e-Health Bulletin

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eHealth Policy Formulation

By Mr. Moses Bagyendera, WHO-Uganda

The World Health Organization defines e-Health as the combined use of electronic communication and information technology in the health sector. In practical terms, e-Health is the means of ensuring that the right health information is provided to the right person at the right place and time in a secure, electronic form to support the delivery of quality and efficient healthcare.

In Uganda, health information is collected and disseminated through radio, television, telephone, computer, portable disc players, internet and other digital technologies. These channels enable services such as mobile telephony, text messaging, teleconferencing, electronic mail and video-conferencing to facilitate delivery of health care services. In 2005, the World Health Assembly (WHA) recognized e-Health as the way to achieve cost-effective and secure use of information technologies (ICTs) for health and related fields.

The WHA urged member states to consider drawing up long term strategic plans for developing and implementing e-Health services and infrastructure in their health sectors.

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To successfully prepare these e-Health masters plans, close infrastructure in their health sectors. To successfully prepare these e-Health masters plans, close cooperation between healthcare and telecommunication professionals is essential as well as infrastructure sharing to reduce costs and integration of security and privacy aspects are among the strategic issues.

Participants at eHMIS workshop

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ICT has revolutionized the production, market access and distribution of goods and services all over the world. This has led to development of new business models leading to fundamental changes in the way enterprises related to consumers.

The Internet, web based technologies and social media have led to new communication modalities that have forced traditional mass media such as TV, radio and newspapers to devise new strategies and alternative ways to remain relevant in the health sector.

In Uganda, ICT plays a major role economically, politically, socially and culturally. ICT also relates to the human right of health care and facilitates freedom of expression and the right of access to information.

The government of Uganda has recognized that ICT has become a key enabler of economic and social transformation as clearly articulated in the National Development Plan II (NDPII), in which ICT has been identified as one primary growth enablers.

In the health sector, ICT facilitates generation and sharing reliable, timely, high quality and affordable health care information. It also promotes continuous medical training, education and research while respecting and protecting peoples rights to privacy.

WHO and the International Telecommunication Union (ITU) have supported policy formulation to aid the protecting people's rights to privacy.

WHO and the International Telecommunication Union (ITU) have supported policy formulation to aid the e-Health frameworks in various countries.
According to ITU, the implementation of e-Health systems and services particularly in developing countries is a challenge international, national and district levels. There is need for guidance on an approach and methodology that bring success to all levels.

Drawing on experiences and lessons learned and considering progress in technology as well as the improving climate for investment and operations, it is now possible to put forward an initial outline of a general methodology for ICT in the health sector. This outline should make it possible to avoid costly errors and enhance the efficiency of health systems.

Implementation must be based on clear appreciation of the country's current and future public health and healthcare needs and on action plans to use ehealth technologies to meet health care priorities in the long run. The plans should include the public, not-for-profit organizations and the private sectors and structured in a business format approved by all stakeholders.

If these conditions are met, there will be increased return on investments, successful long-term impact and significant health benefits for all concerned. e-Health is indeed one of prerequisites to overcome the digital divide, contribute to reduction of poverty and to delivery of timely, effective and efficient health care services in Uganda

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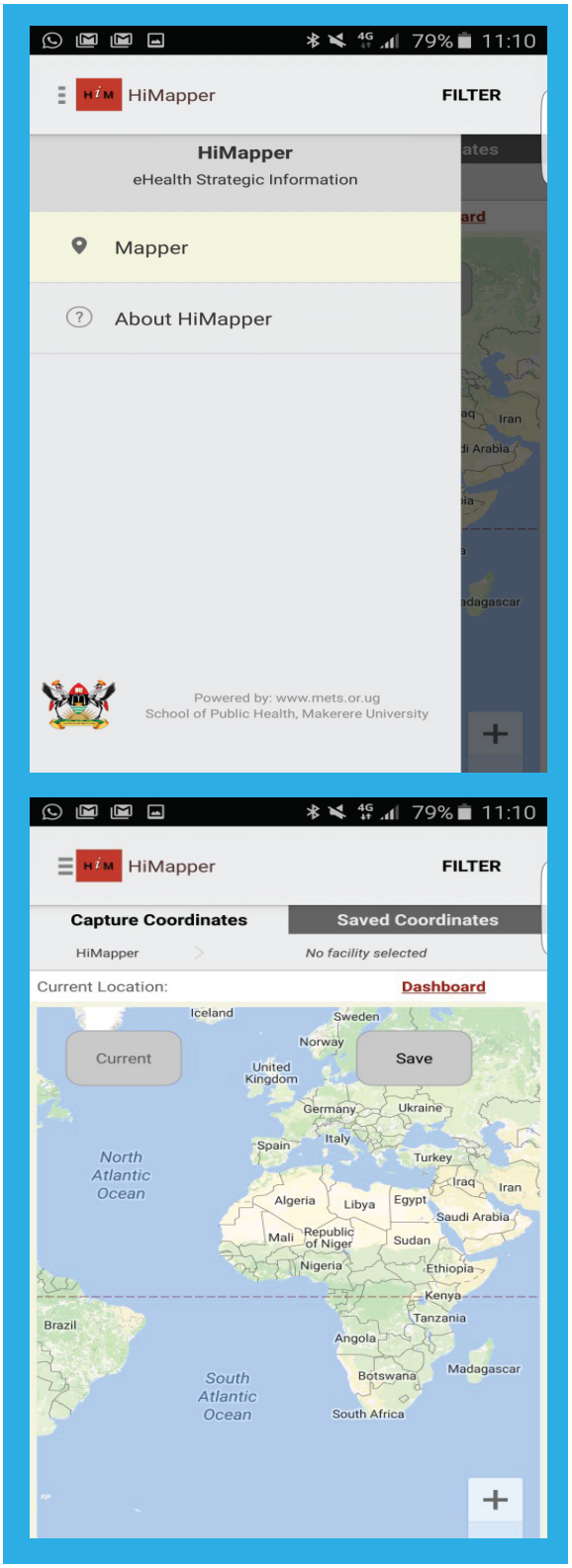
eHealth Innovations

By Mr. Jonathan Mpango, METS Program

Health Informatics Mapper (HiMAP) is a mobile based application developed by the Monitoring and Evaluation Technical Support (METS) Programme with support from Centers for Disease Control and prevention (CDC) Uganda for Ministry of Health, to serve as one of the e-Health solutions for health facility directory manage-ment.

Collection of spatial data as one of the attributes for inclusion in the health facility profile is key in performing basic spatial analysis including location of facilities. Originally, conventional GPS hand-held devices have been used to collect the longitude and latitude values of health facilities collecting data for over 70% of these health facilities. HiMap mobile app is here to supplement these efforts and to leverage on the capabilities of inbuilt GPS for smart phones to simplify and fasten the process of data collection aiming at having 100% of all the health facilities in the national system geo-coded.

In the recently concluded Ministry of Health (MoH) National eHealth Infrastructure Assessment in Uganda, HiMap was used to capture the Geo coordinates of both the District Health Offices (DHO) and Health Facilities (HF). The application captured 6% (384/6065) of the HFs and 100% (112/112) of the DHOs offices. The benefits the for the App are endless given the ever growing number of smart phone users at all levels of health monitoring and reporting. HiMap is projected to significantly reduce the cost of capturing and updating geo location coordinates for health service delivery points across the country. Programmes and projects can now tap into the power of mobile technology to deliver effective and efficient services across the country.



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With the increasing use of mobile technology to improve health service delivery and provide real-time information, HiMap is posed to change the face of geo-spatial data collection, and analysis. The HiMap currently features three features/functions;

Mapping module	Used to capture GPS coordinates
Sync module	Used to push coordinates to national DHI2 system & also retrieve the Health facility list from DHIS2 to HiMap
Dashboard module	Used to display key indicators/summaries

The app current runs only on Android based mobile phones but will soon be released for IoS mobile phones. It can be downloaded free from google play store.

The app utilizes the list of districts, sub counties and health facilities as registered into the national DHIS2 system to generate and create coordinates for both Districts and health facilities as recorded by field personnel.

Additional functionality enables the user to overlay the location points to the google maps to easily and quickly find the desired point of location. Future plans include the overlays with with terrain, vegetation, sources of water and other key features to guide and improve health service delivery a cross the country.

To enhance the usability and improve the app, the team at METS has lined up three additional exciting features to improve functionality as well as the look-and-fill of the app.

Search Module	To search for locations and contact address for HFs and DHO
Mobile Navigator	Used to find your way around the remote health facilities and DHO offices.

Apple and Windows mobile user versions will also be released in the near future;

The current version of HiMap can be downloaded from Google Play Store using the search key word **"Himap"**.

The app is free and currently runs on Android platform.

For feedback and enquiry on HiMap, write to us on : ***himap@musph.ac.ug***

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Bi-Annual Report draft outputs

By Mr. John Kisa

Weekly Reporting rates- National. Improvement in reporting rates in districts

Table1: Weekly Reporting Rates Categorized

Reporting Rate"	No. of Districts"		
	Q1"FY2015/16"	Q2"FY2015/16"	Q3"FY2015/16"
100"	4"	18"	24"
80"99"	16"	37"	59"
79"50"	53"	45"	26"
<50"	39"	12"	3"
Total"	112"	112"	112"

Fig1: Health facilities reporting and reporting rates for Oct 2015 to Mar 2016

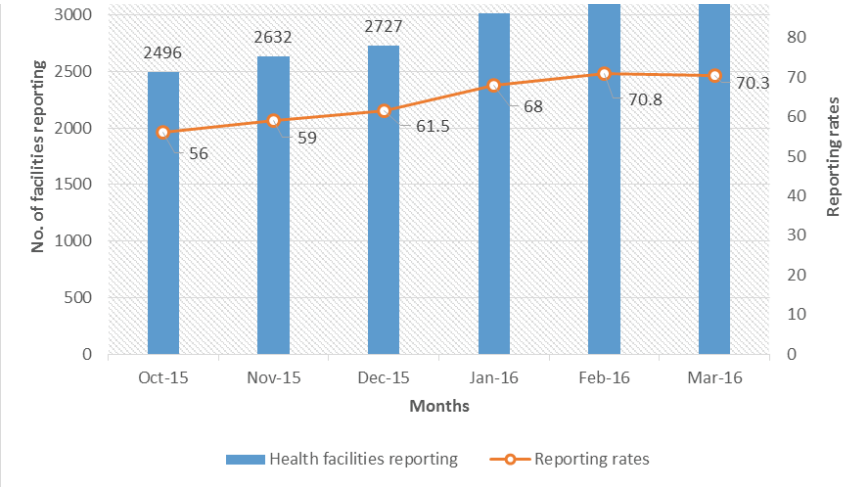

Fig2: Weekly Surveillance Reporting by Region

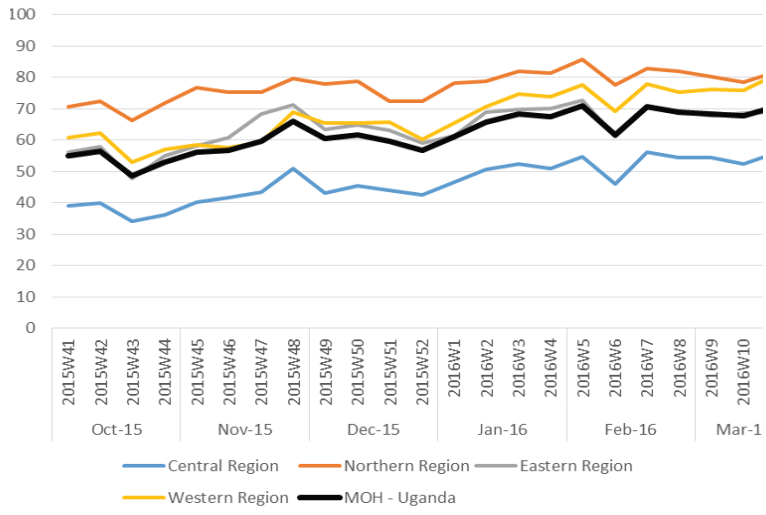

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Fig3: Weekly reporting by district

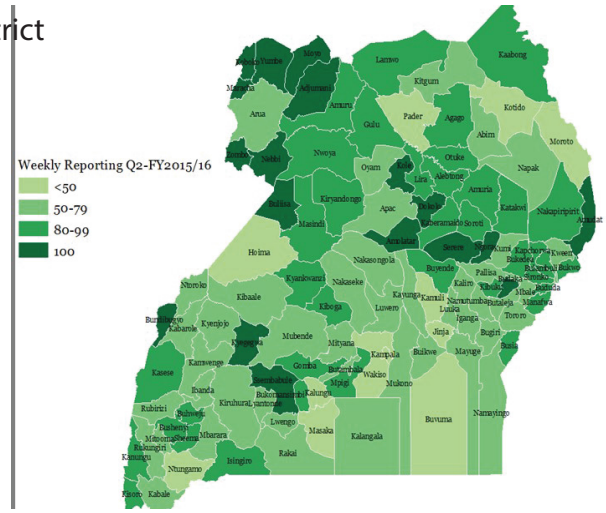

Fig4: ACT Stockouts by district

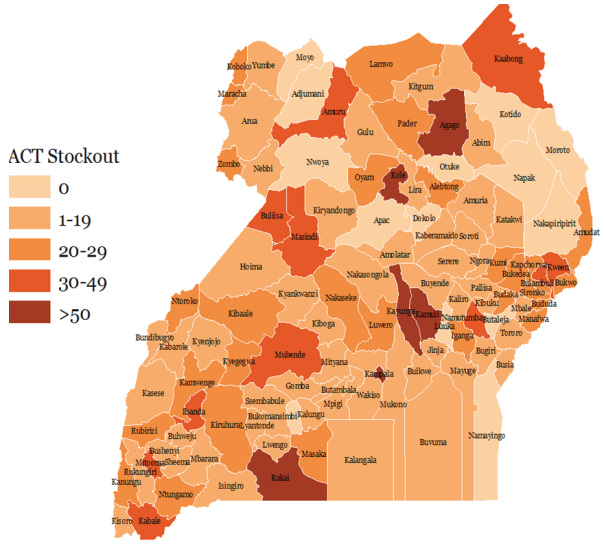

Fig5: No Stockout of essential medicines Q1 and Q2 FY2015/16

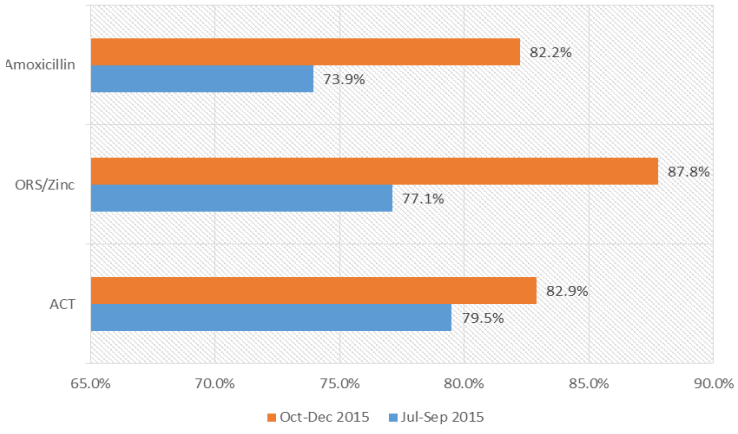

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Table2: Facilities reporting stockout of medicines and stockout rates

Medicine		Jul-Sep 2015			Oct-Dec 2015		
		Facilities with stockout	Facilities reporting	% Stockout	Facilities with stockout	Facilities reporting	% Stoc
Artemether/ Lumefantrine 100/20mg tablet	ACT	903	4405	20.5	756	4420	
ORS Sachets with zinc tablet	ORS/Zinc	1008	4405	22.9	541	4420	
Amoxicillin dispersible 125mg tablet (For children)	Amoxicillin	1148	4405	26.1	785	4420	

Fig6: 10 Outbreak/IRS Districts: Weekly Malaria Cases & Reporting

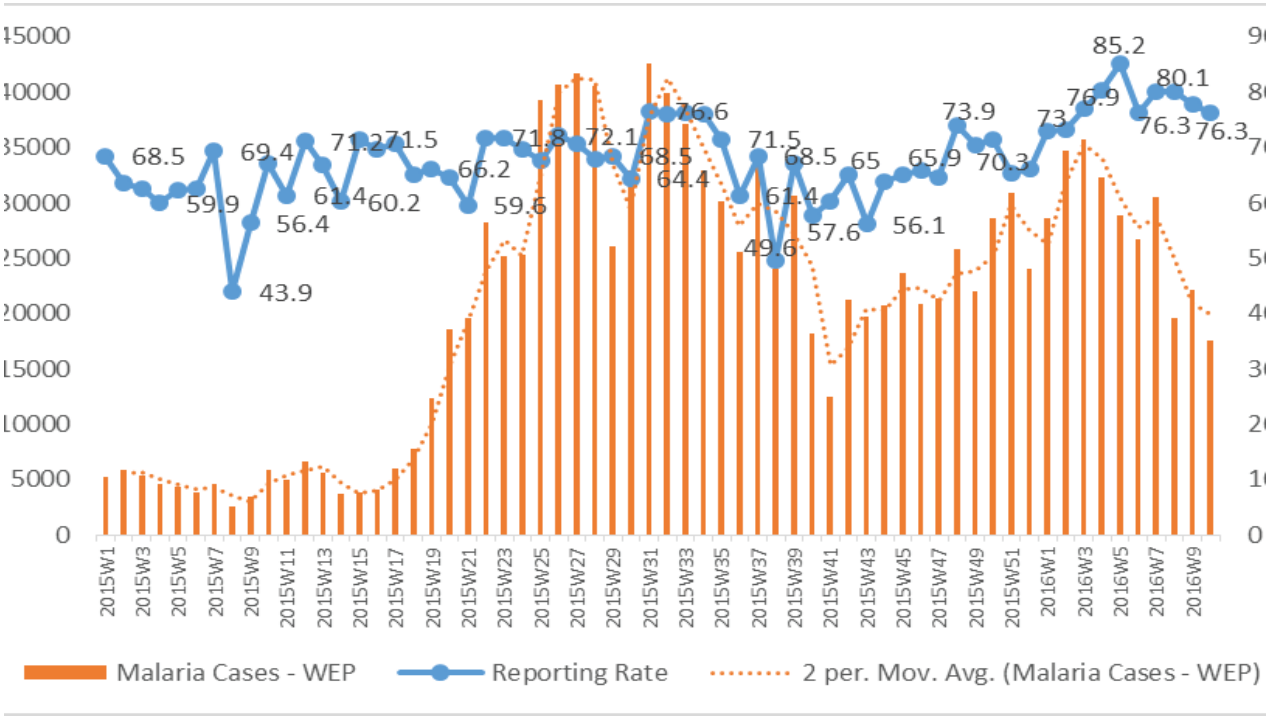

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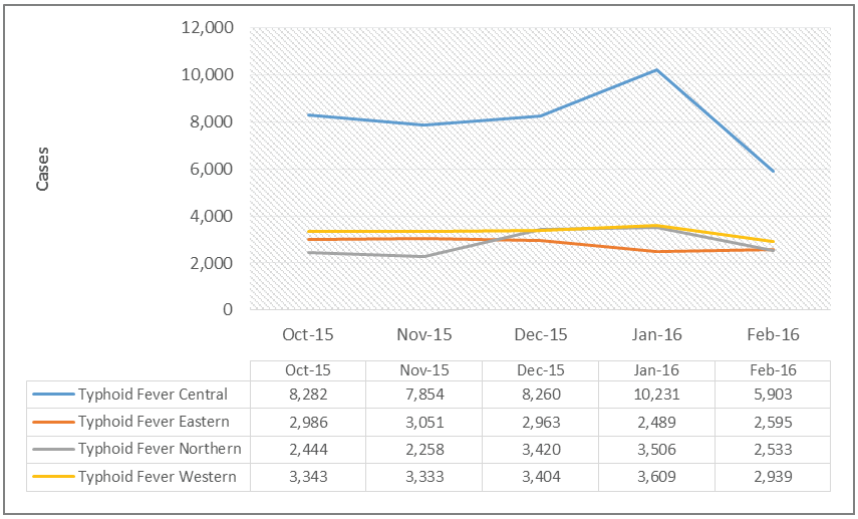
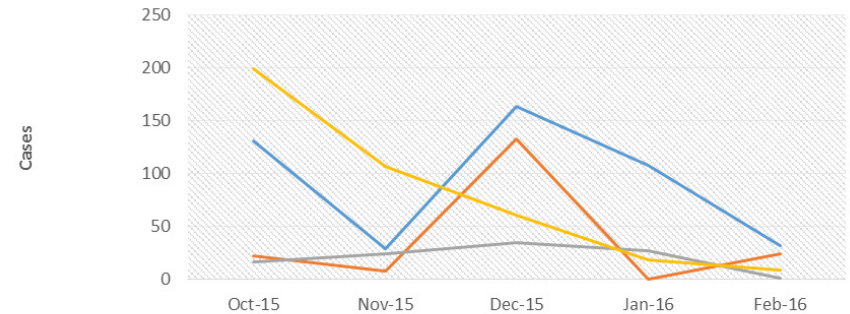
Fig7: Suspected Typhoid Fever Cases by Region



	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Typhoid Fever Central	8,282	7,854	8,260	10,231	5,903
Typhoid Fever Eastern	2,986	3,051	2,963	2,489	2,595
Typhoid Fever Northern	2,444	2,258	3,420	3,506	2,533
Typhoid Fever Western	3,343	3,333	3,404	3,609	2,939

Fig8: Suspected Cholera Cases by Region



	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Cholera Central	131	29	164	108	32
Cholera Eastern	22	8	133	0	24
Cholera Northern	17	24	35	27	1
Cholera Western	199	107	61	19	9

"The time has come to put all the pieces together. Efforts together. Plans have been made. Needs are clear. Solutions are available. Leadership is gathering momentum. Now act."

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