



Digital Data for Decision Making and Results Monitoring-

Uganda Ministry of Health experience



Introduction



- Like many African countries, Uganda has had a rapid proliferation of initiatives across the country building on the unprecedented growth of mobile phone penetration estimated at 50%.
- Leveraging tools such as mobile phones that already exist in Health facilities and Communities which we are targeting, there was need to implement very low cost and at scale tools that extend and enhance the existing HMIS complemented with information from the community.



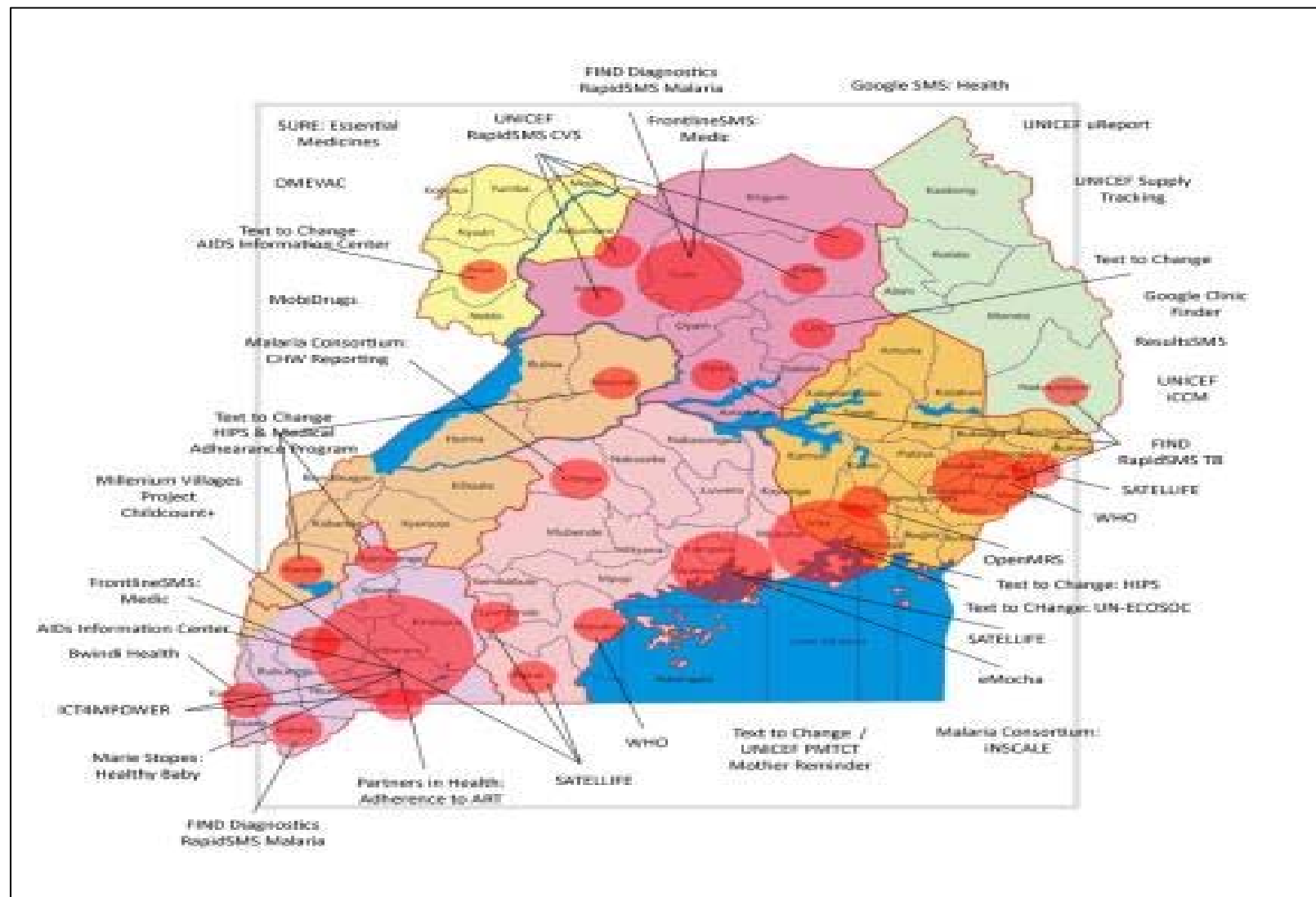
Introduction ctd...



At the onset of the ehealth/mhealth paradox, it was noted that;

- Initiatives were driving investment in multiple architectural and operational directions
- The degree of impact was not adequately quantified
- Difficult to coordinate all initiatives to ensure maximum impact
- Difficult to transition from one initiative or solution to another
- The total cost of ownership per project and per environment was not clearly quantified and/or managed

When an inventory was done, there were over 100 e –Health initiatives across the country with minimal guidance and impact on Health Service Delivery





Latest developments

- The moratorium that was put in place has allowed for the development of structured frameworks which have enabled integration, harmonization and alignment
- Draft eHealth Policy: The draft national eHealth Policy is in place and this is regarded as a global benchmark
- eHealth Technology framework: The national eHealth technology framework was completed
- Governance and Leadership: The National eHealth Technical Working group coordinated by the Ministry.
- The Ministry of ICT is working on the legal frameworks to govern management of electronic information including health-a very young ministry



Successes



- Minimum evaluation Criteria for selection of programs/Projects established
- mTrac was only a handful of initiatives given approval to proceed- It was completely government led, had a clear and immediate strategy for national scale up, and required limited recurrent costs.
- It is an SMS based Monitoring System built on the weekly surveillance reporting form which includes 17 notifiable diseases, maternal deaths, OPD and malaria case management, and selected medicines eg ACTs, which was coded into simple SMS strings.
- Health workers use their own phones to submit weekly data via a cross network, toll free shortcodes.



Successes Ctd..



There are four main sources of data within mTrac covering both official government data channels as well as crowd- sourcing community data for verification

1. Health workers who report on diseases, case management and stock quantities on a weekly basis (2500 govt HF, 2500 NGO&PNFP)
2. Community Health Workers (VHT) submitting weekly aggregate data on case management and stocks (Over 10,000 VHTs in 50 districts)
3. Community reports through Anonymous SMS Health Service Delivery Complaints Hotline (Approx 800 messages per week on the hotline)
4. Separate UNICEF supported initiative called U report. A free SMS social network for people to voice their opinions on issues that they care about. (Over 200,000 registered U-reporters)



Challenges



- Network reliability: SMS messages that run through third party aggregators generally get deprioritized against person-person messages. This can lead to long message queues and delays.
- Lack of centralised/regional support for repair of devices such as computers, modems that are distributed and used across the country
- Lack of clear understanding of human resource capacity gaps at different levels including community health workers
- Misuse by some malicious users of the anonymous hotline
- Data use by recipients/decision makers is still limited and this demotivated the data collectors.
- Limited investment in measuring impact on health outcomes over all.



Lessons Learnt



- Government leadership is key in the alignment, scale up and sustainability of ehealth/mhealth initiatives
- Strengthening existing processes is often less disruptive, and is an easier entry point when introducing new technologies. Avoid introducing new processes, workflows or data collection needs
- There should be careful assessment of implications for additional training support, system management, repair and maintenance of devices and power (either solar or grid).
- Surveillance data useful beyond just timely data. Example of CHW in Kotido - data showed increase in pneumonia cases. Surveillance team found VHTs were actually mis-diagnosing the disease. Organized a refresher training.



Way Forward



- Finalisation and enforcement of the legal framework (a multisectoral approach including the private sector)
- Strengthen partnerships with the private sector eg technology development, streamlining reporting, accountability. The PPP policy has been passed by cabinet.
- Strengthen data sharing and address gaps in open data policy eg through the establishment of common data warehouses, sub portals, etc eg under the EAC Open Health Initiative.
- Increase demand and incentives for data use among decision makers.



Acknowledgement



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