage in business or trading during that time. One district health officer engaged in the study confirmed that as per MoH guidelines, TTMs should be paid 1,000 Liberian Dollars (approximately USD 10) by a woman’s husband or family for their role in assisting during the pregnancy, guiding them to the facility for delivery, and providing them with necessary care at the maternity waiting home. But again, this was not common practice.

Although the gCHVs who participated in the study expressed dissatisfaction with their remuneration, they also acknowledged that they received more support than TTMs who ‘Never received money’ and ‘Only sometimes got a lappa for taking a woman to the health centre.’ gCHVs were also concerned that the lack of incentives to TTMs may cause tension between them. As a gCHV in Margibi explained,

\[\text{We recommend that the TTMs should receive some incentive so that they can be satisfied with the work that they are doing. The same way we get something is the same way they should get something, so that bad feelings cannot be there and they will be able to do their work...They need some incentive for the work they do.}\]

This view was echoed by many stakeholders, although as one county health officer explained, the government did not have the capacity to pay adequate incentives and this is why INGO implementing partners were responsible for motivating community-level health workers. He concluded,

\[\text{Frankly, those people are working like crazy and its difficult work. The little that we [the CHT] have is not enough to pay all CHVs, and we have health workers who are struggling to get on the government payroll. So you can imagine if you included gCHVs, TTMs and CHDCs...The government is not prepared for that.}\]

1.4 Supply chain management

In terms of the management of supplies, the National Community Health Services Policy (2011) outlined that the Community Health Services Division of the MoH would ensure a) all materials intended to facilitate the CHVs’ activities were delivered to them through the health facility without interruption; b) all commodities and drugs for CHV use were ordered and stored by the CHSS in consultation with the health facility officer-in-charge (OIC) based on community needs; c) all commodities and drugs for CHV use were ordered and stored by the health facility OIC based on community needs; and d) the supply chain master plan was used for delivery of drugs from the health facility to communities.

In the government’s 2013 mapping survey, the lack of drug supplies was highlighted as hampering the work of gCHVs, and there was an apparent disconnect between training received and the ability to conduct activities due to limited supplies. For example, in the mapping survey, only 24% of gCHVs reported having received an ARI timer, and 21% ORS. This suggests that even if they have been trained in case management for diarrhoea...
and ARI, the majority of gCHVs did not have essential supplies to treat patients at the community level (MoH 2013). In addition, only a third reported having received the necessary equipment (bicycle, boots, raincoats etc.) to access communities in their catchment area.

Partners had different levels of engagement with the supply of essential commodities for iCCM. Larger agencies including UNICEF, Save the Children and partners with well-developed CHV programmes (e.g. Last Mile Health) supplied key medicines for iCCM. Other smaller NGOs who supported gCHVs programmatically depended on the supply of drugs from the gCHVs’ referral health facility or ‘local’ sources (such as pharmacists). In all cases, however, anti-malarial drugs were sourced from the National Drug Service (NDS).

Across the four focal counties, programme implementers of iCCM confirmed that, before Ebola, it was challenging to procure regulated ‘programme’ drugs from the NDS due to its lengthy bureaucratic processes. This was particularly true for anti-malarials, whereas ORS and paracetamol were reported to be more easily procured from ‘local’ sources. CHT officials and programme implementers in Lofa also explained that incomplete or inaccurate monitoring data about the drugs gCHVs distributed made it difficult to secure programme drugs given that the NDS required documentation detailing the previous month’s drug use prior to releasing more.

Many stakeholders described supply chain interruptions they had faced. Before 2012, PMU provided MNCH services at the community level in Lofa, but gCHVs suggested that programme drugs were unavailable after the first six months. From 2012, Samaritan’s Purse was the primary provider of iCCM in Foya District, but gCHVs recalled that whilst they had been provided with ‘all of the medicines’ they needed during the first three months of the programme, after that initial period, malarial medicine was ‘never’ supplied again, and other programme drugs were provided infrequently. As a result, iCCM effectively ceased in project communities across Lofa prior to the Ebola outbreak, and the majority of caregivers and community leaders engaged in the study were not familiar with gCHVs providing drugs as part of their community case management services.

According to Plan International, whose community-based MNCH services before Ebola centred upon malaria prevention and treatment, the government was responsible for the supply chain of iCCM anti-malaria medication ‘With the commodities procured by the Global Fund, but supplied to the government’. In general, the government pushed drugs from the national level down to health facilities, although gCHVs in need of anti-malarial medication for community case management would procure the drugs directly from their designated health facility. A district-level stakeholder confirmed that ‘The supply chain has been a huge challenge. A lot of time you had stockouts and there are no drugs in the country, so we have stockouts at the facility level and stockouts at the community level. This was the reality.’ Several other partners involved in iCCM activities prior to the Ebola outbreak confirmed that drug stockouts, particularly for anti-malarial medication, were common with health facility OICs frequently co-opting all drug supplies for health facility use when their own supply was insufficient. A representative from one implementing partner concluded, ‘There was a big gap because the county was not getting enough medication to treat malaria at the health facility. So for that reason, the community drugs that were for community-level case management, were being used at the facility.’ Other implementing partners affirmed that it had been common practice for them to provide drugs when the CHT ‘fell short’.

gCHVs clearly articulated their frustration that whilst they had received training for treating childhood illness, they were not equipped with the necessary medicines by the facilities to which they were affiliated. A gCHV in Bong explained, ‘After the training, we were told that supplies will come later and then we will be able to work in the community to treat small children, but they did not give us the medications to do the work. Each time we go to them to ask for the drugs, they will still not have them to give’. Programme implementers in Bong confirmed that although their gCHVs had received training for the identification, treatment and referral of malaria, diarrhoea and ARI, they were only regularly provided with treatment for diarrhoea and that ‘Nothing
was given for the other sicknesses.’ Similarly, an OIC in Bong recounted that he had to frequently turn gCHVs away without drugs due to facility stock outs, ‘When they came for their monthly meeting and requested drugs, and the clinic did not have the supply to give, we had to tell them to come back later for the supplies’.

Several gCHVs explained that because they did not have medicines to distribute, they resorted to advising caregivers to treat a child’s diarrhoea in the ‘native way’. This was described as a ‘coping mechanism’ so that under-resourced gCHVs could continue to provide assistance and guidance at the community level. The advice given for the local treatment of diarrhoea differed by county. In Bong, for example, where coconut trees are abundant, gCHVs encouraged caregivers to give their children coconut water to drink. In Lofa, however, gCHVs were more likely to suggest the use of ‘homemade ORS’, a mixture of sugar and/or salt and water that may also be infused with local herbs.

Other gCHVs reported that they purchased drugs from local markets, pharmacists or drug vendors to sell to communities. One gCHV concluded, ‘The clinic did not provide drugs for me to come with to the community to help the children. Because of the distance of the community to the town, I would buy the medicine and come to see the people.’ In this particular case, community members did not recognise their gCHV as a health worker but as a drug vendor. As the community leader explained,

\[
\text{People used to come here before the Ebola outbreak to give vaccination, but we never had people who came to treat women and children freely. We used to buy medicine from one man who was trained by some organisations. He used to buy his medicine personally and come here to treat our children, but we used to pay him.}
\]

Programme implementers expressed different opinions regarding gCHVs selling drugs. Some acknowledged that if gCHVs had been trained to dispense medicine, but were then not supplied with the necessary commodities, they may have taken the initiative to purchase, prescribe and dispense medication independently of formal supply chains. Other programme implementers suggested that the onward sale of medicines distributed by health facilities through iCCM programming was indicative of the lack of both supervision and incentives, and that gCHVs were being opportunistic in selling drugs to supplement their income and provide for their household. As one UNICEF stakeholder commented, ‘If you send someone to walk three hours to reach a far community, and you do not give that person food or water, that person will surely sell the drugs to buy food to eat, and he will abuse the purpose of the iCCM programme.’

1.5 Service delivery and referral

Service delivery and referrals provided by CHVs were highly dependent on local specificities. In some of the study sites where iCCM was implemented prior to Ebola, caregivers were not aware of the services gCHVs could provide and appeared to have little direct experience of their services or referral. In other sites, however, community members spoke with enthusiasm and appreciation of the care gCHVs and TTM had provided pre-Ebola. Although national policies for service provision existed (see discussion on National Community Health Service Policy above), specific guidelines for service delivery and referral appeared dependent on the local implementing partner. Save the Children in Margibi, for example, provided the gCHVs they trained with an illness classification card to help: a) identify and treat routine illness at the community level; b) identify danger signs associated with moderate and serious illness; and c) refer caregivers to the health facility. In Save the Children’s iCCM programme, the gCHVs were seen to be ‘peer supervisors’ for TTM and CHDC members, and both community leaders and caregivers concluded that this created an effective community referral system.
As discussed above, however, service delivery was hampered by a variety of supply-side bottlenecks, including stockouts and drug shortages, and limited resources (e.g. transportation and incentives). These issues influenced the pattern of service delivery at the community level and meant that iCCM was not effectively functioning in most of the study areas in the period immediately prior to the Ebola outbreak. Issues with service delivery also affected the treatment-seeking behaviour of caregivers. In response to stockouts at clinics, community members reported that they were more likely to bypass the health facility and use local remedies or buy medicines from drug vendors or pharmacies, although the cost and quality of drugs purchased were persistent concerns.

Caregivers were also likely to seek services from health workers living in closer proximity to them than the health facility, creating an informal (and parallel) system based on demand. Community members frequently reported visiting their local health worker (registered nurse, physician’s assistant, pharmacist) at home during non-business hours, and then purchasing the recommended medicines directly from them or from the local pharmacy or drug vendor. Although this was common for routine illnesses, it was also the most direct path of care following the sudden onset of sickness or during the night or weekends when clinics were closed. As one community leader in Montserrado explained, ‘In this community we are fortunate to have a nurse that resides here, so in case of emergency, at night, when we cannot access the clinic, we have our registered nurse in the community that has their personal drug source and will try to help’.

In more rural areas, the distance from health facility to the communities in their catchment area also had an impact on service delivery. gCHVs and TTM’s identified distance as one of the greatest challenges to their work, as it hindered both their ability to access patients and the patients’ ability to comply with referrals. For TTM’s supporting pregnant women, such constraints were often magnified because of their client’s advanced pregnancy and the (often) advanced age of the TTM. It was not uncommon for women to go into labour at home and be unable to reach the health facility, or to have a ‘roadside’ delivery. In such situations, TTM’s assisted women with community-based births, but were often criticised by registered midwives and health facility staff. As one TTM in Bong concluded, 

\textit{We were told that when there is an emergency we should deliver pregnant women but after we do the delivery, the registered midwife at the clinic starts to talk to us harshly for doing the delivery. Sometimes when we are taking the pregnant woman to the clinic she delivers on the road and after we do the delivery, we take the mother and child to the clinic right away, but still the midwife is angry.}

Attending maternity waiting homes, intended to reduce the risk of mothers giving birth in the community or en route to the health facility, were also problematic, particularly in terms of the non-clinical care that TTM’s were supposed to provide. For example, if a woman was not accompanied by a relative, then it was often the TTM’s responsibility to prepare the woman’s food, yet they were not given the resources to do so and were rarely reimbursed by the woman’s family. gCHVs in Margibi suggested that because of the lack of resources to care for women in maternity homes, TTM’s were themselves reticent about attending maternity homes and were therefore less likely to encourage women to attend.

\subsection*{1.6 Communication and social mobilisation}

The national strategy documents provided little guidance concerning the role of CHVs in communication and social mobilisation, beyond the stipulation that CHVs should be mobilised in national campaigns, including the distribution of insecticide-treated bed nets and vaccination campaigns (MoH 2011a). Again, social mobilisation activities were dependent on the local programme and implementing partner, but were usually framed as ‘health promotion’. For example, in describing their pre-Ebola WASH activities in Montserrado, Nimba and Grand Gedeh Counties, Oxfam stated that gCHVs were primarily used for public health promotion activities in
communities, ‘Talking about sanitation and hygiene...talking to the community about what they are doing in terms of hygiene practices, what they can do to stop preventable diseases.’ Further details about the role of CHVs in communication and social mobilisation activities prior to the Ebola outbreak were not collected.

1.7 Supervision and performance quality assurance

According to the National Community Health Services Strategy and Plan (MoH 2011b) CHVs were to be supervised by community health service supervisors (CHSSs), who should be a physician’s assistant or registered nurse. The strategy outlined that ‘The community health service supervisor shall provide robust support to the CHVs, which shall include in-service training, supportive supervision and consistent resupply of any needed materials (e.g. job aids, reporting forms, medicines or other consumables)’. The position of CHSS was meant to relieve the burden of supervising CHVs from their facility’s OIC, and to ensure proper reporting and service delivery. Across the study’s four focal counties, however, stakeholders asserted that supervision and performance quality assurance was not effectively conducted because of the absence of CHSSs.

The supervisory mechanisms for gCHVs (immediate supervisors, reporting agents, and links to the CHT) were not consistent across the study counties, but were arranged according to local specificities and even different stakeholders in the same county described varied structures for supervision. Organogram 1 above illustrates the official structure for the workflow of the CHT, as provided to UNICEF county social mobilisation coordinators (CSMCs) during their orientation. It is notable that the position of CHSS was not included, rather supervision of gCHVs and TTM fell under the Environmental Health Technician(s). As defined by government policy, an Environmental Health Technician was someone trained in hygiene promotion, community mobilisation, disease surveillance, and water quality analysis (e.g. community-level health activities). Throughout the study, however, no stakeholder referred to this position. In contrast, Organogram 2 (above) depicts the actual community-level supervisory structures as described by stakeholders in Lofa, and is consistent with structures identified in Margibi and Bong counties pre-Ebola.
Organogram 1. Workflow of the County Health Team

MINISTRY OF HEALTH & SOCIAL WELFARE
COUNTY HEALTH & SOCIAL WELFARE TEAM (CHSWT) ORGANOGRAM

County Health & Social Welfare Officer (CHSWO) — County Health & Social Welfare Board (CHSWB)

Hospital Medical Director
County Health Administration Director (CHAD)
Community Health Dept. Director (CHDD)
Clinical Health Services Director (CHSD)
Pharmacy Services Director
Monitoring & Evaluation Director

Accounting Supervisor
Accounting Assistant(s)
HR Supervisor
Training Coordinator
Procurement Supervisor
Logistician(s)

Disease Surveillance Supervisor
Social Welfare Supervisor
Health Promotion Supervisor
County Diagnostics Supervisor
Reproductive Health Supervisor
Child Survival Supervisor
Disease Control Supervisor

District Health Officer(s) (Report to CHDD and CHSD)

Facility Officers in Charge
Environmental Health Technician(s)

See Hospital Organogram for positions reporting to the Hospital Medical Director

April 19, 2013

Supervise gCHVs & JTMs
1.8 Monitoring and evaluation, and health information systems

As with the supervisory mechanisms for gCHVs, the monitoring and evaluation of activities was not consistent across the study counties, but arranged according to the operating mechanisms of the implementing partners and local specificities. Some gCHVs submitted their reports directly to the health facility to which they were affiliated. The OIC would then verify the data reported by all the gCHVs attached to the health facility, and send a compiled report to the county health team. According to one national-level stakeholder, this preferred mechanism supposedly facilitated the identification of discrepancies through the triangulation of data reported by gCHVs, TTMfs and CHDC members, and could be tracked in relation to health facility data reported in the health management information system (HMIS). In contrast, other implementing partners, explained that they collected iCCM reports directly from the gCHVs they supported, but no further information was given on if or how these reports were integrated or shared at the local or county level.

Stakeholders at all levels affirmed that prior to Ebola, reporting was weak and inconsistent, and gCHVs themselves confirmed that it was not well systematised. One gCHV in Bong concluded, ‘Initially we were given report sheets, but then they said we should provide our own report sheets. We made our own report sheets with notebook paper’. Another stakeholder concluded,

*It was a serious challenge for the gCHVs to travel to the health facility [for the submission of monthly reports]. They were not able to pay their way and they were not able to deliver their reports on time. They couldn’t afford to do that. So we had to go to their locations ourselves to collect the report, and that was an extra cost. It was a serious challenge we faced.*
This lack of effective line management was replicated at all levels, and also affected the reporting of TTM's and CHDCs. It was also highlighted as a key factor in explaining why gCHVs were not provided with necessary medicines, particularly when the distribution of commodities had to be accounted for on a monthly basis, and the responsibility of supplying drugs shifted away from INGO implementers.

Further data about the monitoring and evaluation of CHV’s MNCH activities and its integration into health information systems prior to the Ebola outbreak was not made available during the study.
When this Ebola business was happening and we were under quarantine, three pregnant women gave birth. One managed to give birth at the hospital because she was out visiting relatives when we were quarantined. The other two women were ‘captured’ [under quarantine] here, and their family never had money to get them to the hospital. One woman tried to make it to the clinic, but delivered on the road. Another woman tried to go to the maternity waiting home but the nurses there denied her. They gave her medicine and then told her to go home.

A doctor from the hospital had to order the clinic to take big bellies when they came there for treatment or delivery. The TTM who normally help women here, were sick at the ETU at the time of Ebola and could not assist. So because those TTM were not here, I helped deliver these two pregnant woman. I am a herbalist and what they now call a ‘traditional midwife’. Before Ebola time, they called me a TBA.

I was advised by the gCHVs not to do community deliveries, but what could I do? Women needed help. I delivered two children during the outbreak. I helped to deliver one woman by the side of the road and the people that lived along that road, they were very afraid of us. The women were okay after their delivery and one baby was also fine. One child died.

My relatives helped me with glove supplies to do the deliveries but no organisation helped me. Some NGOs came here when the TTM were at the ETU, but I was denied assistance. They did not count me as someone who has been helping in the community because I was not trained.

Traditional midwife, Bong
2. Community health volunteers and delivery of MNCH services during Ebola

This chapter focuses on the MNCH services that CHVs provided during the Ebola outbreak and discusses the effect of the ‘no touch policy’ on the implementation of community-based activities. Again, the analysis is structured around the eight benchmarking components.

2.1 Coordination and policy

During the Ebola outbreak, many community-based MNCH services in ‘hard hit’ or ‘hotspot’ communities were largely discontinued. This gave rise to the revival or continuation of informal healthcare at the community level, including self- or home-based treatment and home deliveries.

From early in the outbreak, CHVs were recognised to be at high-risk of exposure to Ebola, a risk compounded by limited training in infection prevention and control prior to the outbreak. To ensure CHVs were protected from potential EVD exposure and infection, the WHO and UNICEF in collaboration with the MoH, developed a ‘no touch policy’. The guidelines recommended that gCHVs avoid all physical contact with patients and based their assessments solely on patient history and observations (WHO and UNICEF 2014), guidance which was aligned with the no touch policy that had been integrated into iCCM training programmes for gCHVs prior to the EVD outbreak (Simen-Kapeu et al 2015).

According to the majority of stakeholders engaged in this study, MNCH services – including iCCM – provided by CHVs were largely discontinued during the outbreak in most of the study areas. Although there was no explicit shift in policy, resources were redirected towards the Ebola response, and routine health services were put under further strain in the already weak health system. As one county-level volunteer recounted, ‘CHVs turned their attention towards controlling and containing the emergency. People who had other routine illnesses were still being cared for, but their care was not at the larger scale it had been prior to the Ebola outbreak.’

Confusion over the intent and practical implementation of the ‘no touch policy’ was also highlighted by study participants as a key factor in the discontinuation of MNCH services, and many interpreted the policy as an instruction to cease iCCM entirely. A representative from Save the Children in Margibi recalled the MoH issuing a ‘clear message’ that iCCM programming should be ‘stopped’, rather than modified, and reported that they ‘abandoned’ their programme in June 2014. This cessation of activities was also reflected in the programme’s quantitative data as no service provision was recorded between May 2014 and the end of the year. Save the Children had also worked with gCHVs to provide iCCM and nutrition screening in Montserrado before the outbreak, but as one representative concluded, ‘Because of the no touch policy, these services no longer happened at the community, and the entire process of iCCM services were stopped.’ Another representative clearly recalled having received a directive from the MoH to stop iCCM activities, and again no data on service provision was recorded from July 2014 until early 2015.

Quantitative data on community-based MNCH service delivery was only available for one of the four study counties. The data sourced from Africare in Bong (Figure 1) show a substantial decline in MNCH services during the outbreak, particularly from July to December 2014. In June 2014, for example, it was reported that 130 children had been treated for malaria across the 29 health facilities that Africare supported in the county, but in July 2014, the number of children treated for malaria had dropped to 20, and no malaria treatments were recorded for the five month period August to December 2014. Contrary to data obtained from national-level stakeholders, a representative from an implementing partner working in Bong, stated that iCCM activities had essentially stopped in their area before the outbreak began due to dwindling drug supplies, lack of supervision and lack of funding, although they also suggested that the MoH had ‘banned’ iCCM in response to
the outbreak. Similarly, representatives from Samaritan’s Purse which had supported iCCM programming in Lofa, confirmed that their iCCM services were no longer functional when the outbreak started because their contract to provide EPHS had recently ended and although it was due to be renewed, ‘Everything that normally was going on stopped because of Ebola’, and representatives from the IRC explained that their iCCM programming had already stopped before Ebola because of lack of funding.

Figure 1. Number of treatments for children 0-59 months for pneumonia, diarrhoea, and malaria in Bong, Liberia, Jan 2013 - Dec 2015

Plan International had been primarily involved in malaria prevention and treatment activities at the community level prior Ebola, and interpreted the ‘no touch policy’ as a directive to stop using rapid diagnostic tests (RDTs). Although presumptive treatment continued, as one representative concluded, ‘The level of coverage dropped markedly’.

Caregivers in Foya Tengia, the only community in Lofa where caregivers reported direct experience of iCCM before Ebola, concluded that all community-level health services provided by their gCHVs stopped during the outbreak. Some gCHVs described their fear of punitive measures if they continued community case management, and as one gCHV in Lofa explained, ‘We were warned not to give finger stick [RDT for malaria] and if we did, we would be placed in prison’.

In contrast to these perspectives, representatives from USAID engaged in the study were not aware of an official policy instructing iCCM activities to be stopped during the outbreak, but noted that it was largely the implementing partners, not the government who had been ‘driving’ iCCM prior to Ebola. For some national-level stakeholders, it was unsurprising that there was confusion over the ‘no touch policy’ and its impact on MNCH and particularly iCCM services given the lack of standardisation in CHV programming before the outbreak that had resulted in NGOs ‘doing their own thing’.
2.2 Costing and financing

Many national and county-level stakeholders discussed ongoing difficulties in sustaining routine health programmes during the Ebola outbreak. This was a major concern for partners with longer-term development programmes who were forced to divert their resources during the response, as opposed to organisations orientated towards humanitarian relief whose engagement was more short-term and aligned solely to the Ebola outbreak.

According to representatives from USAID engaged in the study, most funding during the response came from the US Office of US Foreign Disaster Assistance (OFDA). USAID continued to fund the government to provide community-level services through designated partners such as IRC and Africare, but OFDA was ‘Quick to rapidly mobilise funds and transmit funds to implementing partners’ during the Ebola crisis. As one representative from USAID concluded, OFDA ‘Could do it faster than we could.’

Implementing partners emphasised their need for ‘emergency budgets’ to enable them to continue routine community-based programming whilst simultaneously scaling-up activities required during the emergency. As one stakeholder concluded, the funding structure INGOs were operating under during the outbreak often led to shortfalls and was ‘not sustainable at all’. For example, Save the Children in Margibi had a budget for ten months of normal programming, but due to the increased costs incurred during the outbreak (including the resources required to employ an increased number of gCHVs), their funding ran out after seven months, and the WHO underpinned the budget for the last three months of their emergency response programming.

2.3 Human resource management

Training

With regards to the continuation of community MNCH services during the emergency period, only gCHVs in Margibi reported that they had received additional training. Delivered by the International Medical Corps (IMC), the training focused on child nutrition and included how to monitor malnutrition at the community level, provide Plumpy’Nut if supplies were available, and advocate for exclusive breastfeeding. As one stakeholder from the IMC concluded, ‘Many people were training them [gCHVs] on Ebola, so we saw a gap with nutrition’.

Incentives

It was notable that no TTM or CHDC member engaged in the study reported receiving monetary incentives for their role during the Ebola outbreak. According to one implementing partner, both the small financial incentives that had been given to some TTM pre-Ebola for their referral of pregnant women, and the financial penalties families were liable to pay if pregnant women did not interact with health facilities, had ‘dropped’ during the Ebola outbreak. As they explained, ‘Because the entire focus was on infection prevention control, there was not so much about the delivery of community care services’.

Some organisations, such as Africare, continued to support monthly meetings, but other incentive schemes (such as providing two lappas to a TTM for referring a pregnant woman) lapsed. A member of a CHDC in Lofa asserted, ‘The CHDC did not receive any incentives, but we were still working in our community creating awareness for our people’, and a county-level stakeholder in Margibi confirmed, ‘gCHVs were getting incentives but CHDCs and TTM were not, yet they do the hardest work. It would have been good if they got incentives so they could be motivated to work more.’ The lack of incentives given to TTM and CDHC members was a source
of tension among CHVs. Many expressed confusion or frustration about why a TTM providing critical care for women needing to have community-based deliveries because health facilities were closed were not remunerated, whilst gCHVs were compensated for their roles as Ebola response workers (discussed in the following chapter).

2.4 Supply chain management

As outlined above, most community MNCH activities in the study’s target counties had ceased to function prior to Ebola, partly due to weak supply chain management, and the outbreak did not have a major affect on the procurement and distribution of commodities related to MNCH services or iCCM.

TTMs were not provided with materials to perform community-based deliveries during the outbreak, nor were they given materials for enhanced infection prevention control (IPC), despite their high-risk work. As a result, TTM in Margibi explained,

| Box 2.1 | We had gloves and apron before Ebola came and that was what we were using to deliver pregnant women. But when Ebola came, the gloves and apron finished fast and we could not get any new supplies. That was the reason we were using plastics for protection. We could not allow the baby or the mother to die so we just had to look for something to protect ourselves and do the delivery. |

Similarly, TTM in Montserrado described using raincoats and boots given to them by Save the Children and World Vision during training workshops held prior to the outbreak. None had received formal training on personal protection during Ebola, but took the initiative to purchase their own gloves or ‘black plastic’ to protect their hands from potentially ‘contaminated’ blood during delivery.

2.5 Service delivery and referral

Stakeholders at all levels confirmed that there was a hiatus in effective community MNCH services during the Ebola outbreak, mainly as a result of the additional workload and focus on the response. For example, of the original cadre of 65 gCHVs that Africare trained in Bong, only five continued to work on iCCM during the outbreak, and according to a senior Africare representative, they did this without supplies, incentives or supervision. Similarly, gCHVs in Montserrado acknowledged that whilst they were no longer able to conduct MNCH services because their ‘Ebola work’ absorbed all their time, they did encourage caregivers to seek medical assistance if they identified a child who was ill.

With the closure of health facilities during the early phase of the response, even if a gCHV wanted to make a referral, caregivers had limited options for seeking maternal or child health services until community care centres (CCCs) started to be established towards the end of 2014. According to Save the Children who ran CCCs across Margibi, the CCC was a community-based approach that aimed to provide a rapid way of isolating and treating patients suspected of having Ebola, whilst offering families and communities the opportunity to remain close to them, and reducing the trauma of family separation (Save the Children 2014). In providing a triage service, the CCCs facilitated basic treatment at the community level or onwards referral for conditions other than Ebola. In Bong, both gCHVs and community members spoke positively about their interactions with local CCCs. CCCs were constructed to enable community members to easily see people entering and existing and to observe the health workers and this helped to dispel some of the suspicion and distrust of health facilities and health workers. Caregivers concluded that despite their fear, they were willing to attend CCCs on the recommendation of ‘strong’ gCHVs who they had known before the outbreak. Community members also became more willing to follow the health advice of gCHVs after they had experienced their neighbours dying in
the community from Ebola. Similarly, trust developed in the quality of treatment offered at CCCs when patients started to return home either having not had Ebola but having been given good care for another condition, or having being ‘healed’ when they did have Ebola. As one community leader from Bong concluded, ‘We were not afraid of the gCHVs during the outbreak. We were afraid of the Ebola message because it was scary. But then, once our ears were opened to listening, we were happy to see the gCHVs because they were the only people that used to come to us during the quarantine’. Similarly, a caregiver from Bong confirmed, ‘When we carried our sick children to the gCHV before [Ebola], he used to write the referral slip. So when during Ebola he sent us to the CCC, we went because we did not want our children to die’.

In terms of the provision of maternal health services at the community level, the role of TTM s assumed greater significance during Ebola. During the height of the outbreak, TTM s were often the only source of care available to women in need of assistance during pregnancy or delivery, largely because health facilities were closed, health workers refused care for pregnant and delivering women, and women were frightened of seeking care from health workers (discussed further below). In Red Hill Field community in Montserrado for example, TTM s reported that they delivered 16 babies whilst their community was under quarantine because of Ebola, and 14 survived.

Many health facilities were closed or turned pregnant women away (for both the woman’s safety and the safety of health workers) but if health facilities were open, it was most often TTM s who encouraged them to attend and often escorted them there. Stakeholders confirmed that the MoH initially wanted to discourage the work of TTM s and were surprised by the number who continued to perform community deliveries given their risk profile, particularly after formal health workers had abandoned their posts. In contrast, community leaders and caregivers appeared less surprised, attributing TTM s’ service to their commitment to saving the lives of their ‘fellow community women’. As a gCHV in Bong concluded,  

**We were told that the TTM s should not deliver pregnant women in the community, but during the outbreak everything changed. TTM s were delivering women in the community because the clinics were closed. Nurses and doctors were afraid of being infected with the Ebola virus and ran away. The TTM s stayed to help their people.**

This view was echoed by TTM s themselves who confirmed, ‘We are family and also community members so we could not sit down from working while those pregnant women died.’ In this context, trust and the proximity, both geographic and social, between the service provider and service user was critical. Across the eight communities included in the study, four reported that one or more of their TTM s had been infected with EVD during the outbreak (which may have elevated the risk of transmission amongst other community members). Of those, two TTM s survived, but six died.

The following testimony provided by a TTM in Red Hill Field community in Montserrado was broadly illustrative of the role of TTM s played in assisting community-based deliveries during the Ebola outbreak.

**We were told not to do what we did during the outbreak, doing the community delivery business, because it was dangerous. But we just had to depend on God to guide us. Whenever I went to do a delivery I said to myself, ‘God help me, that person is between life and death so please help the person to deliver safely’. It was only God helping us at that time because if you went to the hospital, they would refuse you. I delivered more than ten women during Ebola. People here, they know me well in this community. They used to come for me on a motorbike to go help the big belly [pregnant or labouring women]. During the Ebola time, some of us TTM s were using plastic to protect ourselves. Me, I must tell the truth, I never used plastic before Ebola. I would deliver with my bare hands. But then this Ebola business came and everybody was afraid. But we, the TTM s, are living in the same community together with the big bellies. We see them everyday so we cannot see a pregnant woman crying in labour pain and not go there to help. So I started to use hand gloves if I could find them or to tie plastic on my hands. And I would protect myself with black plastic on my feet because you don’t**
want the blood to touch you. So that’s how we used to do it until this Ebola – God help us – finished. We needed PPE, but we did not have it. It was just by God’s grace that we survived. We needed gloves, rain boots, chlorine, hand sanitiser, soap, buckets. These were things that we needed to work, but we were not given any. Everything was given to the big people and we were left out.

In discussing care-seeking behaviours for illnesses during the Ebola outbreak, community members often described self-medicating with drugs purchased from a pharmacy, market or drug vendor, or using home remedies or ‘bush’ medicine at the onset of symptoms. Many community members stock piled key medicinal supplies in the anticipation of future illness, particularly in ‘hot spot’ areas and after the closure of health facilities. These medicines allowed caregivers to treat their children and family members ‘away from the eyes of others’ to ensure that they would not be accused of having Ebola.

The ability to pay for medicines was the most frequently cited factor that determined whether caregivers would purchase drugs or resort to bush medicine or home remedies. In terms of sourcing ‘packaged’ drugs, caregivers expressed a clear preference for paracetamol to relieve pain and reduce fevers, and at the household level it was used to indicate whether a child’s illness was related to Ebola or not. Caregivers explained that if paracetamol broke a child’s fever, then the sickness was thought to not be Ebola. If, after several days of treatment, the fever did not break, then stronger medicine was thought to be needed, and the child would be taken to a ‘higher’ level, either a traditional healer or a nurse or locally-based CHV.

Caregivers in Lofa emphasised that whilst the high cost of medicine and frequent facility stockouts were problems they faced before Ebola, these issues were exacerbated during the outbreak, particularly as the cost of medicines increased substantially during the outbreak in most locations. Caregivers often explained that they gave money to other community members who were travelling to an urban centre to purchase medicine for them, or bought medicines directly from the peripatetic drug vendors known as ‘black bag doctors’. Although community members acknowledged that their medicine was far from ideal, that it could be counterfeit or expired, many reasoned that it was better than nothing, particularly during the outbreak when facilities were closed and their access to medicine restricted.

The use of traditional medicine was commonly reported across the four counties included in the study. Caregivers described using ‘traditional’, ‘bush’ or ‘country’ medicine to treat minor illnesses and reduce symptoms, thereby avoiding suspicion from other community members and health workers. If the primary caregiver was not knowledgeable about bush medicine, elders and traditional healers assisted them to collect the plants and make the medicine. Many people appeared to have a higher level of trust in traditional medicine than biomedicine, particularly during the height of the outbreak when there was widespread denial of Ebola and fear that health workers and the medicines they prescribed could be causing the disease. It was notable that community leaders drew parallels between the use of traditional medicine during the Ebola outbreak, and the way it was used during Liberia’s civil wars in the 1980s and 1990s when formal health services had been widely unavailable.

### 2.6 Communication and social mobilisation

Across the four counties, the focus of communication and social mobilisation activities shifted from MNCH to Ebola prevention and treatment, and is discussed in the following chapter. A small number of CHVs engaged in the study did recall providing non-Ebola health related messaging (as discussed above), but this was usually tacked-on to Ebola sensitisation activities, or given in an ad hoc manner whilst conducting Ebola-related duties, such as contact tracing or active case finding.
2.7 Supervision and performance quality assurance

In line with the discontinuation of community-level MNCH activities during the outbreak, supervision of non-Ebola related activities largely stopped. TTM, the cadre most involved with the provision of MNCH services during the outbreak, operated with little or no supervision or quality assurance. Although there were many reports of TTM (and CHDCs) taking the initiative at the local level to protect and serve their communities, the lack of supervision and material or technical assistance meant that their unsanctioned activities elevated their risk of exposure to EVD.

2.8 Monitoring and evaluation, and health information systems

As outlined above, with the cessation of most formal community-based MNCH activities during the Ebola outbreak, there was a corresponding gap in data and reporting, particularly during the height of the outbreak (i.e. May-December 2014). Further information about monitoring and evaluation and the inclusion of MNCH data in health information systems during the Ebola outbreak was not collected by most stakeholders and was therefore not available during the study.
In March 2015, after the community leaders of 26th Gate believed the outbreak in their area was over, a local man became violently ill and he very quickly experienced several of the early signs and symptoms of Ebola. His wife came to my home at two o’clock in the morning because she knew me as a social mobiliser.

I grabbed my flashlight and followed her home. When I got there, a lot of people were there shouting at me saying I was just eating the Ebola money. I told them that this was not the time to get angry and called the ambulance to come and get him. They said that they were coming, but it was taking too long and he was suffering. His family was afraid of him. So I looked for paracetamol and glucose, I put on my raincoat and my rain boots, I covered my head with plastic, and put goggles on my face.

I did not receive any training about how to wear PPE, but I saw how other people did it so I followed the same way with my own supplies. I entered the home to help the man. He was seriously sick. He did not want to drink, but I encouraged him to drink. The man was cold and someone wanted to bring a fire close to him but I said it was not a good idea because he was not himself and he may fall into the fire.

I continued to care for him until the ambulance arrived to take him to the ETU. I followed on my motorbike to bring word back to his family on his condition. He survived.

I was praised by my community leaders for how I helped the man and when the IRC came and wanted to start treating children in the community again, they selected me for the job. Now, when I tell people to call me when their children are sick, they listen to me because of what I did for that man.

gCHV, Margibi
3. Community health volunteers and Ebola-related work

This chapter focuses on the Ebola-related work that CHVs were engaged in during the outbreak. For ease of comparison with the pre-Ebola and post-Ebola work conducted by CHVs, this chapter is also structured around the eight benchmarking components.

3.1 Coordination and policy

The coordination of the Ebola response was a dominant theme frequently discussed by stakeholders at all levels. Many juxtaposed the lack of coordination early in the response, against more streamlined efforts later in the outbreak.

In September 2014, the MoH established an Incident Management System (IMS) with support from international partners including UNICEF, WHO, CDC, UN Mission for Ebola Emergency Response (UNMEER) and others, to serve as a ‘national task force and technical expert committee to oversee the management of the Ebola-related activities’ (CDC 2014). This government leadership led to improved coordination between partners at the national level and cascaded down to county and community levels.

CHVs were recruited, trained and deployed by agencies including UNICEF, WHO, UN Women, UNHCR, UNFPA, CDC, and numerous INGOs, NGOs and CBOs. CHVs shifted into new roles to perform a wide variety of activities in the response including social mobilisation, contact tracing, active case finding and burials (see below). In theory, CHVs associated with a given partner were to be aligned to that partner’s specific remit within the response (e.g. contact tracing or social mobilisation), but in practice, the coordination of CHV activities varied greatly from partner to partner and from county to county (also discussed further below). As one UNICEF respondent concluded,

Before the coordination actually started there were complaints from the community saying, ‘There are too many organisations coming to my house every day, I am tired with them’. So we tried to arrange it such that UNICEF, you are responsible for social mobilisation, and ACF [Action Contre Faim], you are responsible for case finding. That is how we separated the functions so that you don’t go with the same message your friend was carrying yesterday to the same place today.

The mobilisation of ‘Ebola task forces’ was seen by many stakeholders to be useful mechanism to quickly coordinate response efforts and enforce protocols at the community level. Task forces were closely linked to CHDCs, and the existence of a CHDC prior to the Ebola outbreak provided a natural platform for a task force and subsequent coordination activities. Amongst other actions, the task forces oversaw the movement of people in and out of their community; established handwashing stations; monitored individual-, household- and community-level quarantine restrictions; and advocated for the distribution of resources (e.g. WFP food rations to families in quarantine). CHVs had close ties to the task forces in the communities in which they worked (some were also members of the task force) and their duties were more easily carried out in collaboration with this local level structure (as in the pre-Ebola context).

Across the study sites, gCHVs confirmed that during the outbreak, ‘We were only focusing on Ebola, we were not doing that work we did before’, and as one county-level stakeholder concluded,

During Ebola, iCCM collapsed because all attention was drawn to Ebola...The attention of the gCHVs was split, the Ministry [of Health] told them to stop doing what they were doing before and then UNICEF came to recruit gCHVs for interpersonal communication. The community leaders said that we can use these gCHVs because
they are no longer providing any service so they can do the social mobilisation, so therefore they diverted their activities to basically just social mobilisation.

The roles that CHDC members described during the response were similar to those of gCHVs: social mobilisation, contact tracing, active case finding, and caretaking. The main difference was that CHDC members undertook these activities largely without the formal support of INGO partners. Like TTM, CHDC members worked within and monitored their own communities. They were invested in their work as locals (rather than outsiders) and had strong and sustained relationships with community members that were important during the emergency period. As one CHDC member from Margibi emphasised,

*When all of the others left, we, the community structures had to stay to work within our community to make sure that this virus did not finish everybody. We, the CHDC, met the County Health Team and told them that the people they sent into the community were afraid of going to affected areas, so we asked them to train us instead of training other people from outside.*

Roles and responsibilities

*Social mobilisers*

The use of CHVs in social mobilisation and community engagement was widespread. Their roles and responsibilities in this capacity are discussed in detail in the following section on communication and social mobilisation.

*Contact tracers*

Contact tracers were responsible for creating a line list of all known contacts associated with a specific Ebola case, searching for the contacts, isolating and monitoring them every day for 21 days to determine if they experienced any signs and symptoms of Ebola. Any contact presenting with signs of symptoms was reported and referred for treatment. The responsibilities of a contact tracer were similar to those of an active case finder (see below), and consequently, most gCHVs who participated in this study and who had been deployed as a contact tracer, also described themselves as performing the role of an active case finder when needed.

*Active case finders*

Active case finding was a strategy adopted in the latter months of 2014 during the height and immediately after the peak of the outbreak in Liberia. Working as active case finders, gCHVs would go door-to-door to search for confirmed, suspected or probable cases of Ebola in their communities. If they identified a sick person, they would isolate them, report the case and refer them for treatment.

*Burial teams*

Two gCHVs involved in this study were members of safe and dignified burial (SDB) teams in Lofa and Bong. During the outbreak, Global Communities were responsible for SDB in rural Montserrado and other Ebola-affected counties of Liberia, while the Liberia Red Cross National Society (LRCNS) supported by the International Federation of Red Cross and Red Crescent Societies (IFRC) operated the SDB programme in urban Montserrado. In October 2014, the WHO issued a 12-step text and pictorial SDB guide (WHO 2014) and in
November 2014, the IFRC created a working standard operating procedure (or staff manual) for safely performing SDB (IFRC 2014). The protocols outlined the structured and systematic SDB process for non medical-facility burials (a key element of which was community engagement, as discussed below).

Several gCHVs who participated in the study also described playing an ‘informal’ (i.e. non-trained) role in burying bodies in the community, even though such actions were prohibited. This mainly occurred when a death had occurred in the community, but the dedicated trained burial team were unable to assist (e.g. due to distance, poor road conditions, community non-compliance with mandatory SDB, or when the teams were overwhelmed at the height of the outbreak). In such cases, gCHVs described ‘copying’ the actions they had seen trained burial team members (e.g. wearing protective gloves and limiting contact with the deceased).

Hygienists

gCHVs who worked as ‘hygienists’ described their role as ‘The person would go into an ETU, CCC, hospital, clinic, health facility, or community, to decontaminate an area [where there had been a known or suspected case] by spraying chlorine’. Most gCHVs who worked as hygienists and participated in the study had been involved with decontaminating ETUs.

Caretakers

Several CHVs engaged in the study assumed an informal role of ‘caretaker’ for family members, friends and community members during the response. gCHVs in Montserrado and Bong described a more formal role as care-takers, and received training from Save the Children, the Carter Center and UNICEF on providing care for suspected Ebola patients in the community (discussed further below). The training focused on how gCHVs could protect themselves and community members from coming into contact with individuals suspected to have Ebola, offering support whilst they waited for the official response team (an ambulance and/or burial team). The majority of CHVs consulted for this study had not, however, received any specific guidance on how to treat someone with suspected EVD.

3.2 Costing and financing

From the third quarter of 2014, there was a huge influx of aid for the Ebola response. In reflecting upon the use of resources and financial investment, stakeholders from the MoH engaged with this study lamented that millions of dollars had been spent on building Ebola treatment units (ETUs) for, as one representative concluded, ‘We weren’t preventing Ebola, we were treating it...It hurts me now [to think about] how funds were spent on ETUs compared to empowering communities’. The MoH did eventually receive funds from the World Bank to train ‘thousands’ of gCHVs on social mobilisation, but MoH stakeholders suggested that, in retrospect, they could have done more to engage communities and stop the outbreak sooner if donors had provided funds directly to them, rather than to partners implementing their own individual social mobilisation activities.

The support should be given to us [MoH], support us and we’ll support the communities...it is true that partners themselves want to be given the credit when they go out there, but what about supporting the government? We have the structures...how do we sustain community engagement when we don’t have the money? A proposal was submitted on the funding component but up to now it’s zero. We’ve hardly gotten anything. So if you don’t want a lot of people going to the hospital, empower the community.
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3.3 Human resource management

Across the four counties, the vast majority of CHVs utilised in the Ebola response were gCHVs who task-shifted from their normal duties to become Ebola response workers. The emergency also resulted in a huge and rapid expansion of workers engaged at the community level that was difficult to manage in terms of human
resources. The table below details the various roles that CHVs engaged in this study had assumed during the Ebola outbreak, and outlines the organisations they worked for, the length of time they did this work, and the monthly payment they received.

Recruitment

Managing human resources at the community level during the response was challenging for both the government and agencies. As one respondent in Montserrado noted, ‘Before the outbreak we did not have many gCHVs... but when EVD came they were so many’. Save the Children, for example, had an initial cadre of 150 gCHVs in Margibi, and these were augmented by over 800 ‘new’ gCHVs during the outbreak, trained to focus solely on contact tracing and social mobilisation. The sheer size of the expanded workforce meant that it was difficult to keep track of individuals in terms of training, deployment and, importantly, in terms of supervision and quality assurance (discussed further below).

At least at the start of the response, there was a lack of coordination between organisations working in the same geographic location and many gCHVs were recruited by more than one organisation at the same time. One national-level stakeholder explained, 

It was common for gCHVs to work for more than one organisation during the outbreak. It shouldn’t have been the case, but in a practical sense you can see that this happened. I don’t think that the CHT really monitored the lists [organisational rosters] to cross-check and see if one gCHVs was working for multiple organisations.

The government was clear that gCHVs should be recruited to work in their own communities, but as one respondent asked, ‘If you have one gCHV working with five partners, how can you coordinate those activities?’ This had an impact on the coverage, quality and reporting of activities, particularly as a gCHV may have been trained on a specific role (e.g. contact tracing) but spent more of their time working in another capacity (e.g. as a social mobiliser). Programme implementers widely acknowledged such practices and suggested that poor human resource management may have contributed to inflated numbers of newly recruited and trained gCHVs working in the response. Difficulties were also experienced in terms of overseeing the expanded workforce, and there was often blatant nepotism in the recruitment process that programme implementers had to carefully navigate (e.g. when community leaders installed their friends and relatives to serve as CHVs, primarily to access volunteer incentives). As the response became more coordinated, micro-mapping of partners and response workers was undertaken, and rosters were developed indicating the CHVs employed by each organisation in a geographic area. As a county-level stakeholder in Bong explained,

You could find some gCHVs who were connected with two groups. If you expected them to work on something, they will not be doing that work, but will be doing another group’s work... 2014 was a crisis year so to coordinate was difficult, but after the number of cases was reducing in January and February 2015, we started to coordinate properly. At the end of the time, gCHVs were grouped per organisation. For example if a gCHVs name was on the PCI listing, we could not allow them to work for UNICEF, and if a gCHVs name was on the Save the Children listing, we could not allow that person to work for the WHO. We could not allow one person to be on more than one listing because there was some incentive given and we wanted every one to benefit.

Training

Stakeholders emphasised that re-training CHVs for the Ebola response, particularly in terms of Ebola-specific issues (symptom identification, referral procedures, IPC, etc.) was a major concern. The Ebola response created a complicated health landscape, with established partners working alongside new partners, and previously trained CHVs working alongside newly recruited CHVs. Differences in skill sets, level of experience
and training received, led to divisions of labour amongst CHVs, even within a given organisation. Many national-level stakeholders suggested that ‘veteran’ (i.e. pre-Ebola) gCHVs were more competent than new recruits, but this view was challenged by other respondents who highlighted that some veteran gCHVs struggled with the complex challenges of EVD and disruption to their routine practices, whilst new recruits were more likely to ‘take things in their stride’.

Who received training and what training they received varied according to county, implementing organisation and the timing of the outbreak. In Lofa, for example, where the outbreak in Liberia began, gCHVs recalled being given ‘five minutes’ of training by a local CBO before being deployed as social mobilisers in July 2014. As one gCHV explained, ‘We were called by NEC [local CBO] and within five minutes they just told us what to do and gave us the pamphlet to read and use the microphone to create the awareness in the community’. In contrast, gCHVs in Montserrado confirmed that they had received a week-long training of trainers (ToT) by Save the Children in early 2015 so they could better cascade information to caregivers at the community level about how to safely care for sick family members. In Margibi, gCHVs engaged in the study received training from Save the Children on contact tracing, and in Bong, gCHVs were trained by the Carter Center and UNICEF on providing care for Ebola patients in the community.

Many gCHVs engaged in the study suggested that they had requested ‘Keep Safe, Keep Serving’ training during the outbreak. This was a training package for healthcare workers that was implemented by the WHO and focused on the proper use of personal protective equipment (PPE) and IPC. Many gCHVs and programme implementers suggested that this training had ‘Helped to save a lot of health workers lives’ and would have been beneficial for other CHVs too, particularly TTM. It was notable that none of the TTM engaged in the study had received training during the Ebola outbreak or as part of the response.

Incentives

The influx of ‘Ebola money’ dramatically skewed the financing of the health system, particularly with regard to incentives provided to CHVs and other ‘Ebola workers’. The majority of respondents in the study highlighted payment disparities between organisations and activities performed, particularly during the first phase of the response when there was no standardised incentive scheme. For example, the MoH paid gCHVs USD 50 per month, but paid workers in ‘hot zones’ USD 5 per day (approximately USD 150 per month). Similarly, representatives from Save the Children in Montserrado indicated that gCHVs working ‘in the ring zone’ (i.e. Ebola hotspots) were paid more, although this justification was not mentioned by other implementing partners. The rate of remuneration also differed by county as well as organisation. Save the Children paid its gCHVs in Margibi USD 30 USD per month, whereas gCHVs in Montserrado who were supported by Oxfam reported receiving USD 150 per month. These variations had an impact on the distribution of gCHVs and the coverage of the work they were engaged to do. As national-level stakeholder concluded, ‘It should be that all organisations paid the gCHVs the same money, but it was not like that during this epidemic. Some people were paying higher, some people were paying less, so you would find that those that were paying higher attracted more volunteers than those that paid less.’ The following testimony from a county-level stakeholder was representative.

We faced this issue of how incentives were given disproportionately to gCHVs during the outbreak. Here in Lofa, there was a problem between two INGOs and the CHT. During the EVD crisis for burial activities, one of the partners was doing burial activities and surveillance activities along the borders. From them, gCHVs were paid USD 225 per month. But then another partner came in and wanted to do a community event-based surveillance programme with gCHVs. They decided to pay USD 75. This created a problem with the CHT who said, ‘No you have to bring it up to the same amount as the other INGO or at least closer to that amount, or the gCHVs will not work for you’. The partner said no, their budget was [USD] 75. It took months for them to work
this out, to harmonise before the project was able to start. And they ended up paying just [USD] 75, the amount they had originally stated they could pay. The CHT had to serve as the negotiator between the partner and the gCHVs because the CHT knew they would protest at [USD] 75 a month. And they did protest at first, being paid such a lower amount than before. But that partner stuck with their [USD] 75 budget.

Distortions created by the different incentive mechanisms, encouraged a culture of expectation and resentment, and incentive disparities continued until the MoH confirmed that all INGOs had to pay their gCHVs a standard, flat monthly rate of USD 70 (USD 50 for work performed plus USD 20 to cover transport expenses). Although this occurred in 2015, stakeholders could not confirm the exact month and it was not clear from the review of documentation. Overall, however, programme implementers across the study’s four focal counties welcomed this standardisation of pay. Many stakeholders suggested that standardising the incentives minimised confusion at the county and community level, and enabled organisations (including the government) to recruit and retain staff who may have otherwise moved between organisations seeking higher remuneration. Programme implementers also noted that with the standardisation of incentives, gCHVs preferred to work with organisations offering longer-term contracts (e.g. to secure five months of work) and this had a positive impact on staff retention.

Whilst partner organisations wanted to offer ‘competitive’ payment (so as to avoid losing staff), they were also forced to consider how increasing gCHV incentives would impact their post-Ebola programming by depleting budgetary resources too quickly. Save the Children in Margibi was the only INGO identified by both programme implementers and gCHVs as having to increase the incentives they paid to CHVs after the mandate was introduced by the MoH. They were also identified as the organisation able to employ their gCHVs for the longest duration, and this was attractive to gCHVs seeking more stable paid work.

From October 2014, UNDP in partnership with the UN Mission for Ebola Emergency Response (UNMEER) coordinated the Payment Programme for Ebola Response Workers (PPERW), a programme that focused on paying response workers the appropriate salary in a timely fashion, and provided additional hazard pay to certain categories of response workers in recognition of the elevated levels of risk associated with key activities. In Liberia, funds were sourced from the Multi-Partner Trust Fund (MPTF) and the UNDP Crises Prevention and Recovery Thematic Trust Fund (CPR-TTF).

Despite the attention paid to reimbursing Ebola workers, many gCHVs confirmed that payments were rarely made on time for the whole period of the response. Many gCHVs reported that they had continued working on behalf of their community and in the name of the INGO that had previously employed them, with the expectation that they would eventually be remunerated for their work. As one county-level stakeholder explained, ‘We told them, ok you work for a month and you will be paid USD 50 for a month. But then the USD 50 didn’t come. They were still working and we couldn’t tell them to stop, but some didn’t get paid for three months’. A gCHV in Lofa confirmed, ‘I used to make my report every month and give it to the OIC even though I was not getting any incentive. When we asked concerning the incentive they said maybe next time when they come to do the training.’ Similarly a gCHV in Bong whose payments were suspended when the community he served was under quarantine asserted, ‘I could not allow my people to suffer and die in the community [just because I was not being paid]. I had to help.’

3.4 Supply chain management

In an open ‘Letter to the World’ delivered to the BBC in October 2014, the President of Liberia appealed for more international aid to help stop the outbreak given that donations had fallen ‘well short’ of UN requests (BBC 2014). The multitude of INGOs operating in the country responded by sending donations and supplies to the areas and programmes they served. In October 2014 alone, Samaritan’s Purse filled a 747 cargo jet with
infection protection and control kits, Oxfam supplied personal protective equipment and hygiene kits to Monrovia (tripling its aid donations up to that point), and MSF reported over 807 tonnes of medical supplies had been shipped to the region to date.\textsuperscript{4}

Whilst implementing organisations directly distributed large quantities of material supplies and equipment throughout the response, it was often done with limited government oversight. The supplies provided to CHVs by the agency that employed them typically included rain gear such as rain boots and coats (particularly necessary during Liberia’s rainy season from May to October), flashlights, hand sanitiser, and identifying t-shirts. Programme specific materials such as posters and flyers for social mobilisers were also provided. Some organisations provided gCHVs with bicycles in an attempt to overcome transport limitations and help them to cover the large distances they were required to travel, but they were not frequently used by gCHVs in rural areas due to the challenging terrain.

Personal protection and infection prevention control were of paramount importance to CHVs. gCHVs in Margibi received PPE from Save the Children after undergoing contact tracer training, but were instructed to only use it in an emergency, if a suspected Ebola patient needed care whilst waiting for the responders to arrive. Most other CHVs, however, were not supplied with PPE. A gCHV in Montserrado recounted, ‘Before we could go into the field, they told us we should not wear slippers and we can’t wear short-sleeves. We had to be in a long lappa or skirt, long trousers, boots, gloves, long sleeves. And sanitiser and everything, we must take it all along.’ Programme implementers confirmed that they had instructed CHVs not to care for sick community members, but only to provide information and report patients to the relevant authorities. In some situations, however, this instruction and the ‘no touch’ policy was difficult to follow, and it was not uncommon for gCHVs, TTM and CHDC members to explain how they had wrapped plastic bags around their hands and feet, and sometimes their faces, as rudimentary homemade PPE. When discussing self protection measures, most programme implementers in Montserrado confirmed that careful interaction that followed the ‘no touch’ policy meant that CHVs did not routinely require PPE, and in fact they preferred that it was not issued without comprehensive training. As a representative from one implementing partner asserted, ‘To wear the PPE is one thing, to remove it, that is where we saw health workers coming down with Ebola... So we were not allowing people to use PPE at the community level’.

Although some CDHC members reported receiving the same basic equipment as gCHVs (rain gear, flashlights, sanitiser, etc.), no TTM engaged in this study received such items.

3.5 Service delivery and referral

As discussed above, the majority of CHVs task shifted into other duties during the response, but alongside their roles as social mobilisers or contact tracers, continued to provide care to their communities when they could, albeit in an informal manner. Many reported becoming ‘caretakers’, the point person to assist a suspected Ebola patient whilst waiting for the response ambulance to collect and transfer the patient to a health facility or ETU. Although some gCHVs in Bong and Montserado reported receiving training from the Carter Centre, UNICEF and Save the Children on how to care for somebody with EVD in the community, most had not received specific guidance. CHVs were called on to perform this role when other community members were too afraid to come near the patient. For those working at the height of the outbreak and in more rural areas where response teams had limited access (due to location and/or poor road networks), the work could be intensive and challenging.

\textsuperscript{4} See news reports: Samaritan’s Purse 2014; Oxfam 2014; MSF 2014.
Whether a gCHV would refer a patient to a health facility depended on the phase of outbreak; the proximity of the community to a functioning health facility, ETU or CCC; and whether the patient’s condition was conducive to treatment by a health worker. If they did not make a referral, or if the patient refused to comply with the referral, then gCHVs would advise the caregiver how to care for the patient in the household, using gloves and plastic to prevent bodily contact, and sometimes suggesting traditional remedies (‘country medicine’) to alleviate symptoms. As a gCHV in Bong concluded,

\[We were told to take sick patients to the hospital, but when someone was sick, they would not like to visit the clinic because it was the time of Ebola and the nurses may think that you have Ebola so they would not take proper care of you. People preferred to remain in their community with their sickness than to visit the clinic...I did not refer sick people anywhere during the Ebola outbreak. We used traditional medicine within our community when someone was sick.\]

gCHVs also reported how they assumed the role of ‘record keeper’ in the communities they served. Because they were literate, many community leaders asked gCHVs to help them document community members who were sick, had died or in some cases had ‘run into the bush’ to escape quarantine. They were also asked to provide status updates on patients who had been taken to ETUs and CCCs. Whilst gCHVs may have routinely kept such data, community leaders acknowledged that gCHVs provided a vital record keeping service for and feedback loop to the community. Interestingly, no national stakeholders engaged in this study raised the gCHVs’ ‘record keeping’ function during the response.

The Ebola outbreak created a complex operational environment in which to deliver health services at the community level. The logistical issues gCHVs faced (limited transport, long distances, low cell phone coverage, little reimbursement for costs incurred) were exacerbated during the emergency. In some rural areas, gCHVs had to help suspected Ebola patients walk from their village to the closest road so that the ambulance could collect them, and a walk that may take a healthy person two hours may turn into an overnight trip. gCHVs in rural Bong described having to walk behind patients trekking through the bush without providing physical assistance because of the ‘no touch’ policy. As one gCHV explained, ‘If the patient fell down we could only yell encouragements to get back up and keep walking. Please God get back up, there is help for you at end of the road.’ Another recounted,

\[We used to carry the sick patients to where the ambulance would pick them up and sometimes when we got there, the ambulance was not around. The ambulance was in another area and we had to sleep near the sick patient, light a fire for them to heat themselves and find food and water for them. After they finish eating, we threw the plates and cups away. There was nothing much to protect us but God.\]

Not all communities welcomed their gCHVs, and several confirmed that they had asked their INGO ‘sponsors’ to provide them with identity cards and/or agency t-shirts to give them more credibility in resistant communities. Many described the emotional and psychological challenges they faced, particularly during the first months of the response when communities were resistant, frightened and some did not believe that Ebola was real. Across the four study counties, gCHVs reported experiencing stigmatisation as potential ‘Ebola carriers’; accusations of witchcraft; accusations that they were prolonging the outbreak and/or spreading the virus so that they could profit from the response by ‘eating Ebola money’; harassment from families of symptomatic patients they had reported to authorities; mistrust from community members who thought there were ‘spies’ and hid their health status or refused care; anger from their own family members that their work put them and their household at heightened risk; anger from their family and community for not fulfilling responsibilities such as farming and harvesting due to Ebola-related work commitments; and discouragement when they thought they had successfully conveyed key prevention and protection messages yet no behaviour change resulted. The following quotes from gCHVs in Lofa, Margibi and Bong were representative.
One of the challenges that the gCHVs were facing was that the communities felt that they had been paid, so sometimes if the gCHVs went into that community to explain something the community would feel that they were not doing it to help them, but just to get paid. So some communities were not trusting the message. This was something that I think the community leaders needed to work on more, to explain to their communities who these gCHVs were and what their purpose was, to please listen to them when they come.

It is true that people were afraid of us. Even when we were walking in the community and they saw us they used to insult us and tell us that we were the people that were eating the government money so that we could kill their people in the community. Some people and I almost fight because they were insulting me. When you go to their homes to talk to them they will listen to you but when you ask them to go to the hospital they will not agree to do so.

We were hated by our people in the community. We were brave to come into affected communities to help eradicate the Ebola virus, but that made our families afraid. I never slept with my family in the same room during the time of Ebola because I never trusted myself and they too never trusted me.

Community members were also forthcoming about how they avoided gCHVs and shunned the services they were there to deliver. Caregivers explained how they would lie to the gCHVs about their health and that of their children, and if they were experiencing fever or diarrhoea (both symptoms associated with Ebola), would pretend to be well or would send their children to hide in the bush until the gCHV had gone. Caregivers in a focus group in Margibi explained,

Caregiver 1: When we saw the gCHVs coming and we were lying down not feeling well, we would sit down or stand up so that they cannot know that we were sick. When they asked what happened with you, we will say nothing. When they asked if your child was sick, we will say no. But as soon as they leave we will go back to lie down. We hear them coming because they used to come around to ask how many persons lived in the house and how many children you have. As soon as we hear their voice we would come out and sit down because when they met you lying down, they would ask you many questions. We continue doing that until Ebola finished.

Caregiver 2: From the beginning we really talked to the gCHVs badly when they started working because they know us. When the gCHVs came to ask us how many persons in the house we would insult them because we do not want them to carry us to the ETU if one person is sick so that we can die there... We were afraid to tell them when someone was sick in the house.

In addition to the fear of Ebola, communities were also afraid of gCHVs and distrusted their work. Factors contributing to this fear included: distrust of the chlorine solution and hand sanitiser gCHVs used; the perception that when gCHVs kept a distance between themselves and the community (i.e. in line with the ‘no touch’ policy) they were being rude, preventing effective dialogue and displaying ‘witch-like’ behaviour; confusion about why gCHVs would take note of a sick person’s name, but not provide any care or bring response workers to help; and confusion about why gCHVs would bring somebody to take an oral swab from a suspected patient, but would not return to communicate the test results.

Whether EVD-affected communities trusted or feared their gCHVs was, however, highly dependent on context and was influenced by the gCHV’s role (e.g. whether they were working as a social mobiliser or contract tracer); whether the gCHV was known to the community before the outbreak or was perceived to be an ‘outsider’; and the time of the epidemic. Even if community members acknowledged a positive personal connection with their gCHV before Ebola, this did not necessarily translate into compliance during the outbreak. As one caregiver asserted, ‘We did not go to them [the gCHV] during the Ebola time because we were afraid and many of them did not even pass around here during Ebola time, because they were also afraid’. Despite this,
examples of positive engagement in which communities readily accepted care from gCHVs were documented (as in the narrative preceding this chapter).

3.6 Communication and social mobilisation

By far, the most frequent use of gCHVs during the Ebola response in Liberia was as social mobilisers. After the outbreak was declared over, the MoH reflected that gCHVs ‘Played a critical role in strengthening community engagement and improving environmental and community health in underserved areas’ (MoH 2015b). Volunteers were engaged in a range of activities including: raising awareness of Ebola (signs, symptoms, advocating that it was real); describing how to avoid Ebola (e.g. not to eat bush meat, to avoid contact with a sick person and to not attend or perform traditional burials); advocating for the adoption of prevention strategies (e.g. demonstrating how to prepare chlorine solution and do correct hand washing); and distributing basic materials including buckets, chlorine, soap, hand sanitiser and gloves. As a community leader in Bong confirmed,

*The gCHVs were the ones that brought the message to us; the first messages we got came from the gCHVs and then other organisations started to bring messages to us too. These messages were on how to prevent oneself from Ebola and they told us to wash our hands, not to touch dead bodies and not to touch sick people. The gCHVs were spreading health messages, sharing buckets and hand washing materials and they were also showing us how to use those materials.*

In addition to their main duty of providing health promotion messages (often at household level, through door-to-door campaigns), many gCHVs engaged in the study confirmed their role during the Ebola response as being central to building trust between communities and the responders, government and health system. The importance of community engagement and the need to involve community members as active participants in the response (rather than as passive receivers of services) has been well documented (Fallah et al 2015; Bedford 2015b; UNICEF 2015d; Abramowitz et al 2015; Johnson et al 2015; Gercama and Bedford 2016).

Stakeholders from the MoH highlighted the social mobilisation work gCHVs conducted in rural border areas as being particularly important, encouraging people to wash their hands prior to entering a new area, and ‘Keeping a close watch on strangers’.

With regards to the work of social mobilisers in urban areas, such as Monrovia, the personnel that performed these activities were not usually referred to as gCHVs working as social mobilisers (given that there was not a large cadre of gCHVs to draw from in urban Montserrado when the outbreak began). Rather, they were designated as ‘social mobilisers’ or just ‘mobilisers’ and seen as a group of newly activated individuals who received specific training on Ebola prevention methods to disseminate to their communities.

According to senior national-level stakeholders engaged in the study, the MoH trained approximately 10,000 people across the country for social mobilisation activities through funding provided by the World Bank. ‘Master Trainers’ were sent to provide training at the national level, and then county-level stakeholders were meant to cascade the training to the district-level, and then on to the community level. MoH stakeholders suggested that those trained were newly recruited social mobilisers from areas that had previously not had a gCHV, and included teachers, peer educators and Ebola survivors. As one stakeholder concluded ’We couldn’t only rely on the gCHVs, we also had to recruit some volunteers to serve as mobilisers’.

CHDCs also proved valuable structures for implementing communication and social mobilisation at the local level and were used to increase community coordination. Stakeholders suggested that communities with a CHDC in place prior to the Ebola outbreak appeared to be more resilient, provided a mechanism for the rapid
mobilisation of trusted local personnel (e.g. Ebola task forces), and were more likely to self-mobilise and organised community-led solutions.

A multitude of both international and local organisations were involved with social mobilisation and community engagement activities. Across the three countries most affected by Ebola, UNICEF was the lead agency for the social mobilisation pillar of the response. A UNICEF Communication for Development (C4D) specialist working in Liberia during the outbreak explained, ‘We needed to focus on behaviour change in a structured way, and we wanted to ensure consistent messaging across all mobilisers no matter who they were attached to, NGOs or the MoH[SW], it didn’t matter, everyone was given the same talking points’. Within the social mobilisation pillar, UNICEF and the MoH established four committee ‘teams’ each with their own targeted roles and responsibilities with regards to social mobilisation activities: message and materials team; field operations team; media support team; and research, monitoring and evaluation team. In urban Montserrado, which had its own IMS structure, communication activities were organised under the community engagement pillar and the Community Health Department of the MoH was responsible for mobilising gCHVs and others to act as mobilisers across the county.

In Montserrado alone, partners involved with communication and social mobilisation activities included UNICEF, Oxfam, the IFRC and LRCNS, IRC, MSF, Tearfund, CARE, Hope Worldwide, Mentor Initiative, Shalom, Crusaders 4 Peace, Community Initiative Services (CIS), More than Me, and Ebola Community Action Platform (ECAP) NGOs (UNICEF 2015e). All of them worked with volunteers at the community level. Oxfam, for example, built on their programmatic experience working with gCHVs to promote WASH before the outbreak. As part of the response, they mobilised their gCHVs to go ‘house-to-house’ to disseminate messages promoting hygiene and in addition ‘To ask if people were sick, and if so to refer them to the Ebola Task Force’. They also built hand-washing stations at health facilities and in the community to encourage hygienic procedures that would help reduce the risk of Ebola transmission. Similarly, Mentor Initiative increased the number of gCHVs they supported in Montserrado and Bomi County from 40 to 200 during the outbreak. They were mobilised to communicate ‘door-to-door awareness’ on Ebola prevention messages, hand washing and safe burials, and were also trained to report and isolate all suspected cases of Ebola. Representatives from Mentor Initiative also described working with community health workers to raise awareness at health facilities and CCCs on the importance of IPC. The IFRC and LRCNS were also heavily involved in social mobilisation activities. As the lead of the SDB pillar across the three most affected countries, they trained volunteers on the safe handling and burial of bodies, and deployed thousands of mobilisers to work alongside burial teams and communities. Liberian LRCNS mobilisers who participated in a 2015 evaluation of the SDB programme reported several strategies they employed to include: the utilisation of community leaders to gain safe entrance to communities and encourage community participation; direct and personal communication (e.g. house-to-house visits, focus group discussions); and the use of local volunteers who spoke local languages and could talk to ‘their people’ in a way that would be easily understood and trusted (Johnson et al 2015).

According to UNICEF stakeholders, the communication network that involved both government and partners at multiple levels ‘solidified’ in November-December 2014 after the establishment of the social mobilisation pillar. This resulted in coordinated messages and activity schedules across organisations, and as one stakeholder concluded, ‘Was the time when we started to chase the virus, rather than the virus chasing us’. By June 2015, over 7,300 frontline mobilisers had been trained on social mobilisation and community engagement by UNICEF, the MoH and their implementing partners and UNICEF reported that over 560,000 households had been reached through door-to-door mobilisation; over one million men, women and children had been engaged in community discussions; over 200,00 religious and traditional leaders had been included in community discussions; and over 6,00 teachers had been trained to raise awareness on Ebola prevention and provided with supporting materials.
3.7 Supervision and performance quality assurance

As the number of people engaged in the Ebola response grew exponentially, stretching human resource management to the limit, the supervision of CHVs proved highly challenging, particularly as mechanisms to provide supervision and monitor performance were weak prior to the outbreak. The lack of supervision for TTM was emphasised above, but supervision of gCHVs and other community structures included CHDCs was also evident.

Each organisation that worked with gCHVs developed its own line-management, supervision mechanism and reporting structures depending on its operational set up. gCHVs working as social mobilisers for UNICEF, for example, reported to the coordinator in their local area (district level). They would then report on to the county social mobilisation coordinator (CSMC), who would report to the UNICEF C4D specialist at the national level. Organogram 3 below depicts the different supervision and reporting structures articulated by a selection of gCHVs and the organisations they were affiliated with.

In addition to reporting to their implementing organisation, some gCHVs were required to report to the CHT and CHDCs in the areas they worked, and in some cases the health facilities that they were aligned to pre-Ebola (if the health facility was open, and the gCHV was still in its catchment area). Yet, stakeholders continued to question the quality of supervision that was given. As one national-level respondent explained,

*The supervisors or health promotion officers were engaged in a lot of other activities, so to get around the county and supervise all of these people? It was a big job, so they didn’t really have time to do the kind of work with the gCHVs that they should have.*

Other stakeholders suggested that ‘supervisors’ were either afraid to go into hotspot areas where gCHVs worked or were prohibited from doing so because of restrictions on movement. As a result, gCHVs were not often directly observed or provided with supportive supervision on the ground. As a representative from one implementing partner admitted, ‘*We didn’t have a lot of time to go there, and we didn’t want to go to the community because we might get infected. So we just go [call] on the phone and did not monitor much*’. In contrast, supervisory structures that were put in place specifically during the Ebola response, such as UNICEF’s management of county coordinators and district coordinators (see organogram above), enabled them to have more effective lines of communication and supervision, a two-way flow of information from the national level down, and from the community level up.

The reporting and supervisory structure for CHDC members during the outbreak was context dependent. If the CHDC structure was supported by an INGO and/or NGO in the months just prior to the outbreak, they were more likely to have received supervision and support from INGO and/or NGO personnel during the outbreak. CHDC structures that were established in Ebola ‘hotspots’ during the latter months of the outbreak, for example in Montserrado and Margibi, were likely to have received a significant amount of supervisory support from the MoH and health facility staff while their community was experiencing an active outbreak, and in the months immediately following the last case for monitoring purposes. In contrast, CHDC membership in hard hit areas of Foya district in Lofa, where INGO and NGO support had waxed and waned over the years, significantly decreased due to lack of supervisory support during the outbreak. As one member explained,

*Some communities around the border are over one hour walking distance…We [the CHDC] were just doing sacrificial work and some of my members dropped. I had 20 members but without supervision or being given benefits for our work, 11 members stopped. The CHDC needs support to do our monitoring, to effectively monitor the work of the gCHVs and the TTM in all of our 22 communities.*
At the time of the study, the membership levels of local CHDCs had not increased to pre-Ebola levels, and as a consequence, supervision and reporting continued to be limited.

Stakeholders highlighted that even if basic supervision and reporting mechanisms were in place, mechanisms to assure performance quality were widely lacking during the response. Despite the training and emphasis on IPC and personal protection measures, many CHVs engaged in the study recounted situations in which their behaviour contradicted or was in direct violation to accepted protocol, often because of a breakdown in standard operating procedures. A gCHV in Bong provided the following testimony.

*During the time of Ebola, there was a sick person in my community and I called the health team. The health team came and took a sample of the sick persons’ blood and left the person in the community. But, the health team never came back and the person died. We called them to do the burial, but they never came so we did the burial ourselves. I supervised the community members to do the burial. We wore black plastic over our rain boots and we used the spraying can to spray the area with chlorine as we walked. While people were there hauling the body, we were spraying the area until we reached the burial ground. After we did the burial, we sprayed the area with chlorine and, as we took off the plastic bags, we sprayed and washed our bodies like we had seen the burial teams do. We were not given materials to do the burial, but the dead body was in our town so we had to protect ourselves and bury the person. Luckily, nobody got sick after the burial.*

### 3.8 Monitoring and evaluation, and health information systems

Stakeholders acknowledged that the hectic and pressured operational environment that persisted during the Ebola outbreak resulted in limited monitoring and evaluation of CHVs’ work in the response. Implementing partners highlighted that there were no standardised monitoring tools for evaluating EVD response workers or the impact of their activities. As a representative from one implementing partner concluded, ‘During Ebola, there were no standardised monitoring things. For iCCM you have a standardised form for the gCHV. But in Ebola, it was not like that. Maybe they [the CHVs] came for one training and then you all go home’. The
representative added that they did not want to go into communities, nor send their staff into communities, to do supervision and monitoring during the outbreak for fear of contracting Ebola.

Most gCHVs working during the height of the Ebola crises were required to report their activities on a weekly if not daily basis, although at a county level, formal reports were usually made once per month. As a gCHV who worked with an international implementing partner in Montserrado recalled,

[They] gave us paper and we wrote everything down: how many persons we chatted with that day, how many men, women, children; the total number of buckets distributed; people who were sick; visitors to the community. That was the information they were asking us to report on a daily basis.

The reporting requirements added to the workload of gCHVs, and stakeholders expressed concern that because of limited coordination, gCHVs working with more than one organisation were liable to report the same activity multiple times, thereby elevating the number of interactions or households visited in the response.

Details about if and how the work or activities of CHVs were incorporated into health information systems during the Ebola outbreak were not provided during the study.
We are supposed to be working with TTM$s but we realised that most of the counties prefer to have their gCHVs trained and provided with the operational costs... So if the county said they’d prefer to have the gCHVs trained instead of having the TTM$s trained, that is what we’re looking at. In counties where we were planning to train TTM$s, we are looking at converting those trainings into trainings for gCHVs, so we have full coverage.

NGO representative, Bong
4. Community health volunteers and post-Ebola community-based MNCH programming

This chapter analyses community-based MNCH programming and the work of CHVs during the transition and recovery phase after the end of the Ebola outbreak. Again, the analysis is structured around the eight iCCM benchmarking components.

4.1 Coordination and policy

International partners played an essential role in overcoming the Ebola crisis, but their coordination was poor and they were criticised for having undertaken activities that were highly visible but which fell under their own agenda, rather than supporting government strategies. The continuity and effectiveness of community-based health service provision suffered as a result of both the outbreak and the response.

After the Ebola response was declared over, the Liberian government, supported by both international and local partners, initiated a Rapid Community Health Baseline Assessment (MoH 2015c). The assessment had four key components: a) re-mapping of gCHVs to inform the overall design of the CHV programme and provide the basis for a national database of gCHVs; b) a rapid household assessment of uptake, utilisation and quality of services provided by CHVs to women and children under five years of age; c) a rapid formative assessment to better understand community health needs and gaps; and d) the proposal of additional strategies to strengthen MNCH services. The baseline assessment was intended to provide a strong evidence-based for the development of comprehensive community health services. Aligned to this, the National Community Health Workforce Programme was launched in July 2016 (having been delayed from January 2016). The programme aimed to build well-trained cadres of community-level health workers who could provide quality health services; generate increased demand for routine health services; overcome challenges associated with accessing care; develop community engagement; and improve governance and accountability (UNICEF 2015c).

Stakeholders from the MoH who were engaged in the study suggested that, with the introduction of the new community health policies endorsed by the government post-Ebola, CHVs would henceforth be referred to as community health assistants (CHAs) to avoid the implication that the cadre would be paid for their work. The term ‘assistant’ was perceived to not carry the same connotations of formal remuneration.

Policy progress: commitment to a comprehensive community health package

In 2016, Liberia released the new National Community Health Services Policy, developed in line with the National Health Plan and the priorities of the Investment Plan for Building a Resilient Health System in Liberia 2015–2021. The Investment Plan described and costed the priority activities needed to restore and strengthen the health system in response to the Ebola crisis. The Community Health Services Policy set out the new structures through which it aimed to achieve its goal of an equitable, integrated and standardised national community health model for primary health care services and epidemic surveillance (MoH 2016). The implementation of the policy rested on the contribution of the newly formed cadre of CHAs who were expected to fill a major gap in service delivery by being posted to ‘remote’ communities, defined as those which were more than 5km from a health facility. In defining the new CHA cadre, there was a marked shift in government commitment because, for the first time, the policy made provision for community-based providers to be remunerated USD 70 per month for their work. To strengthen support and governance systems for the implementation of community health services, the policy outlines six key activities:

- Provide an incentive structure for volunteers, payment for CHAs, and performance-based incentives linked to monitoring and evaluation (M&E)
• Develop an integrated career development plan for CHAs
• Coordinate a tighter supply chain mechanism
• Provide a supervision structure lead by ‘Community Health Service Supervisors’ for the CHAs (pending supervision tool development)
• Develop an institutional framework for policy implementation
• Integrate all vertical programmes.

Implementing the community health services policy

Prior to Ebola, there were persistent problems in the implementation of the community health policy. The government had not succeeded in fulfilling its commitments related to remuneration, human resources or procurement, nor had it progressed with decentralisation. These issues were magnified during the outbreak, and community trust was further eroded.

The new policy appeared to be more ambitious than the previous community health policy, but at the time of the study, funding had yet to be secured. In analysing the policy, a number of limitations were identified which may hinder its implementation and progress towards its core objectives. For example, the CHAs were not considered as civil servants and so many of the benefits of formal employment were not provided. Some elements relating to implementation also remained unclear including career development and supervisory structures, both of which are essential to the productivity of community-based practitioners. The different types of community-based practitioners were not well defined, and there was limited integration in terms of how they would relate to and support each other, whilst cadres such as TTM were at risk of being overlooked in the official strategies, despite the significant contribution they had made during the Ebola outbreak and to the resilience of the health system. As the national representative from one agency concluded, ‘Whilst the policy to professionalise and standardize gCHVs into CHA is positive, there are currently no plans to support TTM. TTM are the most trusted resource for women regarding maternal health, so progress won’t be made until TTM are engaged and supported’.

The new Community Health Services Policy was designed to be rolled out in a decentralised system. The decentralisation policy has itself been in place since 2008, but its progress was slow (Downie 2012) and subsequently derailed by the Ebola outbreak. Decentralisation units, even prior to Ebola had ‘Generally insufficient capacity for the overall coordination and management of services’ (MoH 2015d).

Whilst decentralisation should be beneficial for a stronger health system in the longer term, in the short term it may complicate the implementation of the Community Health Services Policy particularly as an enabling environment including quality standards, regulation and capacity building is not already in place. In the decentralised system, the coordination and integration of the various elements of the community health programme are likely to become more complex, and transition will require the support of donors and partners alongside strong and committed local leadership. The national policy provided a basic framework, but few details about implementation at county and district levels. At the time of the study, guidelines were yet to be developed to ensure CHAs felt connected to and supported by the broader health system whilst maintaining flexibility to adapt to local conditions.

Re-start of community-based MNCH activities

Following the Ebola outbreak, there was another shift in the health service landscape and associated actors, particularly as emergency-orientated partners withdrew from the country. According to the representatives from several implementing partners, community-based MNCH services across Liberia, including iCCM, were to
be divided by county and supported by a range of partners including UNICEF, USAID and Last Mile Health. For example, UNICEF was due to support community-based MNCH activities in five counties (Sinoe, Maryland, Grand Gedeh, Grand Kru, River Gee), whilst USAID was set to support work in six counties (Bong, Lofa, Nimba, Margibi, rural Montserrado, Grand Bassa). Within the decentralised system, the aim was for training, incentives and coverage to be standardised within each county and supported by one lead partner. In contrast to this structure, representatives from Plan International suggested that they would provide iCCM services for children across all 15 counties through three local NGO partners (the Consortium of National Health Organisations of Liberia, Christian Health Association of Liberia and ChildFund). At the time of the study, these plans were yet to be implemented.

The Partnership for Advancing Community Services (PACS) Project was launched in June 2015. Funded by USAID, it is a consortium of INGOs led by the IRC and including PSI, Global Communities, YMCA and Planned Parenthood Association of Liberia (PPAL). The PACS Project was initially implemented in three counties where USAID had worked prior to the Ebola outbreak (Lofa, Bong and Nimba), but at the time of the study had recently expanded their services to include three additional counties (Margibi, rural Montserrado and Grand Bassa). As one stakeholder explained,

IRC is the lead. PSI is responsible for the behaviour change and communication component and Global Communities is responsible for the WASH component. Then we have two local organisations, the YMCA and PPAL, both are responsible to work at the community level, empowering the communities to work with the community volunteers at the grass roots.

The following box outlines INGO engagement with CHAs and iCCM in the study’s four counties post-Ebola.

### INGO engagement with gCHVs and iCCM in the four research counties post-Ebola

**Lofa**
IRC was not a partner for iCCM in Lofa before Ebola, but did work with CHVs in relation to other EPHS activities. Post-Ebola, they scaled back their use of CHAs for other programming in order to retrain them for iCCM. The organisation continued to support monthly meetings of CHAs, CHDCs and TTMs by providing refreshments and reimbursing transport costs, and was involved in the construction of maternity waiting homes. CHT officials in Lofa indicated that ChildFund had requested a roster of eligible CHAs in order to start their own iCCM programme, however this could not be verified by the study’s research team. Other stakeholders in the county, including CHAs, also indicated that the PACS Project may assume the iCCM responsibilities that Samaritan’s Purse had pre-Ebola.

**Margibi**
Save the Children remained the main INGO actor implementing iCCM in Margibi, and had restarted their programme by the end of 2015 in consultation with the PACS Project. CHAs started to provide iCCM services in select communities in January 2016, and Save the Children planned to scale-up their interventions throughout the county by mid-2016.

**Montserrado**
Save the Children, who offered limited iCCM services pre-Ebola, had yet to restart their operations in Montserrado at the time of the study. Programme implementers were knowledgeable about the revival of iCCM in other counties through the PACS Project. Although the project was only functioning in rural Montserrado at the time of the study, stakeholders hoped that interventions would be expanded so that gCHVs engaged during the outbreak could be retained as CHAs post-Ebola. Save the Children had also designed a new, post-Ebola, community programme in Montserrado for pregnant adolescent girls called the ‘Be Better Club’. It was due to be implemented by CHAs and the aim was to discuss issues of specific relevance to this target group and to advocate for their use of health facilities for antenatal care, delivery and postnatal care services.
Bong
The PACS Project was initiated in one of Bong’s twelve districts, Sanoyea, and from June 2015, IRC started to prepare for the implementation of iCCM. CHAs engaged in this study reported that they were continuing their work informally, purchasing drug supplies to sell to local communities, but none were working within the renewed iCCM programme. Africare remained active in Bong, but at the time of the study were no longer involved with iCCM.

4.2 Costing and financing

Implementation of the new National Community Health Services Policy is dependent on the required support structures being developed and funded. The policy stated that the legislature would declare health equity a national development priority and so ensure the allocation of county and national budget support, including the possibility of a pooled funding mechanism, to enable its implementation. It was expected that donors and partners would continue to make a substantial contribution.

The Investment Plan for Building a Resilient Health System in Liberia 2015–2021 had a broad focus on community resilience, through the following three key investments:

- Build a fit-for-purpose productive and motivated health workforce;
- Re-engineer the health infrastructure to conform to the population’s needs;
- Strengthen epidemic preparedness, surveillance and response.

The Investment Plan stated that USD 1.7 billion in the six years to 2021 would be needed to achieve its three objectives. The available resources (USD 551.8 million from donating partners and a projected allocation of USD 416.9 million from the Government of Liberia) revealed a sizable funding gap of USD 735 million (MoH 2015d). Notably, the plan pre-dated the new policy so did not reflect the costs of implementing it, nor the costs for the new, salaried cadre of CHAs or their supervision.

The importance of this funding gap should not be underestimated given the government’s historic difficulties in implementing policy as intended. Government investment in health was consistently below the target of 15% of the total public sector budget, and the sector remained characterised by aid dependency, duplication and fragmentation. Several implementing partners who participated in the study questioned the lack of financial commitment made by the government to strengthen health systems post-Ebola. Several stakeholders suggested that the majority of health system financing was provided by donors interested in their own individual, shorter-term programming, and that the government should be doing more to support CHTs to provide improved longer-term care, particularly outside Monrovia. One national-level stakeholder asked, ‘How much does central [government] really care about the people in these areas, people that live way out there? And for their healthcare? They don’t care, because if they did they would support the county and the CHT more’.

In the post-Ebola recovery phase USAID was provided with ‘supplemental funds’ by the US Congress to ‘rapidly restore services’ and were able to expand their operations for three to six counties (as discussed above). In addition to supporting NGO partners directly through the PACS Project, USAID provided ‘support at the central level in terms of building the capacity of the MoHWS to better plan and programme community health services.’ US funds for the restoration of health services in Liberia were ‘short-term funds’ drawn from an ‘emergency non-Ebola health fund.’ Funds were available until December 2016 for the restoration of health services, with additional funds available until December 2017 for health systems strengthening.
Donors for health system financing in Liberia post-Ebola include, in addition to USAID, the World Bank, Global Fund and Japan International Cooperation Agency (JICA). At the time of the study, there were ongoing discussions about how funding mechanisms would be established. For many partners, however, the amount of funding secured was already having implications for their programming. Representatives from Save the Children in Montserrado confirmed that they had ‘run out of funds’ for community health programming, and although they had supported 15 health facilities pre-Ebola, they had discontinued support for 10 of these after December 2015.

Since the Ebola outbreak, the international literature has described resilient health systems as a ‘global public good’ (Oxfam 2015; Kruk et al. 2015). Implicit in this is the idea that the relationships between donors and recipients could be transformed to one of mutual benefit for all in which donors contribute to financing resilient health systems rather than focusing on their own programme priorities, and that ultimately this has a global benefit.

4.3 Human resource management

In transitioning into the post-Ebola recovery period, the number of CHVs working as Ebola response workers was scaled back. Funding reverted to non-emergency structures and programmatic work restarted. Some organisations supported personnel they had employed during Ebola to return to mainstream work. The IFRC, for example, supported their national volunteers who had worked in the safe and dignified burial teams with a severance package equivalent to two months’ salary and opportunities for education, training scholarships, and business empowerment grants. Many workers accepted shorter-term or interim contracts that could be renewed on a rolling basis during the recovery phase, but the reduction in engagement and employment opportunities was frustrating for many community members who had been involved in the formal response. The reduction in workers at the community level also resulted in some of the human resource management structures that had been established during the emergency being dismantled.

Training

In consolidating their community-level workforce and restarting their routine programming, many organisations offered training and/or refresher training. By March 2016, the PACS Project in Lofa had 50 trained CHAs on their roster, and a further 200 that the IRC had worked with prior to and during the response. It was suggested that some of those veteran gCHVs who worked during the Ebola response may also be retained for providing iCCM services once the programme began (and if it was scaled). A senior programme manager confirmed, however, that the IRC would not be able to support the same number of CHAs that they had supported during the Ebola response in Lofa.

The IRC also confirmed that between June 2015 and January 2016, they had provided training to CHAs in Bong focusing on malaria, diarrhoea and ARI. This training was combined with training by PSI, also a member of the PACS Project, on ‘behaviour change through communication and education through listening’. This emphasised community engagement to create and raise awareness of common health conditions. The newly trained cadre was deployed across the county on 13 January 2016. PSI confirmed that their representatives liaised with community leaders in areas where CHAs were deployed, to ensure that the leaders were aware of

5 Global public goods are defined as those from which nobody should be excluded and the use by one person does not reduce use by others.
6 These services were provided by the Red Cross to help facilitate the reintegration of burial team members back into their communities in recognition of the societal stigma they often faced for the ‘taboo’ role they performed in handling the dead during the response (IFRC 2015).
the CHAs’ role as providers of iCCM, and to observe the relationship between the CHAs and community members. At the time of the study, IRC and PSI were planning another round of CHA training in April 2016, after the conclusion of the national polio vaccination campaign.

In Margibi, Save the Children and the PACS Project pledged to train a new cadre of 150 CHAs each (300 in total) for continuing community-based health services. The training started in December 2015 and was scheduled to be completed in April 2016. The combined training package focused on pneumonia, diarrhoea, malaria and malnutrition and would result in approximately 400 CHAs trained to provide iCCM in Margibi. During the Ebola response, Save the Children had expanded their workforce to include over 800 new volunteers. Some of those new volunteers were included in the training, although most programme implementers asserted that they preferred to continue working with the gCHVs they had trained prior to the Ebola outbreak, if and when they were available. At the time of the study (March 2016), there were no plans to retain the remaining ‘surge’ gCHVs due to lack of funds.

In Montserrado, CHAs suggested that only volunteers recalled for the week-long ToT course facilitated by Save the Children in early 2015 were included on the organisation’s community case management roster. The fact that none of the gCHVs recruited during the response were called to attend the training created friction between the ‘old’ gCHVs and ‘new’ CHAs.

Incentives

In a lessons learnt document focusing on the response and recovery, the MoH concluded that ‘The current fragmented and ad-hoc way of incentivising CHAs will need to be improved to become more systematic and sustainable in order for the community health system to be reliable and resilient in the future’ (MoH 2015b). All stakeholders were in strong support of the endorsement by the MoH to pay CHAs a flat monthly rate of USD 70 (USD 50 for services rendered plus USD 20 to cover transportation) to be paid directly to CHAs by their INGO sponsor. It was confirmed that CHAs engaged through the PACS Project and Save the Children in Margibi and Lofa would be paid this, and that the PACS Project in Bong had funding in place to sustain iCCM operations for five years. County Health Officers in Bong suggested, however, that the policy of standardised payment ‘had yet to reach their level’ and was therefore not being implemented at the time of the study.

Across the four counties, TTM s and CHDC members were not provided with regular monthly payments before, during or after Ebola. Some TTM s were provided with material incentives (such as lappas) and were given refreshments and money for transport at the monthly meetings held at their referral health facility. TTM s in Bong also reported that their referral facility had given them USD 20, soap and lappas at Christmas 2015. Many stakeholders, particularly community leaders and CHAs, emphasised the need to remunerate TTM s and CHDC members, and to formally recognise and advocate for their important role in the provision of community-level health services in the post-Ebola period.

4.4 Supply chain management

Partners discussed ongoing challenges with supply chain management and procurement post-Ebola, many similar to those encountered before the outbreak. Difficulties in procuring essential drugs from the NDS continued, particularly malaria medication. As one stakeholder concluded, ‘There is a lot of bureaucracy involved in trying to get the anti-malarial medicine and this has not decreased since the revised community health worker policies’. Several participants recommended that the MoH should ‘give the green light’ to NGO implementing partners to secure drugs quickly through the Global Fund.
Partners involved in the PACS Project confirmed that when the new cadre of CHAs were deployed after training, they were supplied with a backpack of five essential drugs: amoxicillin, zinc, ORS, anti-malarial medication and paracetamol. The supplies were sufficient for the first month of operations, but the longer-term procurement of iCCM drugs was supposed to be through the CHTs who were responsible for overall supply chain management. During the second month of the project in Bong (February-March 2016), however, CHAs were not adequately resupplied with amoxicillin, zinc or paracetamol. In addition to issues around securing malaria medication, stakeholders in this county explained that procuring amoxicillin had become difficult since the shift from using cotrimoxazole as the first line drug for treating ‘cold’. Implementing partners stressed their concern that there were stockouts of three of the CHAs’ five key drugs in the second month of the programme. As one respondent concluded, ‘It is too early for us to be having stockouts of drugs. We only need five different drugs and when you have stockouts of three of them, then only two will be given to the CHAs to do their work. This is not a good start.’ They concluded that ongoing drug shortages would ‘kill the momentum’ that the PACS Project had spent months building preceding the official restart of iCCM in Bong.

4.5 Service delivery and referral

At the time of data collection, many partners reported frustration and/or confusion about the ongoing implementation of the ‘no-touch’ policy in relation to iCCM. Participants queried when and how the policy would be lifted in the post-Ebola period, and what impact this would have on the reintroduction of standard iCCM. As one stakeholder explained, ‘The Ministry has not yet lifted the touch ban. We are sort of waiting on the Ministry. The WHO’s guidance says countries should resume ‘touch’ when they feel ready. The country is waiting for the WHO to tell them what readiness means.’ CHAs trained as part of the PACS Project confirmed that in line with policy, they had been provided with standard issue ‘no touch thermometers’, but not with rapid diagnostic tests for malaria.

Many of the analyses of the West African Ebola epidemic have emphasised the impact that both the outbreak and response had on people’s trust in the health service and health workers (see for example USAID 2015; Wesley 2014; Peters 2014; Omidian et al. 2014). The high level of distrust and suspicion affected the utilisation of routine health services at all levels. With regards to vaccination, for example, community members clearly articulated the reasons they had for not presenting their children for routine immunisation post Ebola (see for example Bedford 2015a), and under-immunisation led to a succession of measles outbreaks across the country. One caregiver from Lofa recounted,

When Ebola started getting hot, then myself, I cut the vaccine off. I never used to go [to the clinic] again. They used to be telling us, ‘Bring the children for vaccine. Don’t be afraid. We will not do anything bad to the children. You bring them for vaccine’. But me, I never used to go. God says you must talk true so I will be frank and I tell you, I never used to carry my son. I left it until my son started walking. I never went again. We never finished with our vaccinations.’

For many caregivers, the gradual regaining of trust was linked to their pragmatic demand for health services, including health services at the community level. Community members in Montserrado who had interacted with gCHVs before the outbreak reported, ‘We are appealing to the CHVs, now that Ebola is finished, please can they come back in the community and start to treat our children like before?’ Similarly, caregivers in areas that had not been serviced by gCHVs before Ebola spoke positively about the delivery of care at the community level that they had experienced after the outbreak. Others were concerned that resources would not be reallocated to CHAs because communities had shunned their services during the emergency. As one caregiver from Montserrado concluded, ‘You shouldn’t blame them, the problem came from us. Because of this Ebola business, when our children were sick we refused to see them. So the fault is ours. We can’t blame them. We want them to continue all of what they were doing before Ebola came.’ Many caregivers discussed the mental
fatigue they experienced due to constantly worrying their children were at risk of infection during the Ebola outbreak, and emphasised how the continuance of iCCM in the post-Ebola period would help alleviate some of their concerns.

The demand for community-level services and the need for trust between service provider and user was particularly evident in the increased workload of TTM's during the emergency period, when they were often the frontline provider of assistance for pregnant women. Many stakeholders felt that TTM's had been ‘left out’ of the post-Ebola health planning and policy. There was a sense that insufficient recognition had been given to TTM's and there was a corresponding lack of advocacy for their role in the community health system more broadly. Some partners felt that the resurgence of community-based deliveries during Ebola continued to influence the lower rates of facility-based deliveries after the outbreak, and renewed engagement with TTM's was required if they were to cease home deliveries and escort women back to the clinics. As a representative from one CHT concluded,

> When we re-opened the health facilities, we needed the pregnant women to come to the clinic for treatment and deliveries... We called lots of meetings and are still calling those meetings so that the TTM's can bring the pregnant women to the health facilities. We know that they did a lot of work during the time the health facilities were closed. They were taking risks, but we were all taking risks, so we are encouraging them to start bringing the pregnant women to the clinic again.

The TTM's engaged during the study emphasised that after the outbreak was declared over, they had not received any formal acknowledgement of their role in providing services at the community level during the response. As one TTM concluded, ‘We were not even called to say thank you.’ They were keen to continue working, particularly with CHAs who could ‘take records’ for them, but stressed the need for recognition and remuneration as part of the cadre of frontline providers. A TTM in Montserrado emphasised,

> They are still using us to work in the community...But we have been working without any pay. We need some form of motivation. And there is no respect for us from health workers because we don’t have identification cards, we are not on the payroll, we are not considered.

In their interviews and focus group discussions, a number of TTM's requested assistance to support ‘the children Ebola left behind’. Whilst caring for Ebola orphans was not part of their official remit, TTM's presented themselves as the spokesperson for women and children, particularly the most vulnerable, and emphasised that their care was a real need at the community level that was not being adequately addressed or resourced.

### 4.6 Communication and social mobilisation

With the restart of routine services, the MoH and partners implemented social mobilisation and community engagement strategies to rebuild trust, increase utilisation of services and referral compliance.

According to UNICEF, social mobilisation efforts during the Ebola response were viewed as ‘laying the foundation’ for post-Ebola programming (UNICEF 2015f). Community engagement, the interaction of multiple stakeholder groups through different channels of engagement, was seen to be a critical component in the restoration of routine health services. According to a UNICEF representative, as well as building trust, it facilitated ‘demand generation and motivating health-seeking behaviours of the public at large’.

With regards to immunisation, for example, two rounds of periodic intensification of routine immunisations (PIRI) (in December 2014 and February 2015) failed to raise coverage to the pre-Ebola level, and by May 2015, 562 measles cases had been reported in 10 of Liberia’s 15 counties. In response the MoH with support from UNICEF and other partners, conducted a national integrated polio, measles and deworming campaign from 8-
14 May 2015. The campaign targeted all children under five years old, and provided vaccination services at static sites (health clinics and hospitals) and mobile temporary sites (for community outreach). The comprehensive social mobilisation and community engagement that was developed was based on social mobilisation strategies used during the Ebola response and drew on lessons learnt from previous immunisation campaigns. CHAs made 229,031 house-to-house visits to encourage mothers and caregivers to take their children for vaccination, and 2,760 community meetings were held nationwide over a period of two weeks. Radio spots were aired three times per day to advertise the campaign, 35,000 flyers were distributed, messages were sent to religious leaders for dissemination and U-Report polls focused on the campaign (UNICEF 2015g). According to a UNICEF C4D specialist, 

**The social mobilisation structure from Ebola was still in place in Liberia at that time and we used this for the campaign. It was very successful, and the government recognised these successes...I think one of the biggest lessons we learnt from the outbreak was that, moving forwards, the Health Promotion Department [MoH] needed to be expanded and social and behaviour change communication needed to be integrated into the system.**

In the campaign, the total number of children who received oral polio vaccine (OPV) was 693,622 (101%); the total number of children who received the measles vaccine was 596,545 (99%); and the total number of children who received the Mebendazole tablet was 518,104 (99%) (UNICEF 2015h; WHO 2015b). This represented a substantial increase in the number of children vaccinated (compared with the two earlier PIRIs) and was, in part, due to good collaboration and cooperation between the CHTs, UNICEF and other partners. The social mobilisation activities were well coordinated and had a positive impact, particularly with previously resistant communities who were targeted for direct engagement. The key messages were consistent and raised awareness of the need to vaccinate children. Most importantly, the community engagement instilled a sense of trust in both the vaccine and the vaccine campaign, and communities repeatedly confirmed that it was this factor that had led them to (re-)accept immunisation (Bedford 2015a).

Due to the important role that social mobilisation played in the Ebola response and in the immediate post-Ebola period, the MoH described community engagement as a ‘key priority’ in the recovery plans. For example, CHAs trained by PSI as part of the PACS Project in Lofa, Bong and Nimba were instructed in behaviour change communication and education through listening (ETL). PSI documentation outlines ETL as an interpersonal communication and community engagement technique meant to enhance the skills of CHAs, and which has been used successfully in other countries such as Kenya ‘To facilitate dialogue and provoke community solutions to common health problems’ (PSI 2010). As one representative explained,

**That training was done to help gCHVs [CHAs] exercise their duties. They will use this skill to do community engagement. On the training, they learnt the states of change and the stages of awareness. This is very essential to their community engagement process. Basically, we are doing community engagement meetings with community members in communities where they have gCHVs [CHAs]. We go to these communities, organise community meetings and discuss healthy behavioural practices with them.**

### 4.7 Supervision and performance quality assurance

Stakeholders confirmed that challenges in supervision and performance quality assurance were similar in the post-Ebola period to those experienced before the outbreak, particularly because some of the management structures that were put in place during the response had since been removed (as discussed above). Programme implementers highlighted that the lack of dedicated personnel to supervise CHAs was detrimental

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7 A social messaging tool allowing Liberians ‘to respond to polls, report issues, support child rights and work as positive agents of change on behalf of people in their country’ (UNICEF 2016).
to the successful implementation of iCCM. At the time of the study, the position of community health service supervisor (CHSS) remained in the health system organogram, but appeared to be rarely resourced by the CHT. As one stakeholder in Margibi confirmed, ‘The CHA policies are good, but the supervision aspect is very bad, and that is where the true problem lies. This is the big concern now.’

In discussing the PACS Project in Bong, stakeholders explained the challenges they faced through lack of CHA supervision. Using vaccinators as supervisors (as described below) highlighted the extent to which supervision mechanisms had reverted to those adopted pre-Ebola. It was also illustrative of the ongoing tensions between the government and implementing partners in terms of responsibility managing human resource for health.

One major challenge we have is with getting supervisors for the gCHVs [CHAs]. There is a criteria set for the position of a CHSS, but we are presently using the people who serve as vaccinators at the clinics. Those vaccinators have a lot of work to do and to add the gCHV [CHA] supervisor work to what they have to do is strenuous for them. They are not getting any incentive for the work, so they do not pay attention to it. They feel that since we are in partnership with the CHT to help with the training, we should find some incentive for them, but we do not have that in our budget. There is a position called CHSS and the three clinics that we are working with should have one CHSS each, and these CHSS will be paid by the PACS project. But we are not to do the recruitment, it is the responsibility of the Ministry to do the recruitment but there is a lot of bureaucracy. The vaccinators are handling the role of the CHSS now but they are not professional people. This position needs someone who is schooled in medicine and has the knowledge to diagnose cases...The bottom line is that CHSS are not at the clinic yet.

The lack of supportive supervision was seen to have implications for the quality of services provided by CHAs, particularly in terms of providing feedback on the referrals they made to the health facilities and their continual professional development. It also impacted the accuracy and timeliness of routine reporting, and this in turn had ramifications for both the supply of medications and the payment of the CHAs as they were not remunerated until their reporting has been signed off.

4.8 Monitoring and evaluation, and health information systems

CHAs trained in iCCM for the PACS Project in Bong were provided with a reporting booklet with space to record care given to 18 patients per month. The CHAs had been instructed to treat as many children as possible, as their drug supplies allowed. As a result, many of the CHAs who treated more than 18 patients in the first month of the Project admitted that they were confused about where to report the additional patients. The booklets contained other reporting forms for activities that the CHAs had not been trained to conduct including family planning, reproductive health and monitoring of illnesses. Stakeholders confirmed that the first month’s reports were difficult to correlate and that errors in the documentation were likely to indicate a lower number of children treated than was actually the case.

Representatives from the CHT in Lofa County suggested that poor supervision and reporting of CHAs and their activities was a factor contributing to the lack of engagement by the CHT and MoH in community-level programmes. County-level stakeholders suggested that the government would be unable to give CHAs more visibility within policy and planning without improved and systematic data on their actions and impact on health at the community level. As one representative concluded,

We are not thinking how can we can best utilise them [CHAs] to get the best result. All programmes want gCHVs [CHAs] doing work in the community on their behalf. All programmes! So these programmes should provide results, a report. But the reports we have seen are non-factual, they don’t present the actual picture, or speak the truth of the community. And for me, where I work, in surveillance, I want a detailed report that gives me the actual picture of what is happening, not a false or misleading picture. So that is one huge challenge.
5. Conclusions

Because iCCM services in the study areas were mostly not functional at the time of the outbreak, it is difficult to assess the effect of Ebola on the provision of community-based curative services. However, the substantial confusion over policy directives regarding continuation or cessation of iCCM services indicates that services would have ceased even if programs had been more functional prior to Ebola, and this is confirmed by the quantitative data from Bong County. Therefore, we can conclude that curative community-based services did not prove to be especially resilient because of generally weak service delivery, confusion over policy from the central level and the overwhelming nature of the Ebola outbreak.

On the other hand, it is clear that the vast majority of CHVs remained active in their communities and were willing and eager to continue providing health-related services. CHVs played key roles in the Ebola response, carrying out social mobilisation, contact tracing, and active case finding activities in their communities. TTM not only continued, but increased their maternal health activities during Ebola. They did this largely without support and protective supplies, putting themselves and delivering women at significant risk. Furthermore, despite the mistrust and stigma faced by CHVs because of their ties to health facilities, they were better able to gain the trust of community members because of their longstanding relationships. Respondents at all levels consistently affirmed that CHVs played an integral role in the Ebola response at the community level.

In addition to gCHVs, this study showed the importance of engaging other key community members. Engagement of trusted and respected community leaders and the existence of CHDCs were also crucial to mounting an effective community response to the emergency. Furthermore, TTM played an important role in maternal health before and during the Ebola outbreak, but were not adequately supported. In an emergency, all of these community actors should be immediately engaged in a coordinated response.

Despite the lack of community-based MNCH services provision during the Ebola outbreak, these findings support the hypothesis that the establishment of strong community-based health services through CHWs, along with engagement of other key community actors, will increase both health system and community resilience in emergencies. However, the findings also highlight the importance of providing clear guidance and support to CHWs to enable them to maximize their potential benefit.

Following the Ebola outbreak, stakeholders at all levels have recognized the importance of strong community-based health systems to achieve increased and more equitable coverage of essential MNCH interventions and to improve resilience of health systems and improved response to emergencies. The new national community health policy provides a strong foundation for strengthening the community health system. However, it is unclear how this policy will be financed. Furthermore, there are critical service delivery weaknesses, especially regarding the supply chain and supervision, that have been present before, during and after Ebola. There is also a need for rigorous assessments of CHV/CHA quality of care and impact of community-based services. These issues will have to be resolved for the initiative to have a significant impact.

Although the Ebola outbreak and its impact could not have been predicted, we can predict that some form of emergency, such as disease outbreak, conflict or natural disaster, will occur again in Liberia. To avoid some of the pitfalls seen during the Ebola outbreak, such as poor coordination of activities and unclear policies, emergency preparedness and response plans should be incorporated into the trainings of CHAs, CHDCs, TTM, health facility staff, and other actors involved in health service delivery. Finally, in an emergency, a balance must be struck between responding to the emergency and continuation of routine services.
Appendix 1 – Map of Liberia

http://www.nationsonline.org/oniworld/map/liberia-map.htm
Appendix 2 – Fieldwork schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Sun 28 Feb</td>
<td>Arrive in Liberia</td>
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<tr>
<td>Mon 29 Feb</td>
<td>Briefing with UNICEF / Training field assistant</td>
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<tr>
<td>Tue 1 Mar</td>
<td>National stakeholder meetings</td>
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<tr>
<td>Wed 2 Mar</td>
<td>Montserrado – District-level stakeholder meeting</td>
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<tr>
<td>Thu 3 Mar</td>
<td>Montserrado – Cowfield (Block C)</td>
</tr>
<tr>
<td>Fri 4 Mar</td>
<td>Montserrado – Red Hill Field (Block B)</td>
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<tr>
<td>Sat 5 Mar</td>
<td>Margibi – 26th Gate</td>
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<tr>
<td>Sun 6 Mar</td>
<td>Margibi – Worhn</td>
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<tr>
<td>Mon 7 Mar</td>
<td>Margibi – District-level stakeholder meetings</td>
</tr>
<tr>
<td>Tue 8 Mar</td>
<td>Travel Monrovia to Bong</td>
</tr>
<tr>
<td>Wed 9 Mar</td>
<td>Bong – District-level stakeholder meetings</td>
</tr>
<tr>
<td>Thu 10 Mar</td>
<td>Bong – Gbokar Town</td>
</tr>
<tr>
<td>Fri 11 Mar</td>
<td>Bong – Gbomo Town</td>
</tr>
<tr>
<td>Sat 12 Mar</td>
<td>Travel Bong to Lofa</td>
</tr>
<tr>
<td>Sun 13 Mar</td>
<td>Lofa – Massabolahun</td>
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<tr>
<td>Mon 14 Mar</td>
<td>Lofa – Foya Tengia</td>
</tr>
<tr>
<td>Tue 15 Mar</td>
<td>Lofa – District-level stakeholder meetings</td>
</tr>
<tr>
<td>Wed 16 Mar</td>
<td>Travel Lofa to Monrovia</td>
</tr>
<tr>
<td>Thu 17 Mar</td>
<td>Preliminary data analysis</td>
</tr>
<tr>
<td>Fri 18 Mar</td>
<td>Debrief workshop</td>
</tr>
<tr>
<td>Sat 19 Mar</td>
<td>Debrief and transcriptions with field assistant</td>
</tr>
<tr>
<td>Sun 20 Mar</td>
<td>Depart Liberia</td>
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</tbody>
</table>
Appendix 3 – Research tools

Focus group discussion framework – caregivers and community members

Data sheet

• Country: ________________________________

• District: ________________________________

• Venue: ________________________________

• Date: ________________________________

• KII/FGD unique code: ________________________________

• Time KII/FGD started: ________________________________

• Time KII/FGD stopped: ________________________________

• Name of facilitator: ________________________________

• Name of back-up note taker: ________________________________

• Name of translator (if used): ________________________________

• Digital recording code: ________________________________

• General comments and observations:
  (include time taken to travel to link facility, mode of travel, and if possible distance.)
### Participant information sheet

<table>
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<tr>
<th>Sex</th>
<th>Age</th>
<th>Years education</th>
<th>Marital status</th>
<th>Occupation</th>
<th>Number of children cared for in family unit</th>
<th>Types of health practitioner visited in last two months? E.g. CHW, TBA, traditional healer, staff at health centre</th>
</tr>
</thead>
</table>
Discussion framework

NB – men and women in separate groups

First I want to ask you about your family and how you normally seek health care.

1. Can you tell me about the healthcare you and your family receive? (before Ebola time)
   - Where do people in your community usually go for healthcare?
   - If your child/baby seems unwell what do you normally do? Who would you consult?
   - From what sources do people in the community usually receive health messages?
   - Who do you trust to give you advice about decisions on healthcare?

2. Can you tell me about the work of community health volunteers in this area? (before Ebola time)
   - What types of people provide health services in this community? (Probe: gCHVs, CHCs, TTM, traditional healer, other health volunteers, etc.)
   - What services do they provide? (Probe: iCCM, maternal and newborn services, immunization, health education)
   - What do you think about these services?
   - Do you normally visit a gCHV in the community? Traditional healer? Which? How do you make contact?

   Additional prompts:
   - Do they sometimes make referrals for you and your family? How is this process? Do you follow the referral? How far is the place to where people are referred? How do you travel there? How do people feel about referral?
   - Are there some people who do not use the gCHVs? Why? Are gCHVs accessible to everyone?
   - What would make it easier for people in your community to use community health services?

Now, I want to ask you about the Ebola outbreak in your community

3. Can you tell me about how the Ebola outbreak affected your community?
   - What were the main ways Ebola was transmitted between people in your community?
   - What were the challenges to preventing new cases?
   - Did you hear Ebola prevention messages? What were the different sources of information on Ebola? Did you understand the messages?
   - What do you think was the best source/method of giving information on Ebola?
   - How did Ebola affect people’s ability to seek health care or services like iCCM, ANC, vaccinations, contraceptives, maternal care and advice etc.? What would have helped them to continue using these services?

Next, I would like to talk about when your children were sick (with malaria, pneumonia, or diarrhoea) during the Ebola outbreak. NOT with Ebola.

4. Before Ebola, what did you do if your child was sick?
   - How did you seek health care and advice?
   - Who did you seek care from?
   - Did your child receive care? If not, why? What care/treatment was given?
   - Did your child recover?

5. How did you seek care during the Ebola outbreak? (i.e. willingness to seek care)
- Were there some types of providers from whom you did not want to seek care during Ebola? Why? CHWs? Health facilities?
- Were you afraid to seek care from gCHVs?
- Has the Ebola outbreak changed the way you feel about seeking health care or services like ANC, vaccinations, contraceptives, basic healthcare and advice etc.?

6. **Was the availability of health services changed during the Ebola outbreak?**
   - From gCHVs?
   - From health facilities? Were the clinics providing regular services during the outbreak?
   - Were normal services (iCCM, etc.) available, from whom? If not, what was not available? How do you know about this – from your own or other’s experiences?
   - Was anyone pregnant during the outbreak? What differences where there in maternal health services that you could get during Ebola? (*Illicit case study of delivering during outbreak*)
   - Did anyone have a child who was sick (non-Ebola during the outbreak)? What differences where there in child health services that you could get during Ebola? (*Illicit case study of seeking care for children during outbreak*)
   - How were these services different during Ebola than they were before Ebola?
   - What differences were there in services from health facilities? Were referrals being made as before? How did you/your community feel about following referrals?
   - How did you feel about the quality of services compared to usual?

7. **Do you know what work gCHVs did relating to Ebola?**
   - Can you remember the types of works CHWs were doing during Ebola? (E.g. Communication and social mobilization? Isolation? Treatment? Other?)
   - What do you think about the work they did?
   - Were the gCHVs from your community or from the outside?
   - How were health messages given during the outbreak? What was the best way, in your opinion, to deliver the health messages?

8. **How could gCHV services have been improved during the Ebola outbreak?**
   - What health services were most lacking during the Ebola outbreak? What were the main challenges you faced seeking care during the outbreak?
   - How could CHWs have made maternal and child health services more available and better quality?
   - What would have made you more willing to receive healthcare from CHWs? From health facilities?
   - From where/whom would you have preferred to receive healthcare? (CHWs, traditional, health centres etc.)
   - From where/whom would you want to receive health advice and information about Ebola? CHWs/traditional healers?
   - How could CHWs have done more to prevent Ebola from spreading in the community?
   - What did you feel generally about the response to Ebola from the community and health sector? What could have been better?
   - In the event of another outbreak, do you have any recommendations for how to support community health services?

9. **Is there anything you would like to ask us?**

Thank you for your time and for sharing your opinions and experiences with us.

[RECORD STOP TIME] __________
Focus group discussion framework – community leaders

**Data sheet**

- Country: ____________________________________________________________
- District: ___________________________________________________________
- Venue: _____________________________________________________________
- Date: ______________________________________________________________
- KII/FGD unique code: ______________________________________________
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- Time KII/FGD stopped: ______________________________________________
- Name of facilitator: _________________________________________________
- Name of back-up note taker: _________________________________________
- Name of translator (if used): _________________________________________
- Digital recording code: ______________________________________________

- General comments and observations:  
  *(include distance or time taken to travel to link facility)*
Participant information sheet

<table>
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<th>Sex</th>
<th>Age</th>
<th>Years of education</th>
<th>Role in community</th>
<th>How elected or recruited</th>
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</table>
Discussion framework

1. **Please introduce yourself and describe your role in the community.**
   - Do you have a role with regard the health or well-being of the members of your community? How?
   - Did you have a role supporting CHWs in the Ebola response. How? (e.g. health promotion, countering fear, other activities?)

2. **Can you tell me about the health services provided in this community?**
   - When people are unwell in this community whose advice do they usually seek? (For minor and major health issues)
   - What are the main challenges to getting healthcare in this community?
   - Are there some providers/places people don’t want to go for healthcare? Why?

Now, I would like to ask about gCHVs and community health providers in your community.

3. **Can you tell me about the health services provided in this community?**
   - Please tell me what types of people provide any sort of services related to health in the community. (e.g. gCHVs, village health committees, TTMs, traditional healers, others?)
   - What services do they provide? Government services? NGO services? Free services?
   - What do you think about these services? How do people receive these health services?
   - Do you have gCHVs in this area? How many? Were the gCHVs present in your community before Ebola? (If present in community before Ebola, what were they doing in the community?)

Additional prompts:
   - How are CHWs selected and recruited in this community? Are you involved in the selection of CHWs? How? What do you think about this process?
   - Do they sometimes make referrals? How do people feel about referral? Do they follow the referral? Where are they referred?
   - Are there some people who do not use the gCHVs? Why? Or cannot access them?
   - What would make it easier for people in your community to use community health services?
   - What do you think the gCHVs do well and less well for mothers and children?

Next, I want to ask you about the Ebola outbreak in your community.

4. **Can you tell me about how the Ebola outbreak affected your community?**
   - What were the main ways Ebola was transmitted between people in your community?
   - What were the challenges to preventing new cases?
   - Where did you get most of your information during the outbreak?
   - Did you hear Ebola prevention messages? Who gave advice? What did the messages make you feel/do?
   - How did Ebola affect people’s ability to seek health care or services like ANC, vaccinations, contraceptives, basic healthcare and advice etc.? What would have helped them to continue using these services?

5. **How did the Ebola outbreak impact the gCHVs work with mothers and sick children?**
   - Were health services such as iCCM available during the outbreak?
   - How was gCHVs availability in the community and their willingness to see sick patients?
   - How was the availability of supplies and drugs?
   - Communication and social mobilization?
- What if someone was sick with a non-Ebola illness? What did they do/where did they go for treatment?

6. How did the Ebola outbreak impact the community’s use of gCHV services?
   - Willingness to seek care from gCHVs? From health facilities?
   - The ability or willingness of patients to comply with referrals?
   - What (if anything) made people to understand the need to go for treatment?

   Additional prompts:
   - Attitudes about quality of care? By CHWs? In health facilities?

7. How did gCHVs contribute to the Ebola response?
   - Communication, health promotion and social mobilization?
   - Case identification and reporting?
   - Referral?
   - Other activities? (e.g. case isolation, case treatment, contact tracing, safe burial, psychosocial care?)
   - Which activities were gCHVs able to do effectively or less effectively? Why?
   - What were the main challenges in carrying out these activities?
   - How could their work have been improved?

   Additional prompts:
   - Who coordinated gCHV activities? How? Were you involved in this? What can we learn from it?
   - How did gCHVs respond to the needs of the community?
   - What helped them to carry out their activities?

8. What are the main lessons learned and how can the community health system be strengthened for future emergencies?
   - In terms of preventing new cases of Ebola in the community, what went well and what did not go well?
   - Continuation of regular maternal and child health services? (e.g. iCCM)
   - Did gCHVs receive the support and guidance they needed from government and partners? Availability of supplies?
   - Health promotion and community engagement? How?
   - Gaining the trust of communities?
   - What are the advantages/disadvantages of using community members as gCHVs?
   - Preparing for future emergencies? Any advice to the government on how to strengthen community health systems? How to improve the work of gCHVs?

9. Is there anything you would like to ask us?

Thank you for your time and for sharing your opinions and experiences with us.
Focus group discussion framework – community health volunteers

Data sheet

- Country: ____________________________________________________________
- District: __________________________________________________________
- Venue: ____________________________________________________________
- Date: _____________________________________________________________
- KII/FGD unique code: _______________________________________________
- Time KII/FGD started: ______________________________________________
- Time KII/FGD stopped: _____________________________________________
- Name of facilitator: _________________________________________________
- Name of back-up note taker: _________________________________________
- Name of translator (if used): _________________________________________
- Digital recording code: ______________________________________________

- General comments and observations:
  (include distance or time taken to travel to link facility)
### Participant information sheet

<table>
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<td>e.g. gov’t facility, mission, NGO-funded facility</td>
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Discussion framework

First, I would like to ask about your work as a CHW, including the work you did before the Ebola outbreak.

1. Can you tell me about the services you normally provide to mothers and sick children (before Ebola)?
   - Curative services (iCCM)?
   - Maternal and newborn services?
   - Health promotion?
   - Others?
   - What training have you received?
   - How do you receive supplies?
   - Who supervises you?
   - How do you report your activities?
   - About how many sick children did you usually treat per month (before Ebola)?
   - What were the main challenges you faced in providing services?

2. Can you tell me about any other individuals or groups that work on health in the community?
   - Other community health workers or volunteers?
   - TTM other traditional healers?
   - Village health committees?
   - What do these individuals/groups do for mothers and sick children?
   - How do you coordinate with them?
   - Before Ebola, where did people’s health information come from?

   Additional prompts:
   - When someone is sick in your community, who do they prefer to go to for advice/treatment? Why?

Now, I am interested in what happened during the Ebola outbreak

3. How did the Ebola outbreak impact your work with mothers and sick children?
   - To what extent were you able to carry out your normal activities as well as Ebola related work?
   - Did it affect your availability in the community and willingness to see sick patients?
   - Did it affect the supply of drugs, supplies and equipment? What caused problems? Was anything done to resolve this? Was it successful?
   - Did you receive supervision as often as before? Did the content of the supervision change? What was the result of this change?
   - Did you carry out communication and social mobilization for maternal and child health? What were the challenges in this?
   - Were you able to complete and send reports to supervisors? What caused problems? Was anything done to resolve this? Was it successful?
   - Did Ebola affect care seeking by the population? Were people still willing to come to you for care? Why/why not? Did you do anything to encourage them to come to you?
   - Did Ebola affect the ability or willingness of patients to comply with referrals? What caused problems? Was anything done to resolve this? Was it successful?
   - Was the availability of health facility services changed? Why? What was the effect of this?
   - Did health facility support to you change? In what way? What was the effect of this?
   - Were you trained on the no-touch iCCM policy? How well did this work? Were there any problems?

   Additional prompts:
- Confidence in being able to provide services? Why? Which ones were difficult to provide? Which ones were less difficult?

- How did the Ebola outbreak affect the way your community sought health care?
  - Attitude and response towards public health messages and mobilisation efforts? Why?
  - Willingness to seek care from CHWs? From health facilities?
  - Attitude towards CHWs? Why?
  - Attitude towards health facilities? Why?

Next I would like to ask about your work during the Ebola outbreak response.

4. What activities did you carry out for the Ebola outbreak response?
   - Communication, health promotion and social mobilization?
   - Case identification and reporting?
   - Referral?
   - Other activities (Case isolation, case treatment, contact tracing, safe burial, psychosocial care?)
   - Specifically, how did you go about this work? (e.g. house-to-house visits, active case finding, quarantining sick people, providing care to sick people)
   - Did you hear of any gCHVs that were providing care to Ebola patients? (Illicit case study)
   - Which activities CHWs were able to do effectively or less effectively? Why?
   - What were the main challenges in carrying out these activities?
   - How did this work affect your ability to provide maternal and child services?
   - What is/was your motivation to do this work?

Additional prompts:
   - What helped you to carry out your activities?
     - What would have helped you do it better? Who could have helped? E.g. on how to manage/control Ebola, protect yourself, community messaging and mobilisation on prevention and protection? Engaging with community members/traditional healers/fair leaders? Why? How? E.g. on how to work on health promotion and countering fear?
   - Who coordinated your activities? How? What would help you to maintain normal services? What policies are needed?
   - How did your community respond to you during the outbreak?
     - Why do you think this was? And how did you feel about your ability to respond to the needs of the community? In future outbreaks how can CHWs contribute to enhancing trust and use of the health system? E.g. Community education and mobilization strategies?
   - What supplies were available? From where? Were they sufficient and of good quality? Can we learn anything from the work during the Ebola outbreak that can help future activities? (If CCCs were in place) How was your Ebola control work coordinated with Community Care Centres? Did the CCCs change the way you worked? What was your involvement with the CCCs? Now that the CCCs are dismantled, what is the impact on your work?
   - What were your greatest (work-related) concerns during the outbreak?

5. How were you supported by the government and partners to contribute to the Ebola outbreak response?
   - Did the government support you to contribute to the response? How? Who guided you?
   - What support was there from partners? (NGOs, international response, other community groups). How effective?
   - What payment or incentives did you receive for work on Ebola? Were there any issues with payments? (e.g. lack of standardization of rates, late payments)
   - What training did you receive? How was the training? Was it sufficient? What do you think should have been done differently?
- What supervision did you receive? Was the supervision helpful? What do you think should have been done differently?
- What supplies were provided to you? Did you receive the supplies you needed?
- How did you report on your work?
- How were sick people referred to health facilities/Ebola treatment units/CCCs?
- How could you have been supported to do your work better?
- How was your work during Ebola as a gCHV similar or different to your work as a gCHV before Ebola?

6. What are the main lessons learned and how can the community health system be strengthened for future emergencies?
- Guidance and protocols? (e.g. Emergency and for MNCH).
- What else would you need to help you to continue providing maternal and child health services? What do you need to do good work?
- To help the community to use services?
- Support from the health system and partners?
- Community education and mobilization strategies?
- Disease outbreak control activities?
- What recommendations do you have for the MoH, UNICEF, or other partners to better respond to any future outbreak or other emergency?

7. Is there anything you would like to ask us?

Thank you for your time and for sharing your opinions and experiences with us.

[RECORD STOP TIME] __________
Focus group discussion framework – health workers

Data sheet

- Country: _______________________________________________________________
- District: ______________________________________________________________
- Venue: _______________________________________________________________
- Date: _________________________________________________________________
- KII/FGD unique code: _________________________________________________
- Time KII/FGD started: _________________________________________________
- Time KII/FGD stopped: ________________________________________________
- Name of facilitator: ____________________________________________________
- Name of back-up note taker: ___________________________________________
- Name of translator (if used): ___________________________________________
- Digital recording code: ________________________________________________

- General comments and observations:
  (include distance or time taken to travel to link facility)
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<td>Primary, secondary, tertiary</td>
<td></td>
<td>e.g. gov’t facility, mission, NGO-funded facility</td>
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</table>
Discussion framework

First, I want to ask you about your work and the services you provide here.

1. Background (general not Ebola specific)
   - What health services can pregnant women, their babies and young children receive in this health facility? How do you feel about the capacity of this health facility to deliver these services?
   - Do you receive referrals of pregnant women and their young children from gCHVs or other community-based practitioners? For what sort of issues? What is the catchment area?

Now I want to ask you about services during the Ebola outbreak.

2. How did the Ebola outbreak affect maternal and child health services at the health facility?
   - Motivation and capacity of staff to work? E.g. Exhaustion, fear.
   - Supply of essential drugs, supplies, equipment as well as PPE?
   - Supervision routine?
   - Completing and sending reports and/or lab samples/results?
   - Care seeking by the population? (e.g. The ability or willingness of patients to seek MNCH services here, including delivery services?)

Additional prompts:
   - Ability to juggle Ebola-related tasks with regular MNCH tasks? Impact on capacity to assist facility deliveries?

3. How did the Ebola outbreak impact routine MNCH health facility support to gCHVs?
   - Supplies needed for community MNCH services?
   - Supervision of gCHVs and support for the MNCH services they offer?
   - Referral services, tracking and reporting of pregnant women, babies and sick children?

Additional prompts: [If these things were a problem, clarify if they were worse than usual, or a continuation of a systemic problem.]
   - Did the Ebola outbreak have any unexpected positive impact on your work/coordination with gCHVs that we can learn from for the future?

Now I would like to ask about gCHVs’ role in the Ebola outbreak response.

4. What activities did gCHVs in this area carry out for the Ebola outbreak response?
   - Communication, health promotion and social mobilization?
   - Case identification and reporting?
   - Referral?
   - Other activities (Case isolation, case treatment, contact tracing, safe burial, psychosocial care?)
   - Which activities gCHVs were able to do effectively or less effectively? Why?
   - What were the main challenges in carrying out these activities?

Additional prompts:
   - What influenced their performance? Probe: training, experience, status in community. What could have been done better?
   - How did you feel about gCHVs’ ability to respond to the needs of the community? (Ebola and MNCH) and how did local communities respond to gCHVs during the outbreak?
o Why do you think this was? And how did you feel about your ability to respond to the needs of the community? In future outbreaks how can gCHVs contribute to enhancing trust and use of the health system? (e.g. Community education and mobilization strategies such as identifying and coordinating trusted community volunteers and support? Why do you think this was?

5. How were gCHVs supported by the health facility staff to contribute to the Ebola outbreak response?
   - Training?
   - Supervision?
   - Supplies?
   - Collecting data?
   - Providing referral services?
   - Others?

Additional prompts:
   - What supplies were provided to gCHVs? From whom? Were they sufficient and of good quality? Can we learn anything from the procurement and distribution channels used during the outbreak that can inform future community health programming?
   - Who coordinated the community Ebola activities? How? What can we learn from these? How could it be improved? Were there challenges in doing the activities as requested? What? Do you know what supervision gCHVs received? From whom? How did this differ from existing supervision? Can we learn anything from the way they were supervised?

6. What are the main lessons learned and how can the community health system be strengthened for future emergencies?
   - Policies and guidance?
   - MNCH service delivery?
   - Utilization of MNCH services?
   - Support to gCHVs from the health system and partners?
   - Health promotion and community engagement?
   - Rapid response to emergencies?

Additional prompts:
   - What would help gCHVs to maintain normal services as well as Ebola related services?
   - Health promotion and community engagement? Probe. How?
   - Linkage to other support organisations? (e.g. Care/referral for orphaned children?)
   - Support to gCHVs from the health system and partners?
   - Supervision and training of CHWs on Ebola response? (e.g. Emergency protocols on how to manage a) Ebola, and b) pregnancy and child health during an outbreak?)
   - Supplies and PPE?
   - Collecting data?
   - Providing referral services and tracking referrals?
   - Psychosocial and moral support? Did they receive any? Enough?
   - In future outbreaks, how can gCHVs contribute to enhancing trust in the health system for regular and Ebola services?
   - Supporting, advising communities? How? Who else can collaborate on that? Who do communities trust?
   - Capacity to respond rapidly?

7. Is there anything you would like to ask us?
Thank you for your time and for sharing your opinions and experiences with us.

[RECORD STOP TIME] ________
Interview framework – policy makers and programme implementers (national level)

Data sheet

- Country: ____________________________________________________________
- Venue: ____________________________________________________________
- Date: ______________________________________________________________
- Unique ID code: ____________________________________________________
- Time interview started: ______________________________________________
- Time interview stopped: ______________________________________________
- Name of interviewer: ________________________________________________
- Name of back-up note taker (if used): _________________________________
- Name of translator (if used): _________________________________________
- Digital recording code: ______________________________________________
- General comments and observations:

Participant information sheet

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<td>Primary, secondary, tertiary</td>
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<td>e.g. gov’t department, mission, NGO</td>
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</tbody>
</table>
Discussion framework

I want to start by asking you about your organization’s work on community health and the EVD response.

1. Background
   - Please describe your organization’s work in community MNCH.
   - Please describe your organization’s work in the EVD response, particularly at the community level.
   - Please describe your current position/role and responsibilities?
   - In what ways are you involved with community health workers (programming, strategy, policy)?

Next, I want to ask you about MNCH services, policy and coordination during the Ebola outbreak.

2. How did the EVD outbreak affect community MNCH policy?
   a. Were any policy changes made?
   b. Was the no-touch iCCM policy implemented with gCHVs? How well did this work? What was the impact of this?

3. How did the EVD outbreak impact MoH, partner coordination?
   - How did Ebola affect coordination between the MoH and partners? What went well and less well? Was coordination effective?
   - Who coordinated the gCHV Ebola activities? How? Did districts take different approaches? What can we learn from these?
   - What do you think are the main lessons from the coordination efforts? Are any of these relevant as we plan how to implement the new gCHV policies?

4. How did the EVD outbreak impact delivery of MNCH interventions by gCHVs?
   - Was there a change in availability of gCHVs in the communities and willingness to see patients? (e.g. Absenteeism?)
   - What motivated gCHVs to continue working through the outbreak?
   - How was the supply chain and availability of MNCH commodities affected? Was this different from normal during Ebola?
   - What about routine training of gCHVs?
   - Supervision of gCHVs?
   - Communication and social mobilization activities by gCHVs?
   - Routine monitoring and evaluation of gCHV activities?
   - Care seeking by the population?
   - The ability or willingness of patients to follow gCHV advice (e.g. comply with referrals?)
   - Availability of health facility services?
   - Health facility support to gCHVs?

Additional prompts:
   - How did communities respond to gCHVs during the outbreak? Why do you think this was? Did it vary across districts? Why? Do you think it could be improved? How?
   - Supporting, advising communities? How? Who else can collaborate on that? Who do communities trust?
   - Some areas had no established gCHV services at the time of the Ebola outbreak, how did these areas fare, compared to other areas?

Now I would like to ask about gCHVs’ role in the Ebola outbreak response
[Note: not all national-level interviewees would be expected to be able to answer all parts of, some may be omitted if not relevant]

5. What activities did gCHVs carry out for the Ebola outbreak response?
   - Communication, health promotion and social mobilization?
   - Case identification and reporting?
   - Case isolation?
   - Case management?
   - Contact tracing?
   - Safe burial?
   - Psychosocial care?
   - Referral?
   - Other activities?

6. Do you know which activities gCHVs were able to do effectively or less effectively? Why?

7. How and to what extent were gCHVs supported by the health system and partners to contribute to the EVD outbreak response? And, what do you think could have been better?
   - What remuneration did gCHVs receive? In addition to their normal remuneration?
   - What training did gCHVs receive?
   - What supervision did gCHVs receive?
   - What supplies were provided to gCHVs? From whom? Were they sufficient and of good quality? Can we learn anything from the procurement and distribution channels used during the outbreak that can inform future programming?
   - What monitoring and evaluation activities were carried out? Any lessons from these?
   - To what extent were referral services available?

8. What are the main lessons learned and how can the community health system be strengthened for future emergencies?
   - Policies and guidance?
   - MNCH service delivery?
   - Utilization of MNCH services? Support to gCHVs from the health system and partners?
   - Health promotion and community engagement?
   - Rapid response to emergencies?

Thank you for your time and for sharing your opinions and experiences with us.

[RECORD STOP TIME] __________
Interview framework – programme implementers and government health officials (county level)

Data sheet

- Country: ___________________________________________________________
- Venue: ___________________________________________________________
- Date: _____________________________________________________________
- Unique ID code: _________________________________________________
- Time interview started: ___________________________________________
- Time interviewer stopped: _________________________________________
- Name of interviewer: _____________________________________________
- Name of back-up note taker (if used): ________________________________
- Name of translator (if used): _______________________________________
- Digital recording code: ___________________________________________
- General comments and observations:

Participant information sheet

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<th>Department / type of facility e.g. gov’t department, mission, NGO facility etc.</th>
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</table>
Discussion framework

I want to start by asking you about your organization’s work on community health and the EVD response in this area.

1. Background
   - Please describe your organization’s work in community MNCH.
   - Please describe your organization’s work in the EVD response, particularly at the community level.
   - Please describe your current position/role and responsibilities?
   - In what ways are you involved with community health workers (programming, strategy, policy)?

2. Please tell me about community-level delivery of MNCH services in this area before Ebola?
   - Who are the main providers of health services or health information in the community? (Probe: gCHVs, TTM, traditional/faith healers, other community health volunteers).
   - What MNCH services were provided at the community level? (Probe: iCCM, maternal/newborn).
   - [If applicable] What were the components of your iCCM program? What was effective? Less effective? Any issues with drug supplies? Supervision? Reporting? Training?
   - [If applicable] Did iCCM end before Ebola? Why?

Additional prompts:
   - How do you think TBAs and traditional faith healers feel about gCHVs? Do they work well together and support each other or are there tensions? (Probe, legal issues, competition, dangerous practices).
   - Which types of providers do you feel communities are most comfortable seeking help from? (probe different types of issues: pregnancy and delivery advice, ANC, health problems during pregnancy, concerns with neonates)

Next, I want to ask you about community MNCH services during the Ebola outbreak.

3. How did the EVD outbreak affect community MNCH services?
   - Did iCCM end due to Ebola? How was this change communicated?
   - Was there a change in availability of gCHVs in the communities and willingness to see patients? (e.g. Absenteeism?)
   - How was the supply chain and availability of MNCH commodities affected? Was this different from normal during Ebola?
   - What about routine training of gCHVs?
   - Supervision of gCHVs?
   - Communication and social mobilization activities by gCHVs?
   - Health facility support to gCHVs?
   - What motivated gCHVs to continue working through the outbreak?
   - Routine monitoring and evaluation of gCHVs activities?
   - Care seeking by the population?
   - The ability or willingness of patients to follow gCHV advice (e.g. comply with referrals?)
   - Availability of health facility services?

Additional prompts:
   - How did Ebola affect coordination between the health system and other implementing partners in this district? How was it changed, what do you think are the main lessons from the coordination efforts? Was coordination effective? What went well and less well?
What about other routine activities: (E.g. training and supervision of CHWs? Routine monitoring and evaluation of CHW activities? Availability of services? Health facility support to CHWs?)

Was there a change in the way people sought MNCH services?

Now I would like to ask about CHWs’ role in the Ebola outbreak response.

4. What activities did CHWs carry out for the Ebola outbreak response?
   - Communication, health promotion and social mobilization?
   - Case identification and reporting?
   - Referral? Other activities (Case isolation, case treatment, contact tracing, safe burial, psychosocial care?)
   - Which activities CHWs were able to do effectively or less effectively? Why?
   - What were the main challenges in carrying out these activities?

Additional prompts:
   - What do you think influenced CHW performance and ability to work during the outbreak?
     o How did you feel about the CHWs’ ability to respond to the needs of the community during the outbreak? Why do you think this was? Did it vary across districts? Why? Do you think it could be improved? How?
     o How was the motivation and capacity of staff to work? E.g. Exhaustion, fear. How could it have been managed better?
   - Did community behaviour and attitudes influence CHW ability to work effectively?
     o How did communities respond to CHWs during the outbreak? E.g. ability or willingness of patients to comply with referrals.
   - Were Community Care Centers used in this area? Please describe how the Ebola Community Care Centres worked in this area? Who was it staffed by, where are those people now? How did CHWs interact with CCCs? Are there any lessons we should learn from the CCCs that are relevant to the CHW programme / preparedness for future outbreaks

5. How and to what extent were CHWs supported by the health system and partners to contribute to the EVD outbreak response?
   - How effective was partner coordination on Ebola support to gCHVs? What can we learn from what went well or less well? How could it have been better?
   - What remuneration did gCHVs receive? In addition to their normal remuneration?
   - What Ebola training did gCHVs receive? From whom?
   - What supervision did gCHVs receive? From whom? How did this differ from existing supervision? Can we learn anything from the way they were supervised?
   - What supplies were provided to gCHVs? From whom? Were they sufficient and of good quality? Can we learn anything from the procurement and distribution channels used during the outbreak that can inform future programming?
   - What monitoring and evaluation activities were carried out? Any lessons from these?
   - To what extent were referral services available? How could referral systems have been strengthened?
   - Were policies and action plans in place that allowed gCHVs to contribute? What were they? How effective were they? What would you change?

6. What are the main lessons learned and how can the community health system be strengthened for future emergencies?
   - Policies and guidance?
   - MNCH service delivery?
   - Utilization of MNCH services?
   - Support to CHWs from the health system and partners?
- Health promotion and community engagement?
- Rapid response to emergencies?

Additional prompts:
- Linkage to other support organisations. Care/referral for orphaned children? How can CHWs contribute to enhancing trust in the health system?

Thank you for your time and for sharing your opinions and experiences with us.
Appendix 4 – Consent form

Qualitative assessment of MNCH and Ebola-related services by Community Health Workers during the 2014-2015 Ebola outbreak in Guinea, Liberia and Sierra Leone

Introduction
We work for a research organisation called Anthrologica and we are conducting a study on behalf of UNICEF on the use of Community Health Workers (CHW) in Liberia during the Ebola outbreak. This study is meant to inform the community health component of the Post-Ebola Health Recovery Plans that the government of Liberia is developing, particularly in relation to increasing resilience through stronger community health systems. This study will use information from individuals like you to better understand the role of CHWs during the response, and to inform how they may be best utilised in the future to provide services for mothers and children. You are being asked to participate in an interview or focus group discussion for this project. You can decide to participate in the interview or focus group discussion, or not. It is entirely your choice. If you decide to take part, you can change your mind later on and stop at any time. You will not be paid to participate in the interview or focus group discussion. Participating in the interview or focus group discussion will not provide extra health or medical care. It is only an interview. You may ask any questions related to the study and we will answer these questions to your satisfaction.

Purpose
The purpose of the interview or focus group discussion is to get information about matters relating to CHWs and health services for mothers and children. Specifically:
• To document the effect of Ebola on the implementation of community-based services for mothers and children;
• To document the contribution of CHWs to the Ebola response;
• To identify how CHWs could have been more effectively used and supported during the Ebola response;
• To determine lessons learned and recommendations for strengthening healthcare systems and for ensuring future services for mothers and children.

Participant Selection
You have been chosen to participate in this research given your/your organisation’s role in providing health services in Liberia and/or your communities experiences of Ebola as they relate to CHWs. The interview will last for approximately one hour. Focus group discussions will last for approximately one and a half hours. We believe there is no risk to you although it is noted that there may be aspects of your participation in this research that involve risks that are currently unforeseeable. If you would like to discuss any issues that may arise after this interview or focus group discussion with a UNICEF-Liberia Psychosocial Officer you can contact Anthony Kapeu at local phone number (0770 26 7473).

Voluntary Participation and Confidentiality
Participation is voluntary. You have the right to withdraw from the discussion at any time without reason and without penalty. There is no cost associated with your participation. We will ensure that your information, opinions and experiences are kept confidential and will only be used for the purpose of the study outlined. We will not use your name. Your name and other things that describe you (your town name, your office name, any other persons’ names you mention) will not appear when we discuss the interviews/focus group discussions with others or publish a report based on our research. Interviews and focus group discussions may be recorded (your voice only) for the purpose of later writing your answers. The recordings will not be played for anyone in public, for example, not on the radio. These will be destroyed at the end of the study. With your permission, we may also take a photograph of you. These will be used for the purpose of the current study and may be
included in academic publications and other material for UNICEF and Anthrologica. If your photograph is published, you shall not be identified by name and confidential processes (outlined above) will be followed.

In regard to collecting information for this study, we would greatly appreciate your help and therefore seek your consent and cooperation. If you have any questions about this study, you may contact the study Principal Investigator: Nathan Miller (email: nmiller@unicef.org; telephone: +1 347 681 6450), or Aline S. Kapeu, (askapeu@unicef.org, telephone : 0770267929) a representative from UNICEF-Liberia office located at Bright Apartment, Sekou Toure Ave, Mamba Point, Monrovia, Liberia. If you have any concerns regarding your participation, you may also contact the ethics review committee for Liberia: Ms. Cecelia Morris (email: morris.celetha@gmail.com; telephone: 0886522833), Chairperson, UL-PIRE IRB or Curtis H. Taylor (email: chugmechrist@yahoo.com), Focal Point for the UL-PIRE IRB.

INFORMED CONSENT

We will give you a signed copy of this form to keep. By agreeing to take part in this interview, you understand that you will not be paid for the interview, your name and personal information will not be included in any reports, and you can stop the interview at any time as you wish.

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study:

_________________________  _________________________  ________________
Name of Participant        Signature                      Date

_________________________  _________________________  ________________
Name of Witness            Signature                      Date
Appendix 5 – Sampling and demographics of participants

Table 2. Key informant interview and focus group discussion participants

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<tr>
<td>gCHVs / CHDCs</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>TTM</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
<td>61</td>
<td>10</td>
<td>59</td>
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Table 3. National-level interviews

<table>
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<th>Organisation</th>
<th>Number of representatives interviewed</th>
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<tr>
<td>Africare</td>
<td>2</td>
</tr>
<tr>
<td>International Medical Corps</td>
<td>2</td>
</tr>
<tr>
<td>International Rescue Committee</td>
<td>2</td>
</tr>
<tr>
<td>Last Mile Health</td>
<td>1</td>
</tr>
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<td>Medical Teams International</td>
<td>1</td>
</tr>
<tr>
<td>Mentor Initiative</td>
<td>4</td>
</tr>
<tr>
<td>MoHSW, Community Health Services</td>
<td>3</td>
</tr>
<tr>
<td>MoHSW, Health Promotion</td>
<td>1</td>
</tr>
<tr>
<td>MoHSW, Department of Primary Care</td>
<td>1</td>
</tr>
<tr>
<td>Oxfam</td>
<td>2</td>
</tr>
<tr>
<td>Partners in Health</td>
<td>1</td>
</tr>
<tr>
<td>Plan International</td>
<td>1</td>
</tr>
<tr>
<td>Samaritan's Purse</td>
<td>2</td>
</tr>
<tr>
<td>Save the Children</td>
<td>1</td>
</tr>
<tr>
<td>UNFPA</td>
<td>1</td>
</tr>
<tr>
<td>USAID</td>
<td>1</td>
</tr>
<tr>
<td>WHO</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
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Table 4. Demographic details, county and district-level programme implementers

<table>
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<tr>
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<th>Margibi</th>
<th>Bong</th>
<th>Lofa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>33%</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67%</td>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
<td>Range</td>
<td>29-36</td>
<td>Range</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>31</td>
<td>Average</td>
</tr>
<tr>
<td>Time in Service</td>
<td>&lt; 1 year (post-Ebola)</td>
<td>--</td>
<td>&lt; 1 year (post-Ebola)</td>
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<td></td>
<td>1-2 years (during Ebola)</td>
<td>33%</td>
<td>1-2 years (during Ebola)</td>
</tr>
<tr>
<td></td>
<td>2+ years (pre-Ebola)</td>
<td>67%</td>
<td>2+ years (pre-Ebola)</td>
</tr>
<tr>
<td>Education Level</td>
<td>Primary</td>
<td>--</td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>33%</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>67%</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Positions</td>
<td>CSMC</td>
<td>67%</td>
<td>CSMC</td>
</tr>
<tr>
<td></td>
<td>CEO</td>
<td>33%</td>
<td>CHC</td>
</tr>
<tr>
<td></td>
<td>Health Advisor</td>
<td>22%</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>WASH Officer</td>
<td>11%</td>
<td>WASH Officer</td>
</tr>
<tr>
<td></td>
<td>DHO</td>
<td>11%</td>
<td>gCHV Supervisor</td>
</tr>
<tr>
<td>Department / Facility Type</td>
<td>Government</td>
<td>33%</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td>UNICEF</td>
<td>67%</td>
<td>UNICEF</td>
</tr>
<tr>
<td></td>
<td>Save the Children</td>
<td>25%</td>
<td>IRC (PACS)</td>
</tr>
<tr>
<td></td>
<td>PSI (PACS)</td>
<td>22%</td>
<td>RUCEP (CBO)</td>
</tr>
<tr>
<td></td>
<td>Africare</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
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Table 5. Demographic details, community leaders

<table>
<thead>
<tr>
<th>Montserrat</th>
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<th>Bong</th>
<th>Lofa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>75%</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>25%</td>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
<td>Range</td>
<td>40-61</td>
<td>Range</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>52</td>
<td>Average</td>
</tr>
<tr>
<td>Education Level</td>
<td>None</td>
<td>12.5%</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>--</td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>50%</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>37.5%</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Role</td>
<td>Chair / Chief</td>
<td>25%</td>
<td>Chair / Chief</td>
</tr>
<tr>
<td></td>
<td>Block Chief</td>
<td>25%</td>
<td>Block Chief</td>
</tr>
<tr>
<td></td>
<td>Elder</td>
<td>37.5%</td>
<td>Elder</td>
</tr>
<tr>
<td></td>
<td>Youth Leader</td>
<td>--</td>
<td>Youth Leader</td>
</tr>
<tr>
<td></td>
<td>Women Leader</td>
<td>--</td>
<td>Women Leader</td>
</tr>
<tr>
<td></td>
<td>Secretary</td>
<td>12.5%</td>
<td>Secretary</td>
</tr>
<tr>
<td></td>
<td>Pastor / Imam</td>
<td>--</td>
<td>Pastor / Imam</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>--</td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td>Watchman</td>
<td>--</td>
<td>Watchman</td>
</tr>
<tr>
<td></td>
<td>MUL</td>
<td>--</td>
<td>MUL</td>
</tr>
<tr>
<td>How elected?</td>
<td>Elections (vote)</td>
<td>50%</td>
<td>Elected</td>
</tr>
<tr>
<td></td>
<td>Selected</td>
<td>50%</td>
<td>Recruited</td>
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### Table 6. Demographic details, caregivers of children under five

<table>
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<th>Bong</th>
<th>Lofa</th>
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</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>71%</td>
<td>30%</td>
</tr>
<tr>
<td>Age</td>
<td>Range</td>
<td>Range</td>
<td>25-60</td>
</tr>
<tr>
<td></td>
<td>26-54</td>
<td>25-60</td>
<td>37-48</td>
</tr>
<tr>
<td>Average</td>
<td>39</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td><strong>Time in Service</strong></td>
<td>&lt; 1 year (post-Ebola)</td>
<td>14.5%</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>1-2 years (during Ebola)</td>
<td>28.5%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>2+ years (pre-Ebola)</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Education Level</td>
<td>None</td>
<td>None</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>29%</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Position</td>
<td>gCHV</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>CHDC</td>
<td>14%</td>
<td>20%</td>
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### Table 7. Demographic details, community health volunteers

<table>
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<tr>
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<th>Bong</th>
<th>Lofa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>71%</td>
<td>30%</td>
</tr>
<tr>
<td>Age</td>
<td>Range</td>
<td>Range</td>
<td>25-60</td>
</tr>
<tr>
<td></td>
<td>26-54</td>
<td>25-60</td>
<td>37-48</td>
</tr>
<tr>
<td>Average</td>
<td>39</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td><strong>Time in Service</strong></td>
<td>&lt; 1 year (post-Ebola)</td>
<td>14.5%</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>1-2 years (during Ebola)</td>
<td>28.5%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>2+ years (pre-Ebola)</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Education Level</td>
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<td>None</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>29%</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Position</td>
<td>gCHV</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>CHDC</td>
<td>14%</td>
<td>20%</td>
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### Table 8. Demographic details, traditional and trained traditional midwives

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<th>Bong</th>
<th>Lofa</th>
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</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>71%</td>
<td>30%</td>
</tr>
<tr>
<td>Age</td>
<td>Range</td>
<td>Range</td>
<td>25-60</td>
</tr>
<tr>
<td></td>
<td>26-54</td>
<td>25-60</td>
<td>37-48</td>
</tr>
<tr>
<td>Average</td>
<td>39</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td><strong>Time in Service</strong></td>
<td>&lt; 1 year (post-Ebola)</td>
<td>14.5%</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>1-2 years (during Ebola)</td>
<td>28.5%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>2+ years (pre-Ebola)</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Education Level</td>
<td>None</td>
<td>None</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>29%</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Position</td>
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<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>TM / TBA</td>
<td>40%</td>
<td>60%</td>
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