VillageReach COVID-19 Response

• Getting Products to People
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  • Immunization Data Management Systems
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  • OpenLMIS for COVID-19 Response

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VillageReach works with ministries of health and their partners across sub-Saharan Africa to ensure vaccines and other health commodities are available even in the most difficult-to-reach places. In the month of March, we supported the distribution of vaccines and health commodities to more than 300 health facilities in hard-to-reach areas. The direct delivery supply chain VillageReach pioneered is being used to deliver products essential for routine health care as well as PPE and other products needed for COVID-19 response throughout sub-Saharan Africa.
PPE Inventory Management for CHWs

Description:
VillageReach developed a **PPE inventory management tool** for the Government of Liberia (GOL) that can be updated regularly as new stock and data come in.

VillageReach is also supporting the government of Malawi in the **distribution of PPE** to all districts in the country and helping the government use logistics data, through OpenLMIS, to forecast utilization of these and other essential medicines during outbreak clusters and set action plans accordingly.

Results:
- Data informed procurement decisions to ensure sufficient stock of the needed types of PPE are available for use and distribution
- Visibility into storage location of PPE products throughout the country enabling GOL to re-distribute products equitably across counties
- Vital PPE stock replenishments completed in all districts in Malawi right after first confirmed case of COVID-19

Focus Geographies:
- Liberia (in progress)
- Malawi (in progress)
Description:
Accessing sub-national data and below is essential for governments to get vaccines where they are needed most. Robust data systems that can quickly digest data from multiple sources such as logistics management, health service delivery, and electronic immunization registries are central to this response-effort.

Results:
- In Mozambique, the PAV dashboard integrates health service delivery, supply chain, and financing data to inform the government on what has been the impact of COVID-19 lockdowns on vaccinations and predictive-planning for potential outbreaks of other vaccine-preventable diseases.
- In DRC, five provinces can access a vaccine supply chain dashboard which details facility-specific product inventory levels over time, duration of stockout events, and predictions for which vaccines are at risk for stockouts.

Focus Geographies:
- Mozambique
- Democratic Republic of Congo
Predictive Analytics & Machine Learning Support

COVID-19 Messages detected though Machine Learning process

Examples of text messages with insights from health workers received during pilot implementation

- Machine Learning using Health Worker Messages
- Predictive Analytics for Disease Modelling

Description:
VillageReach is partnering with Macro-Eyes, a machine learning firm, to engage with frontline health workers about health changes in their hyper-locale communities. The dataset will yield rich insights about disease patterns and influence government’s responsiveness to COVID-19 and other emerging health needs.

VillageReach is also partnering with the Institute for Disease Modeling (IDM) to utilize epidemiological disease modeling and machine learning tools for predicting COVID-19 transmission within countries using multiple datasets, including hotline data.

Focus Geographies:
- Mozambique (established, looking to scale)
- Côte d’Ivoire (in progress)
- Malawi (in progress)
As lower- and middle-income countries in Africa, Asia and Mesoamerica prepare to respond to a surge in patient load, they will need to quickly and effectively manage their supply chains to ensure adequate availability of supplies including personal protective equipment (PPE), test kits and clinical care equipment (oxygen therapy, ventilators, etc.). VillageReach is partnering with the Clinton Health Access Initiative (CHAI) to help rapidly deploy a cloud-based, free-to-use version of OpenLMIS to support critical supply chain management functions and achieve end-to-end visibility for COVID-19 commodities.

Expected Results:
- Deployment of a minimum viable product (MVP) to minimize setup, deployment and maintenance time and effort with support for stock management, requisition, delivery confirmation, equipment management and dashboards.
- Improved visibility into available COVID-19 related commodities and equipment for country adopters
- Increased efficiency in ordering, resupply and redistribution processes with data-based decisions
- MVP deployment will be followed by rapid application development to add functionality and potentially integration with other key systems, such as warehouse management systems, to provide more automated processes and better end-to-end visibility.

Focus Geographies:
LMICs in Africa, Asia and Mesoamerica – visit OpenLMIS for details.
Maintaining primary health care services during an outbreak is important to keeping preventable diseases from creating additional long-term impacts beyond the outbreak itself. COVID-19 prevention measures that limit mobility make it even more critical for ministries of health to use all the tools at their disposal to provide information, help with continuity of care and speed up test results.

VillageReach is building on the platforms we’ve created to address these challenges and help ministries of health use innovative methods to make sure that primary health care services reach everyone.
Information and Awareness

Description:
As 2019 Gavi INFUSE Pacesetters, VillageReach, Praekelt.org and Viamo are partnering to rapidly expand the functionality and geographic scale of health hotlines and AI-powered chatbots to provide critical COVID-19 related information to communities in Malawi, Mozambique and DRC. We are using multiple channels and technologies that integrate with each country’s infrastructure and include: mobile messaging, interactive voice messages (IVR), WhatsApp with chatbots, voice messages in local languages and hotline operators. We are providing remote training by phone for health workers and developing dashboards that provide the government with data to tailor rapid response plans.

Results:
- CCPF (Malawi’s National Health Hotline) is expanding capacity rapidly. Since April 2nd, nearly 50% of the callers who accessed pre-recorded messages chose COVID-19 topics. While COVID-19 messages remain the most popular there is also an overall health seeking behavior increase.
- AloVida (Mozambique National Health Hotline) will be upgraded with an IVR-capable call center to add capacity and allow callers from all 3 major telecom providers to reach this service for free.
- We are providing remote training for health workers with a goal to reach 50,000 CHWs with IVR and SMS/MMS training modules in the first phase of training.

Focus Geographies:
- Malawi (established)
- Mozambique (in progress)
- Democratic Republic of Congo (in progress)
Ride-Sharing for Lab Sample Transport

Description:
VillageReach is actively supporting the government of Mozambique in implementing a ride-sharing sample transportation solution, Sample Taxi, which will contribute to government efforts to scale up COVID-19 testing and minimize spread of disease.

Expected Results:
- Sample Taxi will ensure that COVID-19 samples are collected, transported, tracked and delivered to the referral lab.
- Test results turnaround times are as quick as possible.

Focus Geographies:
- Mozambique (in progress)

Screenshot of Sample Taxi App sample pick-up workflow