USING MOBILE PHONES FOR POLIO PREVENTION IN SOMALIA

An evaluation of the 2013–14 interactive messaging and mobile voucher system deployed in hard to reach areas in Somalia

Women read SMS about Polio prevention, Somalia, 2014. Photo: Ahmed Farah/Hijra

Beginning in November 2013, Oxfam, UNICEF and local partner Hijra implemented a mobile phone based health promotion project in Somalia to support Polio prevention and control. The project was implemented with two complementary components: pre-emptive community education delivered through interactive SMS on Polio prevention and the distribution of water and sanitation items through SMS voucher redemption. This evaluation concludes that mobile phones are a relevant mechanism to deliver health and WASH information in Somalia.

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INTRODUCTION AND BACKGROUND

Oxfam, UNICEF and local partner Hijra implemented a mobile phone based health promotion project in Somalia to improve awareness on and provide items to support Polio prevention and control. The concept was developed following the outbreak of Polio in Somalia and the first phase of the project started in November 2013. The project was implemented with two complementary components: a pre-emptive community education delivered through interactive SMS on Polio prevention and distribution of water and sanitation items through SMS voucher redemption. The two components were designed and delivered through on an Oxfam run mobile phone platform called mLink.

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The Polio education component was undertaken through four interactive SMS daily sessions. The target reach for this component was 100,000 people in 17 districts that included 16 districts in Mogadishu as well as the Afgooye district in lower Shabelle, with an estimated indirect reach of 1 million people. This estimate is based on a feasibility study connected to a previous project which revealed that in Somalia on average 10 people share the benefit of information delivered to one phone. Somalia is a vocal and sociable society where the community members have a propensity to share information which they learn. The Polio education sessions integrated key community based disease prevention approaches (focusing on faecal oral transmission) that include hand washing and safe water chains.

The second component involved distribution of soap, water containers and household water treatment, all of which play a key role in Polio prevention. Communities received a code (mVoucher) on their phones via SMS which they then redeemed at appointed prequalified traders and exchanged them for the specified Non Food Items (NFI) package. Once the code is redeemed, an automatic notification is sent by the mLink platform and the system immediately enrols the recipient to get education pertaining to the NFI item they have received through interactive SMS based sessions, including how to treat water using water treatment provided. The target for WASH NFIs distribution through mVouchers was initially 50,000 vulnerable households. This was however scaled down to a target of 5,000 households due to logistical and circumstantial challenges, such as trader capacity and logistical supply chains (explored in this report).

This evaluation was commissioned by the Oxfam Somalia country programme. It was undertaken between mid December 2014 and mid January 2015. This report details interviews and discussions that were held in Mogadishu (with beneficiaries and partner staff), Nairobi and Oxford (with UNICEF, Oxfam and partner staff) as well as analysis from the mLink mobile platform database. The report highlights successes as well as challenges that were experienced by

different stakeholders involved in the project. The report makes programme recommendations for immediate to medium term implementation. An attempt has been made to suggest some broader recommendations to inform future direction.

SUMMARY OF FINDINGS

The Polio education component reached 104,358 people and had a completion rate of 86%. Only 2,952 NFIs were distributed through the mVoucher system due to logistical and circumstantial challenges, such as trader capacity and logistical supply chains.

There is widespread penetration and use of phones in Somalia making it a commonly used and accessible tool that was appropriate for reaching hard to reach communities. However, there were some content design issues with the education component, especially with too many questions which demonstrates the need for information to be tailored to information needs based on the current status of the emergency or issue.

The report acknowledges that there was a very high number of people who received the voucher but did not pick up the items. A total of 44.8% of those who did not collect items claimed “Distance to distribution centre” as the reason and 16.8% said they were “too busy” and the underlying reasons for this low conversion rate need to be addressed. Nevertheless, the report recommends that mVouchers show huge potential for making distributions more convenient for beneficiaries. Eventually if the model works in the way it is envisaged; it would be a game changer for the way conditional distributions take place. Vendors could be responsible for doing work typically done by NGOs with knock on benefits to livelihoods as they profit from distributions.

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OBJECTIVES

This evaluation set out to document the process of what happened in the project, evaluate the results and most importantly capture learning that can inform improvement of subsequent phases of the project.

The overall objective of the Polio project was to reduce WASH related mortality and morbidity of vulnerable communities in Mogadishu and Afgooye district through a cost effective integrated WASH and Health education based on a mobile phone application. Key activities under each result were:

Result 1: 1,000,000 children, women and men reached are with health education relating to the Polio campaign

- Activity 1.1: Development of interactive Polio education content. Step by step educative materials on Polio prevention were to be developed and uploaded into the SMS platform.

- Activity 1.2: Development of agreements with phone companies for mass roll-out. This was to involve discussions and the signing of MOUs with the two leading mobile network operators (Hormuud and Nationlink) to use their database of phone numbers to do mass messaging regarding the Polio campaign.
- Activity 1.3: Interactive community education on Polio campaign to 1,000,000 beneficiaries. This was to comprise a 3 days to and from communication between individual phone users with the interactive platform.
- Activity 1.4: Continuous online monitoring through inbuilt feedback mechanism – the last day of the interactive community education package comprised an inbuilt feedback session to feedback from the beneficiaries regarding the view about the educations sessions as well as their level of participation on the Polio campaign.

Result 2: 1,000,000 children, women and men have improved knowledge on safe hygiene practices and 50,000 vulnerable beneficiaries are issued with WASH NFI package through the mLink platform

- Activity 2.1: Pre-qualification of traders. This involved a tendering process to identify traders in various locations who could distribute the WASH NFIs through their established outlets using mVouchers. Activity 2.2: Development of interactive WASH education content. Step by step educative materials on WASH were to be developed and uploaded into the SMS platform.
- Activity 2.3: Transfer of NFI and training of pre-qualified traders. The pre qualified traders were to be trained on how to use the mLink platform to redeem the mVouchers. Once trained, the traders would pick NFI packages from the regional supply hubs
- Activity 2.4: Roll out of community education and distribution of NFIs to 50,000 vulnerable households – this involved distribution of mVouchers to vulnerable beneficiaries through their registered phone numbers and redemption of the mVouchers at the prequalified traders' outlets. Once the beneficiaries received their NFI packages the mLink platform would follow up with accompanying education relating to the NFI package.

The objectives of the evaluation were therefore:

- To identify changes (outcomes) mentioned in the proposal that have occurred in the target area during the period of implementation; and assess the contribution of the project, if any, to these changes
- To gauge proof of concept of the mobile phone based approach for both interactive education as well as mVoucher based NFI distribution
- To identify key lessons learned from the project and make suggestions for future phases.

METHODOLOGY

The evaluation methodology had three core components: stakeholder interviews, focus group discussions with participants in the mobile based initiative in Somalia and qualitative household survey with random population in the districts where the project was implemented. Evaluation leads were also obtained from an internal midterm baseline review that had been conducted in September 2014.[1] Further information was extrapolated from metrics within the mLink platform database.

Stakeholder interviews were conducted by the lead evaluator in December 2014 with staff from the Oxfam Somalia programme and Regional Centre (in Nairobi) and humanitarian department (in Oxford). Interviews were also conducted with UNICEF (in Nairobi) and remotely with Hijra staff (both in Nairobi and Mogadishu) involved in the project. See *List of Stakeholders.*

Due to security and access in Somalia, the project evaluation faced specific constraints and the lead evaluator was not able to travel to Somalia so the focus groups and household surveys were conducted through the local partner, Hijra.

Four focus group discussions with groups representing: women, men, youth and traders were held in Mogadishu. Each focus group discussion comprised 10 participants.

A household survey was carried out via enumerators with 425 participants selected to represent 17 districts – the sample size in each district was proportional to its overall population. Participants were randomly selected irrespective of whether they participated in the project or not. In total there were 41.9% men and 58.1% women respondents. All participants were from the host community. In future there is a need to specifically target internally displaced people (IDPs) in order to understand their perspective.

FINDINGS

Findings are organised in relation to headings and key questions posited from the evaluation Terms of Reference which are quoted at the beginning of each section.

1. RELEVANCE

1.1 Key questions on relevance

- Is a mobile phone based public health promotion approach appropriate in a context like Mogadishu? How does it compare to conventional approaches in such a context?
- Were educative messages and materials properly anchored to the community priorities, culture and custom?
- How did the mVoucher based NFI distribution work? Was it properly anchored to the way of life/business approach in Mogadishu?

Is a mobile phone based public health promotion approach appropriate in a context like Mogadishu? How does it compare to conventional approaches in such a context?

1.2 Relevance of mobile of phone educative platform use in Somalia context

The fragile context in Somalia and the associated access barriers mean there is a particular need to consider alternative mechanisms to deliver aid to hard-to-reach communities. In the urban and semi urban context of this project, mobile phones, in particular SMS is a prevalent and commonly used tool in Somalia.[2] The focus group discussions revealed that all participants had a phone; some had smart phones, yet mobile internet and GPS have been banned in Somalia since January 2014. Participants noted that even if some community members do not have their own phones they may have SIM cards or access to shared phones (previous studies have shown information received on one phone can be shared with up to 10 people). Electricity to keep phones charged was not mentioned as a challenge perhaps due to the fact that all the participants were from an urban or semi urban setting.

In this project a shortcode was set up so there was no cost to the community members to send and receive messages. As a result, mobile credit was not a barrier as these costs were absorbed by the project. Aside from broadcast from radio and TV, it is safe to assume that SMS and voice are the most accessible two way communications channels in Somalia. It must be acknowledged that barriers to the use of phones still remain, as will be explored in this report. Both Oxfam and UNICEF agree that this approach allowed the project to reach a wide number in short time and more people than they could otherwise reach using conventional methods. Furthermore both SMS and mVouchers have benefits in terms of accountability as it is possible to show an audit trail to track field activities.

SMS and voice are the most accessible two way communications channels in Somalia.

Relevance of interactive SMS Education messages

Conventional approaches for delivering education involve face-to-face gatherings which can imply security risks. Delivery of education messages through SMS allows people to access the information in

their own time and pace. SMS is also durable and messages can be referred back to. Findings from the focus group discussion demonstrated that communities appreciate the flexibility this offers and the benefit of time saving. It was noted that having a mobile in their hand means “you can reply whenever,” (as stated by a focus group participant). Community members see the value in the content of messaging, with widespread acknowledgement that the campaign is “good and important to the community” especially with reference to immunisation and hand washing or other ways to prevent the spread of Polio.

With regards to uptake of the technology by community members, it was noted that in Somalia, especially those in the target audience of the project, people are busy, sometimes illiterate and have competing priorities. There were some reports of messages not being suitable for community priorities, culture and custom, for example someone from the focus group said “some questions are not proper for the people,” (It is hard to interpret, but this may be due to Somali translation where dialect is different by region). In future a translation panel may be required to address regional dialect disparities. There were also reports of unwanted messages (see *3.4 Challenges with educative materials*) and a mismatch of prioritisation in package contents (*see 3.5 Communities and vendors view of mVoucher distribution*).

Overall analysis from mLink analytics demonstrates that over the duration, the total number of registered beneficiaries was 104,358 which exceeded the initial target of 100,000 phone users. The transition rate demonstrates that 89,760 (86%) of the total registered phone users completed all of the sessions i.e. did not drop out. In real terms this indicates 89.8% completion of the project target. This is significantly higher than the project target of 75% from the project logframe. In addition, 95.5% in total responded to the introduction and got to the second session which is a very high retention rate. This demonstrates that despite some of the challenges, participants demonstrated the motivation to go through and complete all of the sessions.

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From past phases of the project it has been established that about 10 people share one phone, and the practice of sharing information was affirmed in the focus groups. If this is the case, it would translate into a reach of this education of potential indirect beneficiaries as 897,600. It is not possible to know that all participants will have shared the information so this is only *potential indirect* reach

Table 1 below shows session by session transition figures as obtained from the mLink online database.

Table 1: Analysis of transition through interactive sessions

Sessions	Total numbers per session				Total for both sessions	
	Polio campaign - Existing registrations - 2013		Polio campaign - New registrations - 2014		Total number of participating beneficiaries for both campaigns	
	Number of participating beneficiaries	Transition rate % of total registered	Number of participating beneficiaries	Transition rate % of total registered	Total number of participating beneficiaries	Average transition rate % of total registered
Introduction	11,223		93,135		104,358	
What Polio is/is not	10,345	92.2	89,317	95.9	99,662	95.5
How to prevent/ control	10,095	89.9	85,121	91.4	95,216	91.2
Recap/feedback	10,060	89.6	79,700	85.6	89,760	86.0

Source: mLink database January 2015

Potential for Complementary approaches to interactive SMS education

In Somali communities, there is a general trend that people are used to communicating orally or verbally – news commonly spreads through word of mouth and people want to talk and listen. This means texting is not common as an interactive communication approach and it requires a behaviour shift. Some people who received messages had a particular problem with text spam and were not convinced the information was real or genuine. The community members expressed need for further reassurances. For example in the focus groups they shared that they would like messages from elders and workshops for IDPs. In the household survey, when asked about the sources of other Polio education, NGO staff, Government officers, Mosque or Newspaper were not given as answers by any participant.

This demonstrates the need for complimentary approaches to ensure messages are communicated clearly. These might require the need to mobilise people through face-to-face meetings or workshops, get support of village leaders and elders or be reached through other channels such as radio. Use of mobilisers in markets and schools has had a great impact on propensity to register – in fact this was the most popular point of referral revealed in the household survey as 59.8% said they had been invited to register through Hijra mobilisers. Radio was the second most popular, responsible for 40% of registrations.

Mobile nevertheless has an important role in terms of preferences. Some people in the focus group expressed that they prefer mobile to radio. Women said that “(Mobile is) more flexible then other methods like radio or magazines. We prefer mobile from the radio.” Some said “We don’t have radios to listen to - we are IDPs. If we have radios, we do not have time to listen to the radio because we seek the basic needs.” Men said, “The benefits of receiving this information (through

“The benefits of receiving this information (through mobile) is that it is more flexible than other programs like radio and TV.”

mobile) is that it is more flexible than other programs like radio and T.Vs. Because the people mostly have mobile phones to receive the messages gives by Hijra." Furthermore men said, "We listen mostly to programs of society from the radio. Sometimes we listen to Polio prevention from the radio," and concluded "We prefer mobile phones compared to the radio. The mobile is portable and we take in everywhere we go." Finally, youth said: "We do listen to the local radio, especially news about politics and sports. Sometimes we hear programs about health such as Polio. Mobile phone education is more preferred then radio. Because you cannot listen to the radio every time beside the phone use every time you want. Because mobile is your hand, you can answer the program in the midnight for example."

Men and women read SMS together in Somalia, 2014. Photo: Abdirahim M. Abdurahman, Hijra

This showed that most groups prefer mobile to radio because of its flexibility, portability and convenience to respond on their own terms. It seems youth claim to listen to the radio more than other groups, meanwhile women expressed particular barriers to listening to the radio such as time and access. So it will be important to explore feasible uses radio for socialisation with certain groups so people hear about Polio from multiple sources. Rather than drawing assumptions by demographic, this emphasises the need to take a more rigorous approach to the pre-project consultation on men and women's preferences for accessing the educational material, specifically on the content and mechanisms through which this content is delivered. Reaching people by preference may involve a multichannel approach. Furthermore, this consultation around how content is delivered is linked to motivation to participate and will be important in future as one way of ensuring that people do not get turned off by over exposure or boredom.

Of mention is the suggestion by Hijra on the need and potential to explore voice options, perhaps designed in Somali idioms and the potential to consider options such as interactive voice response (IVR) where participants can dial in to listen to advice. However this was not expressed in the focus groups or survey so the community would need to be consulted before this was actioned. Hijra also added that furthermore by designing text messages to have an element of "talkability", like interesting facts more people may be inclined to pass on by word of mouth and share information on phones. When such discussions happen communities are more likely to trust and remember the advice. This is however based on assumption and anecdotal input so would require further consultation and input into design.

1.3 Relevance of mVoucher

Distributions in Somalia have commonly involved community members meeting at a certain point at a certain time to receive their entitlements. Besides the logistical challenges posed by insecurity, this conventional distribution mechanism takes significantly more time and human resources to manage. In contrast mVouchers, mean that community members do not have to go to distribution points at predetermined times, rather they visit local traders when it is convenient or suits them. Most of the time, vouchers are conditional so exchanged for predefined goods. Some voucher projects have had short turnaround from being issued to collection whereas mLink allows you to define the validity period. mVouchers demonstrate huge relevance to rethink how items reach communities and represent a power balance shift as participants can claim items on their own terms. The mVoucher component of this project, however, was the most challenging activity in reality. It demonstrated that to actualise this relevance, many factors have to be in place in terms of beneficiary sensitisation, training and trader network.

Trader involvement in mVoucher distribution

The project had some unmet needs when it came to raising the capacity of traders to help them feel empowered over the process of exchanging mVouchers for goods. The traders were trained on Skype which, for some, was the first time they had ever used this technology. Aspects of the training did not work as planned and some traders said it was conducted in a hurry.

During a follow up tele-interview, traders were asked about what they liked most about the mVoucher approach. The majority of the traders indicated that they liked the 'uniqueness' of the project. They indicated that it was 'amazing' to see how the mobile linked platform worked and talked to them via a two-way SMS exchange. When the traders were asked about what they did not like most, they indicated the frequent 'dropping' or unreliability of the system as being very frustrating. They said it was sad for them to see many people – including women queuing for long awaiting confirmation responses from the system. Such delays are bad for business too. Despite these

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challenges, the traders expressed optimism that the mVoucher approach has a big future if the bottlenecks that affected the initial stages are addressed. They expressed keenness to participate in future similar or other mobile phone based initiatives.

It was felt by a number of stakeholders that too many assumptions were made that traders would be able to automatically adopt the system. There are some barriers to adoption, such as the fact some are illiterate and the process of trying to learn the technology could be challenging if they did not get the right support. Given traders' position of responsibility in the shop, if the system goes wrong it can look bad on them and their business, so if they feel they do not have the competency there is a danger that they will give up. Furthermore, troubleshooting relied on a small team in Nairobi which could not always address all the issues in a timely fashion particularly on technical issues. In future more local capacity needs to be built to promote ownership and explore more direct linkage of technical delivery with Hormuud. These technical frustrations should be seen in the light of the current set up. This could be resolved in future, however, if traders are better prepared to adopt this process, which is currently very new to them. Looking at other successful mobile applications like mPesa, the mobile money system now widely adopted in Kenya, it is evident that technology adoption takes time and resources. These challenges can be overcome and should not be a blocker for future use.

Another issue is that the traders were requested to display their agency number in their shop to advertise their appointment as prequalified agents for the mVoucher project. The display agency numbers was very important as it was by sending this number that an mVoucher beneficiary was able to kick-start the mVoucher redemption process. Not all traders displayed this number which was largely a logistical challenge because the signs were flimsy and not laminated so may have been hidden or removed. This was a blocker to communities identifying where they could exchange items. In future there should be better branding for prequalified shops and traders should be provided with an agency number sign which is easy to display, much like mPesa agents in Kenya.

In this case, traders were reimbursed for the cost of SMS with eCash mobile money. Moving forward it will be important to demonstrate what other incentives there are for traders to adopt the system. This will help with recruiting more vendors which in this case was slow. Vendors need to have confidence in the tool and a minimum level of training and access to support.

mVoucher reach – actual numbers distribute

The initial target for WASH NFIs distribution through mVouchers was 50,000 vulnerable households. However there were major delays in the course of project implementation due to logistical challenges. The main delays from Hormuud related to lack of a dedicated technical team to address challenges in a timely fashion. As a result, the distribution approach was changed to a mixed method approach comprising both mVoucher based distribution as well as a conventional manual

distribution method. The targets were also adjusted to 5,000 NFI packages for the mVoucher method and 45,000 NFI packages for the conventional method. By end of project a total of 2,952 NFIs were distributed through the mVoucher system. The reasons this did not meet the revised target of 5,000 are explored in *3.5 Communities and vendors view of mVoucher distribution*. A total of 46,624 NFIs were distributed using the conventional manual system (see page 32). Overall a total of 49,576 NFIs were distributed during the project.

1.4 Overall Relevance Assessment

It seems that the very opportunity of reaching people remotely using mobiles due to access barriers and security risks seems to also be the very challenge with this particular initiative. In trying to engage women, men, youths and traders remotely, some steps in this project were missed to engage them fully in the purpose of messaging or the technical mechanisms of voucher exchange.

It seems that the very opportunity of reaching people remotely using mobiles due to access barriers and security risks seems to also be the very challenge with this particular initiative.

Overall this innovative project demonstrates huge potential and opportunity to reach people who might otherwise be unreachable both with education messages and mechanisms for distributions of life saving NFIs. Given the widespread use of mobile phones, coupled with limited alternative ways to reach people, a mobile phone based public health promotion approach is appropriate in a context like Mogadishu. The technology was set up to not be too disruptive or a burden on people living their lives – rather make it easier for them.

It is important to link knowledge received from the interactive sessions through SMS to action in WASH practice so communities know what to do with the information and have motivation to put advice into practice. This means extra care is needed to engage them beyond the SMS campaign to bring them on a journey to understand the value of the messages or items, to sensitise them to the importance and build trust in the system. Given the challenges of gaining remote buy in, extra support needed to be dedicated to engage people to effectively embed the service in their day-to-day approaches so communities can take value out of the messages. High completion of SMS sessions is a success, but there is a danger of “the novelty factor” wearing off if communities do not see the connection to their lives. Furthermore traders need clear training and process to give them confidence and ownership. These diverse groups should be consulted through the process to ensure content is meeting needs. UNICEF and Oxfam are happy with the technology; particularly the unique interactive opportunity for people to respond to ask questions and the promise which mVouchers show in rethinking how communities receive NFIs in the future. The set up of this project is an opportunity to rethink the way Oxfam and other actors distribute and accompany NFIs with educative information.

Women share Cholera messages, Somalia 2012. Photo: Mohamed K. Cibaar, Hijra

2. EFFICIENCY AND COST EFFECTIVENESS

2.1 Efficiency and cost effectiveness questions

- Overall, were the activities carried out in line with the original plan; if not, were the changes adequately implemented?
- Did the team structure and institutional systems support or hinder the implementation (were the systems/approaches sufficiently flexible) How effective was the partnership with Hijra? Did they have the required capacity and commitment to the project? How can this be improved in future engagements? Were sufficient resources made available at the right time to the teams on ground? Was sufficient management support provided?
- Were security and safety risks managed appropriately?
- How did the interactive educative platform perform? Were there major challenges? Were the challenges addressed in a timely fashion? What sort of support is required for the future?
- How the mVoucher did based NFI distribution work? Were there major technical challenges? What needs to be improved to make it more efficient in the future?
- What was the total cost of the response? What is the per capital cost per beneficiary? How does this compare to conventional public health promotion approaches in Somalia?

2.2 Changes to original plan

As indicated above the initial target of 50,000 NFI distributed with mVouchers and the target was revised to 5,000 to be delivered via mVoucher and the remaining 45,000 through conventional distribution. This was due mainly to complementary infrastructure and logistics which needed to be in place for the distribution and acknowledgement that more time was required to prepare traders. Even if the aim was for all 50,000 NFIs to be distributed conventionally or there was another 6 months, it would be unrealistic to reach the initial planned scale so it was positive this change was made early. In January – March 2014 the project encountered a technical problem with the mobile operator due to concerns over terrorism, so the majority of registrations took place in May and June.[3] Overall this did not impact the project too dramatically as people were registered in later months.

Although it was planned as a pilot, stakeholders have rightly pointed out that reaching 100,000 people directly was ambitious and should have had a set up to manage expectations. The project set out to upgrade the platform and scale up at same time as there was no time for small scale pilot. In future it will be important to be realistic about the ambitions and reach of this type of initiative.

2.3 Team Structure, Stakeholders and Resources

It was notable that the project incorporated multiple stakeholders, which was positive for the project and each played a fundamental role. Firstly, Hijra have been a very positive partner who must be acknowledged for an approach which demonstrates willingness to try, innovate and experiment. The Hijra team have achieved a great deal, especially considering the context and type of project. It was noted that Hijra staff had limitations in their technical capacity. However much of this was due to the project design and the technical set up which placed heavy emphasis on a few Oxfam staff project managing from Nairobi. This is limiting as it means the local partner got frustrated and demotivated when they did not appreciate the reasons for technical problems, such as the network being down. This means Hijra are not set up to implement this on their own in future. Hijra said they would like to take on more capacity and Oxfam and UNICEF need to support enhanced ownership of the local partner over the project. Technical support needs to be simple with clear guidance with a focus on a management structure that supports capacity building. This might include a dedicated Hijra project manager and development of more collective buy in and common understanding of challenges to conceptualise solutions together. Oxfam and others need to offer strong back stopping given it is not possible to be there day-to-day and work to train staff intensively given the remote ways of working.

UNICEF were an invaluable partner in the development of content, particularly in contributing expertise on WASH and Polio. In this

project, UNICEF were interested not only on uptake of Polio immunisation but pre-emptive prevention advice as well. As a content partner, they helped to structure the Polio interactive sessions. The approach of UNICEF in their role as a donor must also be commended as they understood the flexibility needed to work in context like Somalia and allowed revisions to project plans. UNICEF helped to negotiate shortcodes and were supportive of innovation through all the phases.

The Oxfam Somalia programme staff were very supportive, especially given that it can be risky to accept to work on “a guinea pig” or innovation project. They allocated resources, time and expertise. In Oxfam’s central Humanitarian Department, senior managers were very keen to see the project take off, allowing implementers to take risks and try things with the support of Oxfam’s ICT in Programme team. This team had very useful insights and helped to market the project internally, with the project manager mentioning “It is good to know Oxford is looking at ICT in Programme seriously.” It was also important to work with the logistics support team including procurement. Initially there was a lack of common understanding on the significance of the project so a workshop was held to demonstrate the advantages when logs and tech work together. It was noted that the Oxfam programme team need to be more realistic in ambitions to better reflect anticipated challenges in unique projects of this nature. UNICEF see Oxfam as a global leader in WASH and saw this as an opportunity for UNICEF to further partner with Oxfam and learn from this innovative approach. Hijra also explained that is was very good to work with Oxfam and UNICEF.

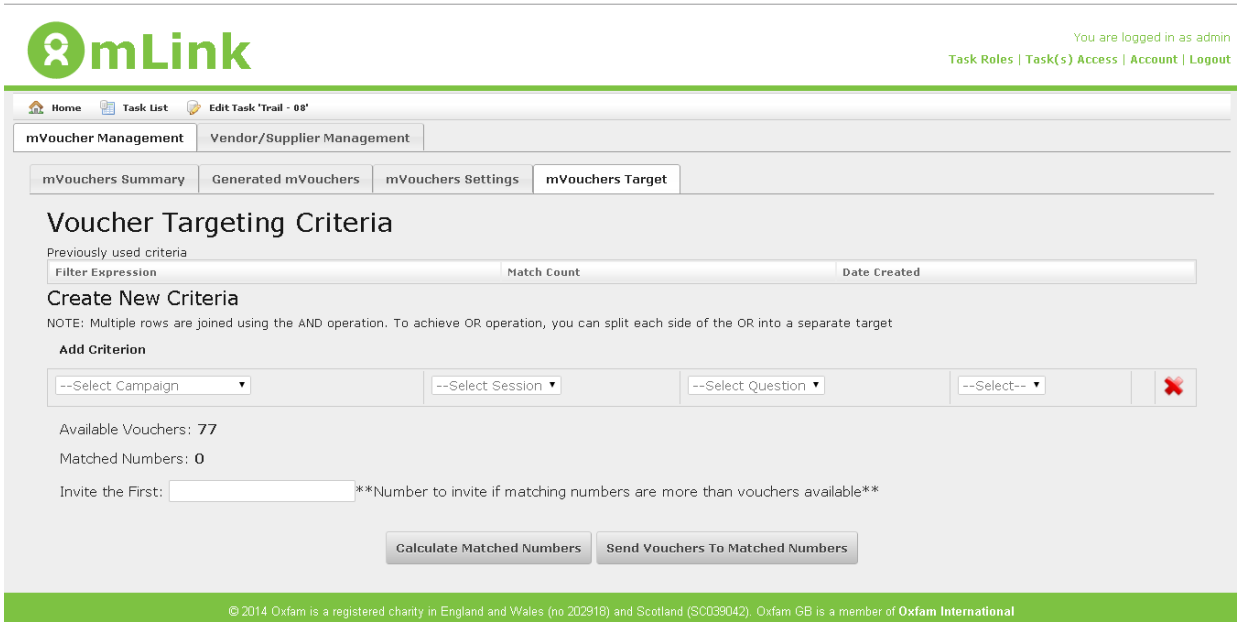
There were sufficient financial resources dedicated to the project, but the budget could have been more effectively allocated to invest in training, particularly the capacity of the traders and focus efforts on sustainability. More time and resource should be invested in trader confidence, branding and identification to support the set up and operation.

2.4 Security and Safety

The data security was well considered in this project, with limited access to the password protected and encrypted database. Even the most well developed software could be prone to hacking and, especially in a context like Somalia, the implications of phone numbers falling into the wrong hands would have severe implications. As the mLink tool is used in increasingly more contexts by more staff, the risk increases and spreads. To ensure robust methodology in future applications, the mLink project manager should work with Oxfam Information Services (IS) staff who have responsibility for data security and to seek guidance to mitigate risks on access, control and responsible data, which must also be included in future partner training.

2.5 Technical Performance Interactive Messaging

In terms of the technical performance of the interactive system, it was sometimes reported to be unreliable, with reported long wait times or delays to receive reply or sometimes receive the wrong answer or the wrong order. The automated functionality of the system was dependent on the server, in turn dependent on electricity which can be unreliable in Somalia. If down, people participating in interactive messages may not receive the following message in the series. On some occasions beneficiaries received messages from service providers such as delivery failures which were an extra burden as they can be time consuming to delete and send a usual text message alert which can be irritating. It was suggested that there needs to be a way of reminding participants of certain actions following the interactive module, so it could be beneficial to consider adding scheduled reminder functionality to mLink.



A screenshot of the mLink voucher management process

2.6 Analytics Functionality

Much of the project implementation focus did not incorporate analytics, which was one of the new functionalities which was added to mLink but not considered as a high priority in implementation. UNICEF used this function if at any time they wanted to know all data available on levels of knowledge of hand washing. The benefit of this is that at a given moment they could look at number of people who had gone through a session.

For other staff, analytics was not commonly used as it was not a priority. It could be that instead of an extra burden on time, analytics is the very thing that helps unpick what is working or not and rectify in agile way. This potential benefit of analytics has largely been an oversight and was under used. Donors often want progress to be

responsive so the opportunity of more frequent metrics that mid-term surveys or ask randomly to get to know preferences can be very positive. Questions should be added to the end of interactive messaging such as was the case with the midterm survey to check in on usefulness of information provided.

2.7 Technical Performance mVoucher

The mVoucher component had the most difficulties as some expressed they spent a long time on the list waiting and it was difficult to obtain the voucher, which can be interpreted as due to low number of mVouchers available because of the reduction down to 5,000. The electricity issues which create server delays has implications on the redeeming item function as vendors may not receive verification messages so they get frustrated and forget about authorising.

2.8 Project Costs

In terms of the cost of SMS, the delivery of messages in theory is quite cheap especially if it is possible to negotiate with the mobile operator given the potential to scale. At first, SMS cost charged by Hormuud was very high. This was after setting up the shortcode which increased SMS cost to 4 times the cost of an average SMS. UNICEF and Oxfam negotiated with Hormuud to bring down the SMS cost to $0.001/SMS. Each beneficiary required 70 messages to complete all the interactive sessions at a total cost of $0.70 (including cost of SMS reply). Each redemption of mVoucher required 4 SMS and each trader was reimbursed $1/package through eCash (mobile money in Somalia). The cost of distributing an NFI package through an mVoucher at trader level totalled to $1.004. These are not the only cost, however as we must include logistics, distribution, warehouse storage and human resourcing, etc. Overall a total of $414,316 was spent on the project.

Given we can assume that a total of 897,600 potential indirect beneficiaries were reached with the complete set of interactive education sessions, this would translate into $0.46 cost per capita. Compared to the global average cost per capita of implementing hygiene education (£1.56 or $2.29 according to DFID March 2012 review[4]), the mLink supported Polio prevention initiative is 5 times cheaper. (Dependent on the assumption each direct recipient of a message shares with 10 people.) If based on direct beneficiaries the cost is $4.6 per capita which is $2.31 more expensive. The results are even more promising when compared to the projected current cost of implementing hygiene education in Somalia. Although no analysed data exists, this should be significantly higher than the global average given all of the logistical challenges. It is challenging, however to make a generalised direct comparison with cost of face-to-face delivery, as it does not factor in what you miss from delivering remotely, especially interpersonal relationships and ability to openly ask questions.

3. EFFECTIVENESS

3.1 Effectiveness questions

- What was the impact of the activities on the target population in terms of knowledge and attitude re Polio prevention and control (positive or negative, intended or unintended)? How does this compare with baseline? How effective has the project been in terms of empowering the local communities to take action using what they have at their disposal to prevent and control Polio?
- What was the level of participation from all community segments including vulnerable groups? How did this affect project outcomes, such as the need to address equity for different groups (e.g. women, children, disabled, minorities)?
- Were there any challenges with the educative materials – in terms of length and appropriateness? Did communities face challenges reading/responding to SMS? How did they store the information – is phone memory capacity an issue?
- How do communities and vendors view the mVoucher based NFI distribution?
- Has the programme made any positive or negative changes in how WASH teams view mobile phones as an alternative community education approach?

3.2 Impact on Knowledge and Attitudes

When evaluating initiatives using mobile phones it is important to recognise that technology is a small part of the solution. Technology alone can neither be blamed for failure nor be fully credited for impact on knowledge and attitudes, but may facilitate activities to complement the way in which people receive, use and access information.

Technology alone can neither be blamed for failure nor be fully credited for impact on knowledge and attitudes, but may facilitate activities to complement the way in which people receive, use and access information.

Household survey results demonstrated 99.8% are self-reported to be aware of the Polio outbreak which revealed there is a widespread basic level of knowledge. Overall, 13.2% reported to have had cases of Polio in their household, indicating it is an issue of concern to many. Baseline studies revealed that people had previously thought Polio was air borne (See baseline report – January 2014) but the household survey demonstrated knowledge that it is related to water and sanitation. UNICEF wanted to use the project to raise awareness about new research on faecal transfer - this direct link was a surprise to many at the start, even staff.

More community members correctly identified multiple answers to questions about causes, signs and symptoms and prevention showing an increase in knowledge compared to the baseline. Table 2 shows the majority identified multiple causes correctly, and all people who did answer gave more than one answer, although it is a concern that 25.4% do not know the causes of Polio. This is a significant gap which

indicated the need for further education initiatives. Furthermore 99.8% gave all available answers for factors that favour Polio spread (Over crowded camps +people not vaccinated +poor hygiene). Table 3 also showed the majority of respondents identified all of the signs and symptoms presented with only 3.8% suggesting that they do not know the signs and symptoms. Table 4 demonstrates that the majority of respondents can identify multiple measures to prevent Polio. Notably, in another question 100% agreed that Polio can be prevented by hand washing which, while positive, must not be considered at face value as it must be recognised that there are ways Polio could be passed on even if you wash your hands. (This may have been a leading question.)

Table 2: Causes of Polio

Answer	Number	%
Bad air	0	0.0
Contaminated food	0	0.0
Contaminated water	0	0.0
Contaminated hands	0	0.0
Do not know	108	25.4
Bad air + contaminated food	71	16.7
Bad air + contaminated food + contaminated water	76	17.9
Bad air + contaminated food + contaminated hands	170	40.0

Table 3: Signs and symptoms of Polio

Answer	Number	%
Fever	0	0.0
Severe muscle pain	0	0.0
Paralysis	0	0.0
Headache	0	0.0
Flu like symptoms	0	0.0
I don’t know	16	3.8
Fever + severe muscle pain + paralysis	76	17.9
Fever + severe muscle pain + paralysis + headache	107	25.2
Fever + severe muscle pain + paralysis + headache + flu-like symptoms	155	36.5
Fever + severe muscle pain + headache + flu-like symptoms	71	16.7

Table 4: Measures to prevent Polio

Answer	Number	%
Hand washing	0	0.0
Safe faecal disposal	0	0.0
Drinking clean water	0	0.0
Good food hygiene	0	0.0
Immunization for children	0	0.0
Immunization for adults	0	0.0
Hand washing + safe faecal disposal + immunization for adults	107	25.2
Hand washing + safe faecal disposal + drinking clean water + immunization for adults	114	26.8
All answers	204	48.0

It is not clear whether this knowledge demonstrated through the household survey can be attributed to the interactive SMS education. All but one of those surveyed had heard about the Hijra SMS Polio campaign and all but one had participated. The project involved registering 100,000 people which is 1 person in every 5 in Mogadishu so it is likely most people would be aware of the initiative, but this might represent a skew in the results. Table 5 below shows self reported ways knowledge from SMS specifically was applied – the most significant being taking family members to vaccination centres and increased hand washing with soap.

Table 5: How knowledge from SMS campaign was applied

Answer	Number	%
Took family members to vaccination centre	132	31.1
Improved hygiene at home	74	17.4
Increased hand washing with soap	104	24.5
Improved drinking water safety	51	12.0
Improved food hygiene	60	14.1
Other mixed applications	4	0.9

Beyond this self-reported assessment, where we cannot even be sure this application of knowledge was a direct result of interactive SMS, it is very difficult to say how messages from the SMS campaign were taken on board or how they were used. Let alone the actual change or impact given the multiple numbers of initiatives connected to WASH and Polio ongoing congruently in Somalia. In the household survey, there were many other sources of Polio information (see Table 6) and 99.8% had received information from other sources which could be attributed to this knowledge. Given the number of ongoing Polio prevention interventions, it is difficult to isolate where knowledge came from so no direct correlation can be assumed with interactive SMS project.

Table 6: Source of other Polio information

Source	Number (Multiple options permitted)	%
Neighbour	1	0.2
Radio + TV	114	26.8
Radio + my school child	203	47.8
Radio + newspaper	107	25.2

NB. Single options were permitted to this question, but every participant gave more than one answer.

The number of household members vaccinated against Polio was 1.3 out of a total average household size of 6.3 (total 20%) and the average number of children under 5 vaccinated against Polio was 0.6 out of average household number of under 5s = 1.3 (46%). The midterm baseline survey revealed 39% of children under 5 were vaccinated so it appears this number is increasing but should be verified against other sources (such as UNICEF reports).

3.3 Participation from all community segments

From the focus groups, use of mobile phones seems to be widespread amongst both women and men. Mother and father use of items in the packet were mentioned equally in discussion, although it is hard to say concretely who benefits most. When compared to the household survey, a different story emerges with 54% who said the father most commonly used the items, followed by 28% children and 18% mother. This might be explained by Somali religious custom of hand washing or 'ablutions' before going for prayers, which men do more explicitly, often 5 times a day.

In this case, the registration process was not targeted: people heard the code to text in and register on the radio or TV. This holds risks in terms of verification since nothing would stop those registering from misrepresenting their needs in the registration survey. In some cases, as the midterm survey demonstrated, vouchers can reach those who do not need them e.g. teachers or wealthy people. Furthermore, it makes it more difficult to target different groups. In the future there is a need for more profiling, for example in upcoming potential nutrition projects which need to survey households to understand their needs before allocating items. It is important to note that gender disaggregated targeting has a trade off with privacy which must also be considered.

From the focus groups, the motivations and perceptions were very similar between men and women and they all said they had phones. Women said, "Every person or most of community have mobile phone." Women also said, "Father and Mother participated in the programme. Mother always texted and she participated in the program." In contrast, men said, "The father texts the message." So both men and women said that they use the service to learn how

Women said, "Every person or most of community have mobile phone."

Polio is prevented and cured. Women mentioned vaccinations which men did not which may be due to responsibility for the care for children, whereas men stressed more the concept of “prevention better than curing.”

Both men and women said the messages were long and heavy, with women suggesting they would prefer the series of messages to be shorter. It was women who stressed more the point that “it should be proper and in order" and men said they get “unwanted questions.” Neither men nor women mentioned any specific barriers or anything which prevents them from accessing or using the education messages

Both men and women had negative feedback on mVouchers. Women said they had “taken our materials by manually, the items took by our hands” (yet they did “rate it good” which was somewhat confusing) and said “The packages contained goods which we want.” Men said “Mothers always benefit the NFI packages” but yet in the household survey it seemed more people quoted father use of the items (as above).

Women said they specifically preferred soap and spoke about use “To wash the hands by the soap, the chlorine is used for cleaning the water in the house” and men said “It is useful for us because we wash the soap with our hands, clothes and others.” Both men and women use soap to wash hands but we can assume women take on more when it comes to cleaning water for the household.

There are not obvious barriers which affect women differently to men, other than small insights that women may take on more responsibility for cleaning water in the households and children’s vaccinations. Overall, the evaluation was not able to get feedback that robust enough to be able to draw firm conclusions but it is important that this is explored more exhaustively in future.

3.4 Challenges with educative materials

There were some challenges with the message design, the main complaint being that messages were too long. On multiple occasions, the project was referenced as “too heavy” in terms of the number of messages being sent and received, with some of the interactive campaigns involving up to 70 steps. People get tired of lots of promotion messages and there is a risk of spamming. This adds another justification for sensitisation and outreach so people know to expect the messages. More importantly, this can exacerbate barriers to engagement given the aforementioned prevalent characteristics of the audience (illiteracy, busy getting on with lives and looking after children). With some of the commonly used mobile phone models, too many messages leave limited space on phone so people are forced to delete messages, removing the ability for them to refer back. Despite high completion rates shown in table 1, future projects must be cautious to design messaging to maintain community interests given early signs and feedback of potential frustrations, especially around length and number of messages sent.

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It is poignant to note that in the first set of questions developed as part of the previous Cholera prevention project (2011), there were 100 messages which worked quite well in the trial with 98% completion. This might be explained by the fact it was delivered in the height of a Cholera emergency when people had an elevated need for water and sanitation advice. Some analysis of metrics in mLink reveals that there were high numbers of people completing sessions when Polio was at its peak, but people lost interest in participating as it became a less pervasive issue. In future careful thought needs to be dedicated to prioritisation, targeting and reasoning behind messages (including information needs correlating to different phases of an emergency.) For example, the participant could be sent an early message asking them, “would you like to receive: 10, 20 or 50 messages” or “would you like the session to last 1, 3 or 7 days” to allow them to select the intensity of the series. This might help determine when it is necessary to send more information, or in some instance to cut number of messages, as long as the modules do not lose meaning.

Furthermore, some questions included in the interactive messaging were reported as “not proper for people” This may be due to Somali translation which is different in different regions, highlighting the possible need for a translation panel in future. Others suggested it was not always clear what ‘the ask’ is (i.e. the phrasing of questions) or there are unwanted questions which were not encouraging to reply to.

The methodology of developing content of messages must also be considered and the time it takes to design questions and implement should not be underestimated. Health education is generally top down with experts who indentify knowledge. With the Cholera prevention campaign it was well known that there was misinformation on what would community most need or what would help communities most. When some education messages complement the use of items, it seems this was a success as it helps gives meaning to the messages (e.g. how long to leave water purification treatment to stand).

By combining the NFI SMS voucher with the educational messaging there are incentives as it means that participants get something tangible from the education messages that you can physically do with the items. In theory, it helps convert education into practice by mutually giving meaning to the messages and giving advice on how to use the NFI. However, given so few packages were distributed it may be confusing to people if they don't have the items to hear about the advice in the messages. This gives further support to tailoring messages in future to those who have / have not received items or at least help those who have not to identify what they can use in supplement within their home.

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Beyond that, some stakeholders expressed concern that the Polio project could have introduced more consultation in development of message content. For example showing evidence of needs analysis on what the problem is or barrier analysis concerning what is holding people back from getting value from messages, such as mother or carer perception on how a child gets ill. Beyond delivering information, consultation on the usefulness of this information must be built in.

3.5 Communities and vendors view of mVoucher distribution

In terms of logistics of mVoucher distributions, the supply chain was particularly long as goods were distributed from UNICEF in Nairobi to Hijra in Mogadishu before being sent to a distributor who then delivered items to a super vendor then vendor. This process takes a number of days and is costly. At the moment, traders cannot procure these items without the support of this type of supply chain because of: lack of trusted source of goods, no assurance of quality and check to meet public health standards, distances from traders and suppliers, no mechanisms for accountability and capacity of vendors.

Currently there are only 3 traders and 15 distributors per district and 5 super agents in Mogadishu (not covering all districts). In the early stages super agents were required to identify 3 traders. This did not happen in all the districts leading to under capacity in distribution and fewer distribution points. There was some reluctance to give all items to traders to manage risk so not many traders were registered for accountability reasons. There was some reluctance to distribute too many items due to concerns about not being able to keep track of goods distributed to traders and associated risk of loss, breakage and more complicated supply chains. This meant community members had to travel some distance as traders were not located centrally and it was difficult for community members to locate registered traders (also due to branding issues mentioned previously). From the household survey, 41.2% received NFI mVoucher invite via SMS but of those 175 people, 71.4% didn't pick the NFI mVoucher. A total of 44.8% of those who did not collect items claimed "Distance to distribution centre" as the reason and 16.8% said they were "too busy."

In focus groups, some suggested that conventional distributions have barriers of overcrowded places and distance to distribution points. Some noted that these challenges still pervade in this new mVoucher model as the distance to registered traders was still significant and the high demand on a small number of traders resulted in long queues. These barriers led some to mention that they prefer the current manual way. Future projects should not only consider more traders or centres to offer more convenient access to distribution points, but also consider creative methods such as a mobile trader who could travel between villages.

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In the household survey, 26.4% quoted the reason for not collecting packages was that items were not what they wanted and 12% said they did not need it. The items in the packet were predefined as the minimum approved WASH kit by the Interagency WASH Cluster. Every survey respondent said they would have preferred a different NFI. Of the goods they received, soap was said to be the most useful, but some expressed that they wanted food or water. It must be acknowledged that interests change according to prevailing circumstances, such that at the height of the Polio outbreak people were more engaged in applying good WASH practice. The current (late 2014/ early 2015) famine in Somalia is changing people's

priorities so there are challenges for WASH teams to consider how to ensure communities realise the ongoing need for good hand washing practice. Nevertheless, an Oxfam staff member visited an NFI WASH distribution and said there was a strong appetite to collect WASH items with maintained queues and in the household survey all respondents said that they used the NFI. In future, the need for consultation on contents of packets must be weighed up against perceptions of needs. It might be there needs to be a different prioritisation of needs by group e.g. IDP / host.

An indication of usefulness of items is whether items are sold on in markets, and as with any distribution, there is no assurance that communities will not sell goods. While it was considered as part of this evaluation methodology whether to check markets for items up for sale (due to low propensity to self-report), this is not the only project to distribute UNICEF items so evidence would not be conclusive. There is some opinion that if goods are sold, this is not necessarily a bad thing, but this could be avoided if there was a process to better target according to needs. Furthermore, this raises the conditional v unconditional cash debate and the extent to which organisation should determine items and the role actors should play in prescribing WASH items even if people do not immediately recognise the need.

3.6 Changes in how WASH teams view mobile phones

In the Oxfam Horn East and Central Africa (HECA) region where there has been high visibility on mLink as a new method of delivery, there was some scepticism about whether this approach can have an impact on beneficiaries. However growing proof of concept is increasing evidence that when the right factors are in place, approaches using mobile can be more successful. The modality and process has caught attention at Oxfam and externally and the use of mobile education and mVouchers is increasingly demonstrating its relevance, especially in the context of broader programme design. Overall it has had a positive effect on WASH teams view of mobile phones as a complementary option, but this must be accompanied with evidential analysis and effective learning on broader good practice and appreciation for contextual nuances to be convincing.

Growing proof of concept is increasing evidence that when the right factors are in place, approaches using mobile can be more successful.

4. SCALABILITY (AND SUSTAINABILITY)

4.1 Scalability questions

- What are the interest levels from communities, program teams, other WASH actors to take this to scale?
- How was the partnership with the mobile phone companies? How can it be improved for the future?

- What changes should be made/in cooperated to make the program scalable? What fashion should it take – increase in scope of in coverage or both?

4.2 Interest in scale

Before scale is prioritised, it must be considered what “scale” means and if this is what is needed. Firstly, do sheer numbers reached mean more value? Or should the focus be on quality with fewer people targeted? Many stakeholders warned “we would rather get it right than reach scale.” Somalia is a challenging context where it is very risky to scale. Complementary programming cannot be underestimated, yet barriers to face-to-face training will hinder good understanding and robust logistics.

4.3 Partnership with the mobile phone companies

To a certain extent, the project has explored the role of private sector and has so far built a positive relationship with the mobile network operator Hormuud which continues to show potential. Despite initial challenges in getting Hormuud on board in the earlier Cholera prevention project, particularly around community sensitivities and risk of misuse of the platform, a strong albeit casual relationship has been maintained. So far the motivation of corporate social responsibility (CSR) and good PR has been an incentive for Hormuud. However, if a future relationship is to be meaningful, more time is needed to negotiate on clear asks.

4.4 Changes needed for scale

In order to reach scale if this is deemed appropriate, the major barriers in project design must be tackled. In particular this includes logistics of how goods can be made more accessible for more traders. There is potential in future to explore mechanisms for traders to procure goods themselves. This would require a system of quality assurance and compliance, for example along the lines of the Kenya Bureau of Standards (KBS). This might even require legal compliance and regulation, which underpins a need for partnership with the government to play the quality control role, since no NGO can develop a licence system or hold traders responsible. This might for example be applicable in the project to work with the semi autonomous government in Somaliland and Puntland. Furthermore, traders will need support to acquire the right goods, with information about where to get supply of WASH items like ORS and soap from trusted source suppliers. Attention would be needed to overcome transport and stimulate markets to ensure available goods throughout. It would come with the incentive that traders could connect such an initiative to livelihoods to generate income and would promote sustainability. It might even be possible to explore community

members' willingness to pay for WASH or other services. Furthermore, while this project needed to pay for text messages to reduce credit as a barrier to entry, in future it might be possible to explore willingness to pay for a well designed education service which was hinted at in focus group discussions.

To reach scale, the project also needs to involve the government, including Ministry of Health around WASH in the broader design with the view towards creating a plan for future content ownership. Partners need more capacity building to ensure it remains locally owned and contextually relevant.

The project now has a database of over 100,000 users and phone numbers, categorised by district which has been identified by stakeholders as having great potential for targeting other activities. This should be treated with caution as any future messaging will need to obtain consent and be sure not to fall into the bracket of spam which could lead to loss of trust in reputation.

CONCLUSIONS AND RECOMMENDATIONS

Interactive messaging

- Mobile phones, especially SMS, are a relevant mechanism to deliver health and WASH information in Somalia, especially given the inaccessible context and requirement for remote methods of operating. There is widespread penetration and use of phones making it a commonly used and accessible tool.
- While this project needed to pay for messages to reduce credit as a barrier to entry, in future it might be possible to explore willingness to pay for a well designed service.
- Interactive messaging overall was very successful with high retention and completion rates. The risk of losing people's attention after the "novelty" factor wears off is a reminder to ensure messages are of interest or offer value.
- There were some content design issues especially with too many questions. This needs to be tailored to information needs based on the current status of the emergency or issue. Messages need to be packaged to suit different phases. The platform needs to integrate flexibility to offer different formats of relevant modules. Messages should also be designed and translated to suit different dialects.
- Complementary communication should be explored to mobilise and engage people through other channels like radio and elders so they build trust in this service from other sources.
- Communities should be consulted around the length of modules or when they want to receive messages. This should include regular check-ins on the usefulness of messages and better use of analytics functions to understand and be responsive to behaviours.

- In future evaluations should survey people about how many people they shared the message with to add evidence to assumptions about sharing with 10 people.
- A translation panel may be required to address regional dialect disparities
- It is difficult to pick out the direct contribution of SMS to overall knowledge and attitudes. Recommend more targeted user testing to work closely following participants as they go through to see what works and doesn't.
- The previous Cholera project recommended youth wanted a break from educative messages like sports alerts and this has not happened. There is a risk there is a novelty in completion of messaging. Some flexibility and creativity is needed to make health messaging more interesting.
- There needs to be some creative planning to offer opportunities for interactive messaging meanwhile handling the trade of with automation in order to reach scale. This might involve being open to the human resource requirements as a positive contribution to message design and human engagement facilitated through phones.
- Notably 25.4% in the household survey said they do not know the causes of Polio. This is a significant gap which indicates the need for further education initiatives and to ensure messages are understandable.

MVoucher

- mVouchers show huge potential for making distributions more convenient for beneficiaries. Eventually if the model works in the way it is envisaged; it would be game changer for the way conditional distributions take place. Vendors could be responsible for doing work typically done by NGOs with knock on benefits to livelihoods as they profit from distributions.
- Nevertheless there was a very high number of people who received the voucher but did not pick up the items. 2,952 NFIs were distributed through the mVoucher system which did not meet the revised target of 5,000 and from the survey 41.2% received NFI mVoucher invite via SMS but of those 175 people, 71.4% didn't pick the NFI mVoucher. A total of 44.8% of those who did not collect items claimed "Distance to distribution centre" as the reason and 16.8% said they were "too busy." The underlying reasons for this low conversion rate need to be addressed.
- From the outset the project had unrealistic expectations of the scale possible. The mVoucher system needed more thought in logistics and training of traders to raise their confidence and ownership over the process. Traders need to be offered incentives to promote further adoption.
- The logistics supply chain was very long and costly. It is possible for future options to consider traders procuring with the right support and quality assurance infrastructure.

- Traders need to be equipped with better branding, signage and marketing to help beneficiaries identify them as a qualified trader and help them to kick start the mVoucher redemption process.
- More traders are needed to reduce distances communities need to travel and increase convenience. This should include a clearly articulation of incentives for traders to sign up. The approach should consider more creative and engaging methods in new projects such as mobile traders who could visit villages.
- Consultation on package might help ensure beneficiaries receive the goods they need or target different needs by group. There is a need to further engage them in a dialogue about why selected goods are important to weigh up perception of needs.

General

- mLink needs a more formal support model with less reliance on one person. It needs guides and manuals which are user friendly.
- The technology road map needs some dedicated thought especially on server side to improve reliability.
- Better use of analytics in real time could help the project to be more responsive and understand barriers to engagement
- It is important to start small, understand context, be realistic and manage expectation before prioritising scale.
- Capacity building to bring the partner on board needs to happen from the outset so they have buy-in and are trained to support troubleshooting.
- Positive relationships and pilot with the mobile operator should be further encouraged to look beyond CSR to business model offering which promotes more ownership and involves other private sector actors for sustainability.
- The partner needed to offer more empowering opportunities to take ownership which would ensure more active use and buy in over an initiative driven by local priorities.
- A relationship with the government is on legality, content delivery and quality assurance is critical for future scale and sustainability.
- There has been significant investment in mLink from Oxfam and there is an opportunity to broaden applications. At risk of a new solution with similar functionality being sought or developed, more needs to be done to prepare for mLink roll out. Future applications must be based on consolidated gains and lessons learnt.

LIST OF STAKEHOLDERS INTERVIEWED

Oxfam

- Jesee Wainaina Kinyanjui – mLink Coordinator
- Sammy Mbogoh – Somalia mLink Manager
- Samuel Weru – Associate Country Director Somalia
- Marion O'Reilly – Head of Public Health Promotion
- Maryam Hassan – MEAL Officer Oxfam Novib
- Mercy Khamala – Programme Officer Nutrition Oxfam Novib
- Ismail Sheikh Adan – South Central Program Manager
- Abdi Maalim – Public Health Engineer
- Victoria Stott – Oxfam Funding coordinator
- Consulted: Vivien Margaret Walden – Global Humanitarian PMEAL Adviser

Hijra

- Ahmed Farah – mLink manager in Mogadishu
- Daud A Rahoy – Officer in charge – Hijra Mogadishu

UNICEF

- Charles Mutai – WASH Specialist
- Shem Okiomeri – Information Management Specialist
- Dr Chaudhary Mohd Parvez Alam – Communication for development specialist (Polio)
- Julianne Rugasira Birungi – Communication for development specialist

NFI DISTRIBUTION

mVoucher distribution

District	mVoucher redemption shop	NFI Packages
Hodan	Samawade center	599
Kaaraan	Wadani shope	220
Hiliwa	Nahreyn 3	173
Shibis	Suudi Sanca Shop	125
Howlwadag	Nahreyn 1	87
Yaqshid	Xeyle Bariise Store	24
Dayniile	Al-cadaala store	436
Waberi	Banadir store	246
Bondhere	Fatxu raxmaan shop	24
Wardhigley	Sahal shope	52
Abdiaziz	Geed lule Shop	148
Dharkinleey	Afbarwaaqo center	170
Shangani	Aboocad Shop	140
Hamarwayne	Al-canbari Store	41
Hamarjajab	Haajira Store	143
Wadajir	Alyom store	200
Kaxda	Barkulan store	124
Total		**2,952**

Manual/conventional distribution

District	Village	Distribution point	NFI Packages
Hodan	Zone K	Samawada	7,624
Kaaraan	Sanca	Wadani shope	1,760
Hiliwa	Baqarada	Nahrain 3	2,120
Shibis	Shibis	Suudi sanca shope	1,720
Howlwadag	Shantaget	Nahrain 1	1,580
Yaqshid	Jungal	Hayle barise store	2,489
Dayniile	Sarkuusta	Al adala	7,846
Waberi	Buundada	Banadir store	1,712
Bondhere	Daljirka	Fatxuraxman shope	1,500
Wardhigley	Xamarbile	Sahal shope	1,340
Abdiaziz	Liido	Gedlula	1,360
Dharkinleey	Tabeelaha	Afbarwaaqo	5,461
Shangani	Curuba	Abucadde shope	1,429
Hamarwayne	Via ageto	Al-cambari	1,717
Hamarjajab	Sheelare	Hajara store	1,374
Wadajir	Siliga	Alyom store	4,180
Kaxda	Abaadir	Barkulan store	1,412
Total			**46,624**

NOTES

[1] Internal review tabulated summary – September 2014

[2] Applications in rural settings might need further contextual analysis concerning access.

[3] See household survey – only 13.2% became involved in the period January-March. 26.8% joined before January, 16.7% April – June and 43.1% of those surveys joined after June. So the majority recently joined.

[4] DFID Water, Sanitation and Hygiene Portfolio Review March 2012 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214187/DFID_20WASH_20Portfolio_20Review.pdf

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