



# TechnoHealth Surveillance Newsletter



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## Editorial address

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From Editors' desk

Dear reader,

The Editorial Committee welcomes you to Volume 4, Number 3 & 4 of the *TechnoHealth Surveillance*. In this issue, we share the following:

- Strategic initiatives to make disease surveillance tools interoperable
- Strengthening community level event-based surveillance
- Supporting frontline health workers with eHealth
- SACIDS shares its research, surveillance and training activities

We look forward to your feedback and comments on this and other issues of *TechnoHealth Surveillance*.

Kindly share with us stories on health-related events occurring in humans, animals and environment for the sustainability of our newsletter.

Enjoy your reading!

## Towards AfyaData-EMA-i-SILAB interoperability for improved surveillance

International Health Regulations and the World Organization for Animal Health (OIE), mandate the flow of information from the primary sources of events to global level to ensure national and global health security. Sub-optimal performance of surveillance systems has been associated with their poor linkage with community level. Community event-based surveillance (EBS) has been underscored as important component of early warning system for early containment of disease outbreaks at the source before they spread further into a regional epidemic or become a global pandemic threat.

To enhance protection of humans and animals against infectious diseases, SACIDS Foundation for One Health, Ministry of Livestock and Fisheries (MoLF) in Tanzania and the Food and Agriculture Organization (FAO) of the United nations have initiated the process to complement their strengths on event-based surveillance enhanced with laboratory investigation.

Initial discussions made with the MoLF and FAO country office in Tanzania, and FAO Headquarters in Rome Italy identified collaborative opportunities and described the road map to a shared platform between Afyadata (<http://afyadata.sacids.org/>), EMA-i (<http://www.fao.org/3/a-i4853e.pdf>) and SILAB for Africa (<http://www.fao.org/ag/againfo/programmes>

[/en/empres/news\\_131014.html](#)), which are mobile/web apps designed to enhance surveillance at different levels. In their deployment strategy in Tanzania, EMA-i starts from district level to National and Global levels (EMPRES-i) and covers mainly animal domain targeting veterinary officials as point of data capture. On the other hand, AfyaData deployment starts at community level, focusing mainly on syndromic surveillance and covers human, animal and environment domains. SILAB for Africa is Laboratory Information Management System that supports veterinary laboratories to track samples from submission to testing and reporting and can facilitate the linkage between diagnostic results and response in the field.

The great degree of similarity between the three apps in terms of technical features provides permissive environment for their inter-operability to enhance linkage of animal health events from community to global scales.

To advance through the road map towards inter-operability, the technical delegates from MoLF, FAO country office in Tanzania and SACIDS met in Morogoro on 12<sup>th</sup> March 2019. MoLF was represented by the Director of Veterinary Services (Dr. Hezron Nonga), and its EMA-i focal person (Dr. Makungu Seleman). FAO-Tanzania was represented by Drs. Mtui Malamsha

(Epidemiologist/EMA-i focal person), Ole Nesele (Value chain expert) and Salu Raphael (Laboratory expert). SACIDS was represented by Prof. Mark Rweyemamu (Executive Director), Dr. Filomena Namuba (Programme Manager), Eng. Eric Beda (Regional ICT specialist) and Dr. Calvin Sindato (One

Health Epidemiologist). During the meeting important milestones were described. As we go to press the Director of Veterinary Services, who acknowledged and pledged for timely interoperability of the three apps, has written a commitment letter to officially initiate the process.

## Strengthening of event-based surveillance in Mvomero



Disease outbreaks typically erupt at community level suggesting that participatory community-based surveillance would enhance early detection, reporting and risk management of signals, rumors or events at the source before they turn to outbreaks. Having recognized this, SACIDS Foundation for One Health has been strengthening community-level event-based surveillance by empowering the community members to assume active role in the detection and reporting of health events from human and animal populations and their environment.

To expand the workforce further, SACIDS has trained additional 80 Community Health Reporters (also known as Community Health Attendants or Community Health Workers) using

One Health approach in Mvomero district of Morogoro region, eastern-central of Tanzania.

The training was conducted collaboratively with the District Medical Officer, District Veterinary Officer and community-based surveillance coordinator from April 1-12, 2019. Trainees were drawn from 10 wards of Mvomero. They were trained on how to recognize clinical manifestations of epidemic prone priority human and animal diseases, their prevention and control measures.



The training package included theory and practical sessions on the application of Information, Communication and Technology (ICT) tools in event-based surveillance, ethics and best practices during collection and submission of reports of health events to relevant authorities and feedback communication.



All trainees were provided with android phones installed with *AfyaData*, which is a mobile phone digital surveillance tool designed for capturing and reporting of health events from community and provision of feedback.

In addition, they were trained on how to refer patients to health care facilities and were provided with referral forms for this purpose. The trainees-specialist *WhatsApp* group network was established to facilitate sharing of experience, challenges and solutions.

The trained individuals were provided with certificates of participation and letters of introduction to community leaders and other stakeholders of community-level EBS.



## SACIDS on eHealth initiatives with frontline healthcare workers

Based on the fact that 95% of world population has cellular network coverage and 500 million people in Africa already are using mobile services, and the projection of 660 million inhabitants of the continent to own smartphones by 2020, the Pierre Fabre Foundation (<https://www.fondationpierrefabre.org>) has been motivated to support initiatives that use eHealth technology to improve health. As the eHealth solutions help overcome economic, geographical and social barriers to health care access and compensate for the shortage of medical personnel, the Pierre Fabre Foundation is helping to develop and make these solutions known.

Pierre Fabre Foundation, is a State-approved charitable organization since 1999, operating to improve access to medicines and quality healthcare in the South. The Foundation initiatives are grouped into four distinct orientations: (i) Training drug specialists; (ii) Combating sickle cell disease; (iii) Access to quality health care; and (iv) Tropical dermatology. The Foundation has also been working in the realm of ehealth since 2015.

The realm of eHealth is broad in scope, encompassing telemedicine, awareness and prevention through mobile applications that promote health, monitoring patients and epidemics via electronic medical records and much

more. Such technology also makes it easier to manage health data and train caregivers through e-learning via mobile phones.

Since its inception in 2008, SACIDS Foundation for One Health (<http://www.sacids.org/>) recognized the eHealth potential and adopted use of digital technology to enhance early detection and risk management of health events. SACIDS through support from Ending Pandemics has designed a digital app branded *AfyaData* (<http://afyadata.sacids.org/>) for this purpose. The app is powered by knowledge repository that clinicians could consult during clinical assessment on most likely disease condition based on clinical manifestations of patients.

In responding to recent call on eHealth supportive initiatives from Pierre Fabre Foundation, SACIDS submitted a proposal titled "Promoting Proper Management of Zoonotic Diseases through e-based One Health Training of Frontline Healthcare Workers" based on utilization of the *AfyaData* platform. The SACIDS initiative has been selected for the 2019 prize awards of the Global South eHealth Observatory. Professor Esron Karimuribo (the founder of the initiative) will be attending the Conference of the Global South eHealth Observatory in France in early July 2019, during which the awards ceremony will take place.

## SACIDS shares its research and training activities during the 7<sup>th</sup> EAC Health and Scientific Conference

East African Health and Scientific Conference (EAHSC) is an East African Community (EAC) biennial event convened in East Africa by the East African Health Research Commission in collaboration with a host EAC Partner States. The EAHSC contributes towards strengthening regional cooperation in health. Hosting of the event is rotational to each of the Partner States. The 7<sup>th</sup> EAHSC was held in Dar es Salaam Tanzania from March 27-29, 2019. The main theme of the conference was “Technology for health systems transformation and attainment of the UN-Sustainable Development Goals”. The event brought together delegates from within and outside the East African region to share the research findings and experience.



SACIDS Foundation for One Health participated in the preparation of the event and shared its research and training outputs. Professor Eron Karimuribo presented a key note speech on Technologies and Approaches for Disease Surveillance, Outbreak Detection and Response and; Cross-border Mobility and Disease Tracking. Dr. Calvin Sindato presented on Digital Technology and One Health to enhance disease surveillance and Community Health Security in Africa. He also presented on Technological advances for strengthening One Health in East Africa Community Partner States.



### Key Partners:

