

Thank you for registering for MEASURE Evaluation's December 6 webinar, "A Health Information Systems Learning Agenda: The Questions and the Lessons." A recording of the webinar can be found here:

https://www.measureevaluation.org/resources/webinars/a-health-information-systems-learningagenda-the-questions-and-the-lessons

During the discussion portion of this webinar, we received a number of great questions. We have compiled some resources in response to each question (some of these were mentioned during the webinar and we are providing the links here).

Please <u>contact us</u> with any additional questions and be sure to visit our Health Information System Strengthening Resource Center: <u>https://www.measureevaluation.org/his-strengthening-resource-center</u>

#### Webinar questions

#### Es ce que je peux avoir la version en français du cours?

Malheureusement, nous n'avons pas encours les réponses aux questions en français. Il est possible que cette ressource en français vous intéresse, le Modèle de renforcement des systèmes d'information sanitaire:

Modèle de renforcement des systèmes d'information sanitaire de MEASURE Evaluation: Un résumé https://www.measureevaluation.org/resources/publications/fs-16-171-fr

*Renforcement des systèmes d'information sanitaire en Guinée* <u>https://www.measureevaluation.org/resources/publications/fs-17-251-fr</u>

### What are the best practices for sustaining improvements in strengthening HIS in low-resource settings?

What are the characteristics of a strong HIS? https://www.measureevaluation.org/resources/publications/fs-18-294

Participatory Development for a Sustainable Health Management Information System https://www.measureevaluation.org/resources/publications/fs-16-179

This paper by Moucheraud et al explores sustainability of HIS in three countries: Sustainability of health information systems: a three-country qualitative study in southern Africa https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1971-8 Have you documented how the HIS Strengthening Model has been used and/or adapted in different countries / settings? What have you learned from such a use of the models in different contexts? MEASURE Evaluation's <u>HIS Strengthening Model</u> (HISSM) has been used for activity planning in a number of settings including Madagascar, South Africa, Cote d'Ivoire, Central America, and Nigeria. The HISSM was also used to document HIS strengthening activities in 11 countries, the results of which can be found here: <u>https://www.measureevaluation.org/his-strengthening-resource-center/his-interventions</u>

#### Can you describe an example of how you have addressed contextual factors (if any) that resulted in a strengthened HIS in a given setting/country?

The following resources provide some examples of how specific contextual factors have been addressed in different settings.

Building Capacity for Resilient Health Systems - Lessons Learned from Sierra Leone, Guinea, and Liberia in the Time of Ebola <u>https://www.measureevaluation.org/resources/publications/tr-17-158</u>

*Improving Gender Equity and Health Outcomes: By Addressing Gender in Health Information Systems* <u>https://www.measureevaluation.org/resources/publications/tr-18-290</u>

Implementing a Routine Health Management Information System in South Sudan http://www.southsudanmedicaljournal.com/archive/february-2012/implementing-a-routine-healthmanagement-information-system-in-south-sudan.html

How do you protect the data stored in the HIS especially in the legal context of data protection acts of implementing country which comes with severe sanctions and penalties where breeches occur? *Webinar: Immunizing Health Data from Cyber Threats: Designing a Secure Environment for Health Data https://www.measureevaluation.org/resources/webinars/immunizing-health-data-from-cyber-threats-designing-a-secure-environment-for-health-data* 

*mHealth Data Security, Privacy, and Confidentiality: Guidelines and Checklist* The guidelines are intended to strengthen national HIS by providing a tool to guide decisions related to collection and management of health data on mobile devices. <u>https://www.measureevaluation.org/our-work/mhealth/mhealth-data-security-privacy-andconfidentiality/mhealth-data-security-privacy-and-confidentiality-guidelines-and-checklist</u>

A Primer on the Privacy, Security, and Confidentiality of Electronic Health Records<u>https://www.measureevaluation.org/resources/publications/sr-15-128-en</u>

### What are recommendations or techniques or strong case examples for on-going harmonizing investments in HIS?

We recommend using the <u>HIS Strengthening Model</u> as framework for harmonizing the variety of investments to support HIS. We would also reiterate the importance of having a strong enabling environment and leadership body or group with the authority to ensure HIS investments and aligned with the national HIS strategy.

Report of the Kenya Health Data Collaborative: Resource Mapping for Health Information and Monitoring and Evaluation Systems

This report details Kenya's August 2016 partner resource mapping with the goal of allowing for more informed and efficient investments in HIS moving forward and to identify resource gaps and potential duplicate investments. <u>https://www.measureevaluation.org/resources/publications/tr-17-209</u>

### In terms of capacity development, are you aware of the GEEKS (Growing Expertise in eHealth Knowledge and Skills) being facilitated at the CDC?

We are aware of, but not involved with the GEEKS training. The following is an article describing the launch of the GEEKS program in Zambia.

http://znphi.co.zm/thehealthpress/launch-of-geeks-program-in-zambia/

### How can you improve measurement of outcome (coverage) in setting where population statistics are often not up to date and no vital statistics available?

We are sharing some external articles detailing new methods related to measurement of health outcomes.

Using health-facility data to assess subnational coverage of maternal and child health indicators, Kenya <a href="https://www.who.int/bulletin/volumes/95/10/17-194399/en/">https://www.who.int/bulletin/volumes/95/10/17-194399/en/</a>

*Hybrid prevalence estimation: Method to improve intervention coverage estimations* <u>https://www.pnas.org/content/early/2018/12/04/1810287115</u>

#### Some stakeholders think of a national HIS as a single data system for aggregate data (e.g. DHIS2). Some stakeholders focus on digital sub-systems only. What are case examples of moving from a narrow view to a more holistic perspective in planning and managing HIS?

The <u>HIS Strengthening Model</u> provides a holistic overview of a national HIS, in terms of what systems, processes, people, and technologies can and should be considered in the scope of HIS planning and management. The starting point for this will be the country leadership for HIS in defining what the national HIS consists of.

Aligning Stakeholders for Health Information Systems Strengthening: One Step at a Time This resource shares the experience for Mali in moving from a narrower view of HIS in terms of only technological solutions to broader approach.

https://www.measureevaluation.org/resources/publications/fs-16-168-en

From the low- and middle-income countries you have come across and/or done case studies on the major problems they faced in implementation? Do you have documentation on best practices used? The following reports describe implementation challenges related to HIS in LMICs. How Electronic Health Records Strengthen the Health Systems of Low- and Middle-Income Countries: Learning from Eswatini and Mexico https://www.measureevaluation.org/resources/publications/tr-18-285

Building Capacity for Resilient Health Systems - Lessons Learned from Sierra Leone, Guinea, and Liberia in the Time of Ebola https://www.measureevaluation.org/resources/publications/tr-17-158

A Cost-Effective and Sustainable Approach for Strengthening the Capacity of Routine Health Information System Personnel in Mali https://www.measureevaluation.org/resources/publications/fs-18-287 Strengthening Data Demand and Use in Three African Countries: Lessons Learned from the Associate Awards in Kenya, South Africa, and Tanzania https://www.measureevaluation.org/resources/publications/wp-18-222

### Do you have any HIS models that can be used to work in response to epidemics that are ad-hoc and need to be controlled like a cholera outbreak in Zimbabwe?

*Guinea's Readiness Response to Ebola: Strengthening Data Availability and Use* <u>https://www.measureevaluation.org/resources/publications/tr-18-265</u>

Improving Outbreak Detection through Strengthened Health Information Systems https://www.measureevaluation.org/resources/publications/tr-18-248

## What have you learned from the recent Ebola crisis in West Africa for the resilience of HIS in Liberia, Guinea and/or Sierra Leone? Is the HIS in these countries stronger for a better response?

Building Capacity for Resilient Health Systems - Lessons Learned from Sierra Leone, Guinea, and Liberia in the Time of Ebola

https://www.measureevaluation.org/resources/publications/tr-17-158

*Guinea's Readiness Response to Ebola: Strengthening Data Availability and Use* https://www.measureevaluation.org/resources/publications/tr-18-265

On the Lookout for Infectious Diseases: Experiences from a Community-Based Surveillance Pilot Activity in Senegal

https://www.measureevaluation.org/resources/publications/fs-18-279

## Are donors interested in investing in developing stronger evidence of strengthening HIS go beyond qualitative approaches? What is MEASURE doing for developing further evidence on this front to go beyond qualitative approaches?

In our experience, donors are not currently making longer-term investments in this, as this would be a costly and time-intensive undertaking. MEASURE Evaluation has developed resources that, in this absence, provide rapid and cost-effective methods of HIS assessment.

Routine Health Information System Rapid Assessment Tool <u>https://www.measureevaluation.org/resources/tools/rhis-rat/routine-health-information-system-rapid-assessment-tool</u>

Stages of Health Information System Improvement Toolkit https://www.measureevaluation.org/resources/tools/stages-of-health-information-systemsimprovement-toolkit/stages-of-health-information-systems-improvement-toolkit

# What can we learn from developed country's HIS? are there contextually adaptable learnings that can be adapted in strengthening developing country HIS. Are there examples of models that you can share that lead to successes?

Maturity Models of Healthcare Information Systems and Technologies a Literature Review This paper by Carvalho et al reviews available maturity models for management of information systems and technologies in health care, primarily created for use on high income countries. https://www.researchgate.net/publication/301302916 Maturity Models of Healthcare Information S ystems and Technologies a Literature Review

Federated health information architecture: Enabling healthcare providers and policymakers to use data for decision-making

This paper by Kumar et al discusses a proposed approach to HIS strengthening using federated health information architecture.

https://journals.sagepub.com/doi/abs/10.1177/1833358317709704