



Real-time **Reporting** using Mobile App by Community Health Volunteers in Siaya County, Kenya

County:	Siaya		
Sector:	Health	Sub-sector/Theme:	Community Health Services
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Target Audience:	County Governments, County Departments of Health, Health-focused Non-Governmental Organizations		
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Context and Challenge

Siaya County's health sector is mandated to promote and participate in the provision of integrated and high-quality curative, preventive and rehabilitative services that are equitable, responsive, accessible and accountable to all. The key achievements of this sector include reduction of under-5 mortality from 227/1000 in 2008 to 159/1000 in 2014 and infant mortality from 142/1000 in 2008 to 54/1000 in 2014. The sector has also seen increased immunization coverage for under-1 year old from 60% 2008 to 80% in 2014.

Despite these achievements, the sector faces numerous challenges which include late reporting of community health data, poor infrastructure for service delivery, and inadequate qualified health personnel. The HIV prevalence stands at 17% against the national average of 6.4% and maternal mortality is at 488/100,000.

The late reporting by Community Health Volunteers (CHVs) was aggravated by several factors such as unavailability of the Ministry of Health (MoH) tools: 513 and 514. In some cases, by end of the month, some CHVs would not be available for the data collection, hence the health sector would miss some key indicators such as maternal deaths. This late reporting compromised the accuracy of the data to improve the health status in Siaya County.

In the medium term, the sector addressed these challenges through partnering with UNICEF and Medic Mobile organization to improve the reporting of health data. This partnership, resulted in the use of the Medic Mobile App (currently known as the MoH Siaya App) by Community Health Volunteers (CHVs) for timely reporting of health data from the households. The integration of the MoH Siaya App followed its success in various areas, including the Millennium Villages Project in which CHVs reported health activities using smart phones. A Community-based Organization (CBO) in Ugunja called Community Resource Centre was using 30 CHVs to report on health issues using mobile phones. Likewise, in Karemo Ward located in Alego Usonga Sub-County, World Vision supported CHVs to report on health issues using mobile phones. As a result, the Siaya County administration saw the need for real-time reporting of health data in the entire County. This resulted in the incorporation of Medic Mobile in the reporting of community health data through mobile technology.

The role of the CHVs in the MoH Siaya App is to collect health-related data at the household level on a monthly basis. The data collected includes Antenatal Care (ANC), Postnatal Care (PNC), Immunization, Integrated Community Case Management (ICCM), Family Planning, Nutrition, Community Based Disease Surveillance, HIV/AIDs, and Eye Health Care.

Response and Actions

All the existing 2148 CHVs were enrolled in the implementation of the MoH Siaya App. Community Health Assistants who are their supervisors, were taken through a three-day Training of Trainers (ToT) session to familiarize them with operations of the App.



The *MoH Siaya App* has two main components: the *inbuilt App* used by the CHVs on household visitation and the *Klipfolio App* used by the Community Health Assistants (CHAs) for supervision of the CHVs. At the highest level of supervision, is the County Health Management Team, which can access data from all the sub-counties.

The homegrown MoH Siaya App was then piloted in two sub-counties and later scaled up to all the six sub-counties in Siaya. The information from the App is used by the sub-county focal persons and the Health Management Team (HMT) for planning and implementation of health activities during dialogue days. These health activities include provision of medical supplies based on the number of community members ailing from a specific ailment, and to monitor and evaluate the health indicators from the dashboard of the App for immediate action. From the data, CHVs are able to refer community members to health facilities.

In addition, possible fabrication of data by the CHVs is taken care of through regular spot checks by the CHAs and sub-county focal persons.

Outcomes and Results

Through the use of the App by the CHVs, the incidence rates of diseases such as diarrhea have reduced. The CHVs provide essential treatment of some common ailments at the household level. Some of the treatment provided includes administration of AL (an approved treatment for uncomplicated malaria among adults and children), Oral Rehydration Salts and Zinc for diarrhea, and referrals for suspected pneumonia cases. The App also has a reminder schedule for PNC and Immunization and has also led to real-time monitoring of CHV activities. The App has also enabled early identification of expectant mothers for utilization of ANC and deliveries by skilled health workers.

Lessons learned (Benefits/Challenges)

- The initial version 2.14 of the App was slow in loading the data. This was managed by upgrading the app to version 3.3
- Loss or malfunctioning of the smart phones has been taken care of by ensuring replacement by the respective CHV.
- The App enables CHVs to collect data in network-constrained areas and upload into the system whenever network is available.
- The App enables identification of CHVs who are weak in reporting. This is being managed by establishment of support groups (3-4) CHVs who assist one another.
- Not all indicators in MoH 515 are captured in the MoH Siaya App.



Recommendations (What can other counties learn?)

- The need for inclusion of key partners in the identification and utilization of specific indicators is important. For instance, Care Kenya which has a specialty in nutrition for the related indicators, has expressed interest in reporting using MoH Siaya App.
- The CHVs require proper training on data collection and utilization of the App.

- The MoH Siaya App should be integrated with the District Health Information System (DHIS2) since the transfer of community health reports from the MoH Siaya App is currently manual.

Conclusion

- To improve service delivery in the community, you require real-time reporting and quick response to identified health needs.
- Information is power and so is timely reporting of health issues.