MatchMaker Resource Package
2019 - Health Information
Management Systems (Somalia)

Welcome!

Congratulations! You have been accepted into the MatchMaker program. We have created this resource package based on the application criteria you filled out on the Response Innovation Lab website and the interactions you had with the RIL MatchMaker in your country.

This resource package contains the top three organizations that we think offer the best solutions to your challenge. Within each of these summaries we will tell you about the organization, their key value to you, and how they meet your match criteria.

We will also share with you next steps and contact info at each of these organizations. We intend to sustain an added value relation with you, so we will keep in touch to support you and hear your thoughts and feedback.

Summary

LOCATION
Somalia

ORGANIZATION & WEBSITE
World Vision | https://www.wvi.org/somalia

SECTOR
Health

DEMOGRAPHIC
The main demographic of people benefitted by this solution will be children and pregnant and lactating women, who are mainly from IDP communities living a nomadic life in Somalia. World Vision aims to target 100.000 individuals directly through this solution.

HUMANITARIAN NEED
• Reducing child and maternal mortality among the nomadic IDP groups.
• Provide health service and monitor provided services to the mothers and infants.

PROBLEM DESCRIPTION
World Vision (WV) is seeking an innovation to solve the Antenatal care uptake, skilled birth attendance at health facilities and having children below 1 year get fully immunized. Due to protracted conflict, insecurity and nomadic lifestyle in Somalia, most households are on the move and thus mothers don't complete 4 ANC visits, most don't deliver at Health Facilities and children don't receive all recommended immunizations. WV Somalia seeks a solution to track them and reach them with the health services or link them and thus reduce both child and maternal mortality.

CONTEXT
Somalia experiences some of the highest risks of maternal deaths in the world, with the maternal mortality ratio estimated at 732 deaths per 100,000 live births.

DESIRED SOLUTION CRIETERIA

World Vision is seeking a solution that is at least at the piloted stage and that has already been tested in a similar context (in Africa). The ideal solution would both monitor the delivered maternal health services provided and remind/ promote immunization for children, especially among the nomadic populations.

The desired solution is one that is low-cost, low-tech and easy to implement and maintain. It would need low requirements of the end users in terms of skills and over all be very user friendly for both the medical staff and the mothers. WV Somalia would need implementation support from a partner who works directly with the innovation solution.

Some important factors that need to be considered in the context are:

- Insecure environment
- Low or unreliable power access
- No internet or unstable internet
- Protracted conflict
- Remote management / access issues

BUDGET & TIME

Budget: Solutions under $10,000 USD is desired

Implementation Timeline: Flexible

Overview

World Visions challenge statement was investigated by a collaborative effort of the Somali RIL, the Global RIL, George Washington University, and the Somali Disaster Resilience Institute (SDRI). This process utilized the broad networks and contacts within the Humanitarian Sector and Private Sector to source solutions that met the criteria and needs outlines in the challenge submitted by World Vision.

The request from World Vision was for a solution that would allow for remote monitoring and support for caregivers and health practitioners. The request for a system to manage health outcomes provided a large scope to explore various solutions that are all currently being implemented in the East Africa region. Local and regional solutions were prioritized in the research process. The five solutions identified ranged from technology based information management systems, to systems that leverage the priorities and incentives that communities to experience in order to build interest and loyalty to adhere to a system.

Although all the innovative solutions identified are currently being implemented in the region, only one solutions identified is currently operating in Somalia, but this system is not as mature as the other systems identified. Despite this, the Somali specific solution has been designed specifically for the context and has many advantageous features like local Somali translations and pre-established relationships with various government departments.

Medic Mobile
Advance Universal Health Coverage, open source software, open access resources, and practice human-centered and participatory design

A Loyalty Program to Mobilize and Sustain Maternal and Neonatal Health
Timely access to immunization and antenatal care services combining with a livelihood offer

TotoHealth
Registration of parents to start receiving timely text messages, schedule and send reminders, appointments, and surveys

Living Goods: mHealth
Real-Time, Tech-Enabled Performance Management

OGOW EMR
Improving the capacity of Somalia's immunization program by empowering caregivers and practitioner with digital solutions

Advance Universal Health Coverage, build open source software, invest in open access resources, and practice human-centered and participatory design.

Medic Mobile: The Community Health Toolkit by

ABOUT THE ORGANIZATION

Medic Mobile is a nonprofit organization on a mission to improve health in the hardest-to-reach communities. They build and test open-source software that supports health workers delivering equitable care that reaches everyone, including people on the move and nomadic populations. Medic Mobile serves as the technical lead and a core contributor to the Community Health Toolkit, which helps health workers ensure safe deliveries, track outbreaks faster, treat illnesses door-to-door, keep stock of essential medicines, communicate about emergencies, and more.

KEY VALUE

Medic Mobile have taken on the role as the technical steward for the Community Health Toolkit (CHT) open source project. The CHT provides organizations with resources to design, build, and deploy digital tools for community health. It includes open source software frameworks and applications, guides to help design and use them, and an active community for creation, collaboration and support. The software included in the CHT was created for people delivering care in hard-to-reach areas and work with or without connectivity. Tools built using the CHT run on basic phones, smartphones, tablets, and computers, supporting people doing critical work in communities, health facilities, and management offices.

Key Information

Medic Mobile helps partners assess opportunities for their health system, choose and configure the right tools for both service-providers and their patients.

1. SECTOR
Health

2. INTERESCTIONS
Maternal Health; Newborn Health; Developmental disabilities; technology; mhealth; Physical Health

3. FOUNDED
2010

4. KEY PEOPLE
CEO: josh@medicmobile.org

COO: jacqueline@medicmobile.org

Africa Regional Director: regina@medicmobile.org

5. LOCATION & WEBSITE
3254 19th Street, Floor Two
San Francisco, CA 94110

Also operating in Kenya.
https://medicmobile.org/

6. RESULTS & IMPACT
Medic Mobile have several publications on their impact and results the tools have given.

They can all be found here:
https://medicmobile.org/research-impact-reports

Special attention might be worth given to the case studies for maternal and infant care:
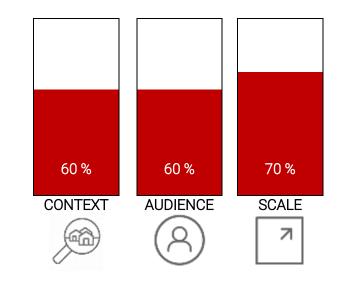https://medicmobile.org/use-cases/#mm-rose

7. KEY ACTIVITIES
Mobile technology for Health service; access to health services.

8. NEXT STEPS
SomRIL and its contacts could facilitate an introduction to Medic Mobile for further discussions.

OVERALL MATCH

CONTEXT	AUDIENCE	SCALE
60 %	60 %	70 %

IMPLEMENTATION

Difficulty:
The tools by Medic Mobile seems user friendly.

Time:
Time needed for initial implementation would be limited, with a short time required to train users on mobile app.

Barriers:
Individuals without access to cellphones and tele-services need to be reached with a supplementary method. World Vision will be required to do the needed assessment and implementation to meet this challenge themselves.

Medic Mobile is not yet implementing in Somalia, but is partnering with several organizations and solutions who are (e.g. Living Goods listed in this resource package). It might not be possible for Medic Mobile to support the implementation directly, but WV and RIL could consult the Medic Mobile team to explore a partnership

Cost:
Depends on the desired level of service.

Equitable and timely access to immunization and antenatal care services for all, while combining health services with a livelihood offer.

University of Nairobi:
A Loyalty Program to Mobilize and Sustain Maternal and Neonatal Health

University of Nairobi

ABOUT THE ORGANIZATION

Health professionals and innovators from University of Nairobi devolved the solution "A Loyalty Program to Mobilize and Sustain Maternal and Newborn Health" back in 2014. The idea is to give women/mothers an incentive to make the healthy choice. When a woman or their child shows up for their scheduled appointment, a "loyalty credit" is added to the QR barcode in their health card. Loyalty credits can be redeemed through discounts on small purchases of farm and post-harvest inputs offered by local vendors or accumulated to allow families to begin true household savings. The latter enables them to make rational decisions affecting their health and their livelihood.

KEY VALUE

"A Loyalty Program to Mobilize and Sustain Maternal and Newborn Health" is a service (hereafter referred to as the "Loyalty Program") that uses 2D barcodes (QR codes) to track and incentivize pregnant women attending antenatal care (ANC) with the goal of retaining them in care from as early as possible in their pregnancy (<20 weeks) to within 30 days after delivery to ensure that both mother and child have received essential postnatal care (PNC) e.g. follow-up visits and starter immunizations. When a woman or their child shows up for their scheduled vaccination appointment, a "loyalty credit" is added to the QR barcode in their health card. These Loyalty credits can be redeemed through discounts on small purchases of farm and post-harvest inputs offered by our partner local vendors/businesses or accumulated to allow families to begin true household savings. The latter enables them to make rational decisions affecting their health and their livelihood.

Key Information

Quick response codes to track visits for prenatal care and vaccinations.

1. **SECTOR**
Health

2. **INTERESCTIONS**
Maternal Health; Newborn Health; Economic Empowerment

3. **FOUNDED**
2014

4. **KEY PEOPLE**
Benson Wamalwa: benson.wamalwa@uonbi.ac.ke

5. **LOCATION & WEBSITE**
University of Nairobi, Kenya

Further information can be found here:
https://www.globalinnovationexchange.org/innovation/a-loyalty-program-to-mobilize-and-sustain-maternal-and-neonatal-health

And: https://savinglivesatbirth.net/summaries/2015/443

6. **RESULTS & IMPACT**
The percentage of pregnant women going to clinics before their baby's birth rose from 25% to 90%. Children delivered at home and brought to a health facility for their first immunization increased from 20% at the beginning of the project to 90% already in the first six month of the implementation. The project raised the use of vaccines from 55% in 2014 to 96% in the first half of 2016.
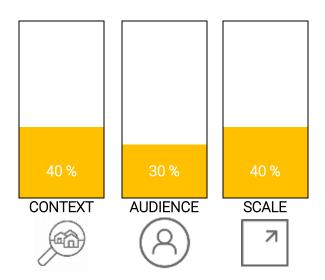
7. **KEY ACTIVITIES**
Maternal and newborn care; track and promote ANC attendance; cash/ voucher service

8. **NEXT STEPS**
SomRIL and its contacts could facilitate an introduction to the university for further discussions.

OVERALL MATCH

CONTEXT	AUDIENCE	SCALE
40 %	30 %	40 %

IMPLEMENTATION

Difficulty:
Easy to use, minimal training for installation. Further discussions needed to be had with Benson.

Time:
Some time may be required to tailor the solution to the Somali context for the purpose that meets World Visions desired outcome.

Barriers:
Unknown for Somali context.

Cost:
Unknown.

TotoHealth enables organizations and counties to register parents to start receiving TotoHealth timely text messages, schedule and send reminders, appointments, surveys and announcements to parents in a convenient and an affordable way.

TotoHealth

ABOUT THE ORGANIZATION

TotoHealth is a social enterprise utilizing mobile technology to detect child development abnormalities and improve access to maternal and child health information for the marginalized communities using mobile technology.

The overall objective of the TotoHealth mobile health platform is to improve the maternal and child health status of marginalized communities in Kenya. The platform, which targets expectants mothers and parents of children under 5, aims to increase/improve access to timely health seeking behavior in regards to maternal and child health, nutrition, hygiene and Reproductive health services. More specifically, the SMS-based platform monitors indicators on milestones to help in timely detection of abnormal growth in children below 5 years and empowering households with relevant health information and linking them to the right health care service providers for specialized care, treatment and guidance.

KEY VALUE

The automated system keeps track of each child's age or mother's stage of pregnancy to enable targeted and timely flow of information. To ensure that the marginalized are covered, the platform enables the parent or guardian to select a local language they best understand.

TotoHealth's robust SMS based platform allows the parent to also receive timely guidance to improve the health of the mother and child during and after pregnancy. The identified key values for World Vision of the solution are:

- WV can improve health outcomes and health literacy of the community by using TotoHealth's content.
- WV will be able to compose and send additional text messages to parents registered.
- Schedule reminders for clinics, vaccinations and/or appointments.
- WV can detect development abnormalities of a child and pregnancy
- WV can map out mothers due to deliver and communicate/avail resources to ensure safe deliveries.
- Analyze data collected from parents to enhance decision and policy making

Key Information

SMS and voice technology to help reduce maternal mortality, child mortality and detect developmental abnormalities in early stages.

1. **SECTOR**
Health

2. **INTERESCTIONS**
Maternal health; newborn health; developmental disabilities; technology; mhealth; physical health

3. **FOUNDED**
2014

4. **KEY PEOPLE**
Official Contact: +254 (0) 708 173 467
info@totohealth.net

Direct contact to CEO: +254 (0) 720 606 167

5. **LOCATION & WEBSITE**
Nairobi, Kenya (Main Office)
Suite C803, Astrol Building,
Exit 7, Thika Road, Nairobi

https://totohealth.org/homepage

6. **RESULTS & IMPACT**
Over 15,000 parents registered to the TotoHealth platform. To ensure that adequate impact is achieved, it has been integrated into the health care delivery systems of 6 county governments, and 5 local non-governmental organizations in Kenya.

TotoHealth conducted a study to assess the impact of the use of its mobile technology. The results showed that 87% parents who are registered with TotoHealth attend the recommended 4 visits during pregnancy compared to a baseline of 47%. Findings showed that the numbers of parents delivered at the health facilities grew from 43% in the baseline to 92% after the implementation of TotoHealth. The number of parents who completed the immunization schemes increased by 5.4% because of TotoHealth interventions.
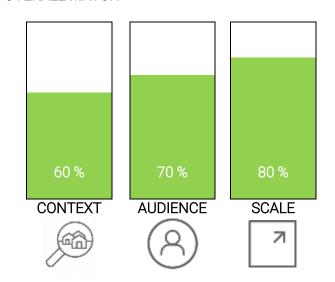
7. **KEY ACTIVITIES**
Health service; access to health services

8. **NEXT STEPS**
SomRIL and its contacts could facilitate an introduction to TotoHealth for further discussions.

OVERALL MATCH

60 %	70 %	80 %
CONTEXT	AUDIENCE	SCALE

IMPLEMENTATION

Difficulty:
The TotoHealth support the implementation, but as the solution is very user friendly is the further use of the service up to the World Vision team.

Time:
Time needed for initial implemation would be limited, with a short time required to train users on mobile app.

Barriers:
Individuals without access to cellphones and tele-services need to be reached with a supplementary method. World Vision will be required to do the needed assessment and implementation to meet this challenge themselves.

Cost:
The cost is depended of the number of parents targeted. The prize for 0-1000 is 288UDS, for 1000-2000 users it is 577USD and for 2000-3000 users is 1155 USD. So depended on the scale, the solution is within World Visions announced budget.

Real-Time, Tech-Enabled Performance Management.

Living Goods: mHealth

ABOUT THE ORGANIZATION

The aim of Living Goods is to digitally empower thousands of government community health workers (CHWs) to provide accurate care and prompt follow-ups by using a smartphone app that details every patient contact, enables real-time performance management of health workers in outlying villages, and detects early outbreaks.

KEY VALUE

Working in partnership with Medic Mobile, Living Goods created the Smart Health app that uses a basic clinical decision support system (CDSS) to ensure consistent and accurate diagnoses and smart workflows for pregnancy care, childhood diseases, nutrition, family planning, and immunization tracking. The app also allows CHWs to collect data that is compatible and integrated with government District Health Information Software 2, an open-source software platform for reporting, analysis, and dissemination of data for many national health programs that support decision-making for better and more targeted service delivery.

Living Goods is testing the integration of immunization services into its core MNCH program, including testing several incentive and demand generation innovations to drive timely and complete uptake of immunization. This is done in partnership with Gavi, The Vaccine Alliance and Last Mile Health

Key Information

Medic Mobile helps partners assess opportunities for their health system, choose and configure the right tools for both service-providers and their patients.

1. **SECTOR**
Health

2. **INTERESCTIONS**
Innovation

3. **FOUNDED**
2012

4. **KEY PEOPLE**
Tel: +254 728 630 936

Contact page: https://livinggoods.org/contact-us/

5. **LOCATION & WEBSITE**
NAIROBI, 15 Gem Lane,
Kileleshwa

https://livinggoods.org/

6. **RESULTS & IMPACT**
Living Goods are very thorough with tracking their impact. It is recommended to have a look at their result side:
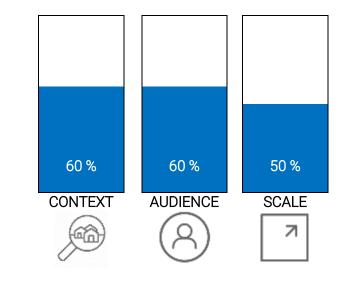https://livinggoods.org/what-we-do/results-evidence-and-research/our-results/

7. **KEY ACTIVITIES**
Mobile technology for health service; access to health services

8. **NEXT STEPS**
SomRIL and its contacts could facilitate an introduction to Living Goods for further discussions.

OVERALL MATCH

CONTEXT	AUDIENCE	SCALE
60 %	60 %	50 %

IMPLEMENTATION

Difficulty:
Seems well established, but would need to spend time contextualizing system for Somalia.

Time:
Unknown.

Barriers:
Dependence on volunteers.

Cost:
Unknown.

Improving the capacity of Somalia's immunization program by empowering caregivers and practitioner with digital solutions

OGOW: EMR

ABOUT THE ORGANIZATION

OGOW's Electronic Medical Records (EMR) solution is a partnership between the Somalian public health facilities and the Canadian Heath service. It is designed for hospitals and clinics in Somalia and allows the services to analyze trends in order to prepare/prevent outbreaks and epidemics

KEY VALUE

The solution is based on user research done in Garowe, Mogidishu and Kismayo. The aim of the tool is to empower caregivers to play a more active role in the well-being and health of their children. Through the digital solution they have access to immunization schedules, are provided with timely alerts and information about outbreaks of infectious diseases. OGOW provides the users with information videos in both English and Somali about relevant topics such as vaccines, diseases. A Fourth feature is a real-time response service, where questions can be asked by the caregivers and answered by health workers. holds a formal partnership with Federal Ministry of Planning, Investment, and Economic Development.

The practitioners have access to patient information, here under diagnoses, lab results and medications. They have access to an immunization reporting tool that ensures successful administration. Furthermore, is it possible to send SMS reminders for scheduling immunization to caregivers.

Key Information

Transparent solution based on needs in Somalia tailored for caregivers and healthcare workers.

1. **SECTOR**
Health

2. **INTERESCTIONS**
Electronic Medical Records; practical management systems

3. **FOUNDED**
2019

4. **KEY PEOPLE**
Founder CEO: khalid@ogowemr.com

5. **LOCATION & WEBSITE**
https://www.ogowemr.com/

6. **RESULTS & IMPACT**
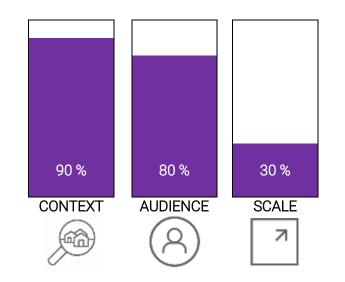OGOW EMR won the Open IDEO challenge 2019, and got Gates funding and 6 months of technical support.

7. **KEY ACTIVITIES**
Mobile technology for health service; access to health services

8. **NEXT STEPS**
SomRIL and its contacts could facilitate an introduction to OGOW EMR for further discussions.

OVERALL MATCH

CONTEXT	AUDIENCE	SCALE
90 %	80 %	30 %

IMPLEMENTATION

Difficulty:
Easy to use and the solution is developed to include local languages. Customized options available.

Time:
Unknown.

Barriers:
Caregivers and healthcare workers needs access and knowledge about simple mobile use.

Cost:
Unknown.

Additional Insights

The following additional insights were explored as part of RIL's research process. While these were not deemed to be strong matches with the challenge, they are nonetheless interesting aspects that WV may like to explore in future or as complementary options.

SisiTech
https://sisitech.com/
SisiTech is currently in the process of developing a solution that will transfer paper based recording in health clinics to an electronic service that allows clinics to share information when approved by the client. The solution is yet to be piloted, but will allow greater insight to patients' history and services given elsewhere. The solution is currently named FluxAfya, but this might change.

Due Diligence

The solutions presented as part of this Resource Package are provided based on the criteria that the MatchMaker applicant submitted in their application to the Response Innovation Lab (RIL) MatchMaker online tool. Wherever possible the RIL has provided solutions which align to the challenge and requirement criteria provided by the requesting agency. The suggested solutions are by no means an exhaustive list but provide insight and research into the challenge.

Risks and Due Diligence
As with all humanitarian programming, risks exist and the need for comprehensive due diligence is required. Before implementing any program, it is the responsibility of the implementing agency to undertake robust due diligence processes.

Humanitarian operating environments are complex, local dynamics can be fluid and understanding the local context is paramount in such environments to ensuring that humanitarian standards are reached and quality programming is delivered. It is for the implementing agency to consider in detail the local context, carry out due diligence checks, engage with local communities for feedback and to manage risks associated with programming. And it is within this context that this MatchMaker Resource Package is provided.

Further Support
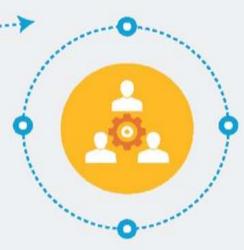
For further information and support please contact:

Nishant Das, Somali Response Innovation Lab (SomRIL) Manager
Email: somalia@responseinnovationlab.com

SERVICES WE PROVIDE

- Discuss areas you want to improve, for better understanding and solutions
- Find innovations you can use in country
- Find innovators that you can work with in country
- Access innovation forums
- Join a community of innovators

1 CONVENE

- Refine your humanitarian challenge
- Search our networks for existing solutions, globally and locally
- Be paired with tested innovations that meet your challenge
- Get evaluation and implementation support

2 MATCHMAKER SERVICE

- Access funding pathways
- Get referrals to global innovation networks
- Plan your financial model
- Get support with monitoring and evaluation of innovation projects, business models ethics, intellectual property and so much more.
- Test, pilot, and scale innovations

3 SUPPORT