CISM PROJECT LEARNING BRIEF

April 2020

MALARIA PROJECT LEARNING BRIEFER

BACKGROUND

Manhiça Health Research Centre (CISM) is implementing the project "Strengthening Health Information Systems in the Context of Malaria Elimination in Southern Mozambique." The project aims to improve data quality to assist malaria surveillance efforts to eliminate malaria. The data quality improvement model decentralises the online data system, DHIS2/SISMA, to the health facility level. This is a pilot project to see how well the decentralisation functions and how much support is needed.

The project is implemented in all 14 districts of Gaza Province divided into two groups according to the intervention packages, namely, six districts for the standard package (Xai-Xai, Massangena, Chicualacuala, Chigubo, Mabalane and Mapai) and eight districts for the standard-plus package (Massingir, Guija, Chokwe, and Bilene, Limpopo, Chongoene, Chibuto and Manglakaze).

OBJECTIVE 1
Health workers are able to generate, aggregate, and report malaria data.

OBJECTIVE 2
Health workers (including community health workers) are reporting accurate, complete, and timely malaria data (improve the flux of information).

OBJECTIVE 3
Improve the quality of data.

OBJECTIVE 4
Health system managers use data for decision-making and provide feedback to lower levels of the system.

LEASSONS LEARNED

1
DECENTRALISATION OF SISMA

Decentralisation requires equipment such as computers, tablets, and telephones with internet and phone credit monthly to send data. It also requires supervision and training

2
INCENTIVES DO NOT WORK

Instead of incentives, you need to have a strong partnership with the Provincial Health Department (DPS) and plan jointly for the activities

3
DATA QUALITY

Each health centre needs to design a strategy for controlling data quality and how to use it between SISMA and APEs

KEY PROJECT ACTIVITIES

TRAINING DISTRICT AND HEALTH FACILITY TECHNICIANS ON THE ONLINE DATABASE AND REPORTING

PROCUREMENT OF COMPUTERS AND CELL PHONES FOR HEALTH FACILITIES AND APES (GOVERNMENT COMMUNITY HEALTH WORKERS)

MENTORING TECHNICIANS RESPONSIBLE FOR DATA REPORTING, AND CONDUCTING QUARTERLY OR BI-ANNUAL SUPERVISION MEETINGS

TRAINING ON THE USE OF DATA FOR DECISION-MAKING AT THE HEALTH FACILITY AND DISTRICT LEVELS

KEY LESSONS LEARNED

KEY LESSON LEARNED #1

Decentralisation of SISMA is possible, but it requires consistent resources.

Decentralisation requires equipment such as computers, tablets, and telephones with internet and phone credit monthly to send data. It also requires supervision and training. However, the information gathered justifies the increase in resources.

KEY LESSON LEARNED #2

Decentralisation gives ownership.

With ownership comes the drive to improve data quality.

KEY LESSON LEARNED #3

Developing capacity for data quality.

Nurses and technicians require training on how to analyze data and they need to understand how data quality relates to surveillance and how surveillance supports the elimination of malaria. Once they see this connection, they are very motivated to improve data quality.

> "Data quality capacity building needs to be a permanent activity."
>
> CISM District Monitoring, Evaluation and Learning Officer

KEY LESSON LEARNED #4

Incentives do not work.

Instead of incentives, you need to have a strong partnership with the Provincial Health Department (DPS) and plan jointly for the activities. This creates an added level of responsibility for the project within the district authorities and it also ensures that the district can train new technicians.

KEY LESSON LEARNED #5

Decentralisation helps Information sharing between health facilities and district and provincial levels.

In the previous system, the district level would receive reports from the health centres. When there were errors that the district caught, they would often correct them and then send the report to the provincial level without reporting the correction back to the health centre.

KEY LESSON LEARNED #7

Strategies for data quality control and use.

Design a strategy for each health centre on how to control data quality. For example, there is a district quality assurance committee that gave a lesson on data quality every Tuesday. Health centres used the surveillance form in SISMA and the help of APEs to map areas with high malaria incidence.

" Now the district sees the health facility as the owner of the data and they work together to correct any issues. "

CISM District Monitoring, Evaluation and Learning Officer

KEY LESSON LEARNED #8

Decentralising SISMA helps improve the quality and use of data in other areas besides malaria.

See below the table with some examples.

TABLE 1: EXAMPLES OF HOW DATA WAS USED IN OTHER AREAS

Making decisions based on Evidence in Guija and Massingir District	
EVIDENCE	**ACTIONS FROM DATA**
1. Increase of violence- GBV cases in children in Javanhane Health Center	Held a multisectoral coordination meeting with heads of schools, community leaders, police, social action and health technicians to address the issue
2. Increase of cases of malaria in Health Centres of Chivonguene and Javanhane	Intensify community education about preventive measures for malaria
3. Low coverage (72%) of targets 4th dose of IPT in pregnant women	Maternal and Child Health (MCH) nurse should meet with local structures (e.g. health committees, local leaders, etc.) about the need for early antenatal consultations
4. Increase in cases of diarrhea in Mapelane Health Center	Conduced community meetings in affected communities to intensify preventive measures
5. Increase in institutional deliveries in the district and lack of a maternal and child health (MCH) nurse	Construction of a maternity ward and allocation of a MCH nurse

MAIN PROJECT SUCCESSES BY OBJECTIVE

OBJECTIVE 1:
HEALTH WORKERS GENERATE, AGGREGATE, AND REPORT MALARIA DATA

Success: The health workers can produce and analyze data at the health facility level. The decentralisation of the reporting system is working and thus shifts the responsibility of data collection, quality, and use to the health facilities. The project has been successful at building capacity of health technicians, APEs, and district health program managers, including district directors and chief district medical officers, in information gathering, quality, and use.

OBJECTIVE 2:
HEALTH WORKERS (INCLUDING COMMUNITY HEALTH WORKERS) ARE REPORTING ACCURATE, COMPLETE, AND TIMELY MALARIA DATA
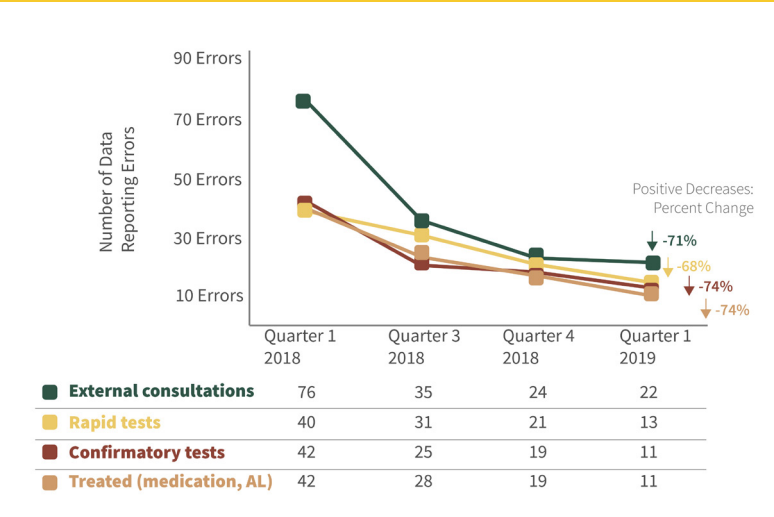
Success: Timely monthly reporting has increased to 90% or more in most health facilities. Data is now the responsibility of the health facility.

OBJECTIVE 3:
IMPROVE THE QUALITY OF DATA

Success: The health facilities are responsible for assessing if their data is high quality.

GRAPH 1: DECREASE IN REPORTING ERRORS IN THE DISTRICTS OF GUIJA, MASSINGIR, CHOKWE AND BILENE FROM THE CISM PROJECT

Positive Decreases: Percent Change

↓ -71%
↓ -68%
↓ -74%
↓ -74%

	Quarter 1 2018	Quarter 3 2018	Quarter 4 2018	Quarter 1 2019
External consultations	76	35	24	22
Rapid tests	40	31	21	13
Confirmatory tests	42	25	19	11
Treated (medication, AL)	42	28	19	11

OBJECTIVE 4:
HEALTH SYSTEMS MANAGERS USE DATA FOR DECISION-MAKING AND PROVIDE FEEDBACK TO THE LOWER LEVELS WITHIN THE SYSTEM

Success: Health facilities regularly use data to identify communities with high malaria incidence. Leaders and the health committees in these communities are then notified about the increase in cases and they disseminate messages about malaria prevention and treatment to curb the epidemic. Some examples of this surveillance are:

1. Javanhane HealthCentre in Guija District observed an increase in malaria cases during the epidemiological week #36, jumping from 35 to 71 cases. They talked to the health centre staff and located the problem in the Cifo community and informed the health committee members, who used megaphones to disseminate information about malaria prevention. Now

cases in that specific neighbourhood, and in week 39 the cases decreased to 46 and then down to 40.

2. CISM and Bilene District health director conducted a weekly malaria case register. From this register, health facilities with the highest malaria incidence were identified. In these areas, indoor spraying was planned, and the health facility worked with the an education campaign

on indoor spraying in these areas, and thus decreasing the incidence of malaria.

3. 3.   Used the data software to identify health facilities with an increase in demand for maternal and child consultations, and reacted by making a proposal to increase the number of Maternal and Child Health (MCH) nurses.

CHALLENGES

Mobile and internet reception is not reliable

APEs need to send data daily and some areas do not have mobile phone reception or internet or it is not reliable.

Some health facilities did not have registries

Not all health centres had registries and others did not have a designated place to keep them, making it difficult to do data quality checks.

High turn-over of technicians and high workload

High turnover of technicians means there needs to be continuous training in data quality. Also, the workload is often too much for one person.

Slow response to outbreaks

Sometimes it takes several weeks to respond to an outbreak due to a lack of health centre staff or other priorities.

SUSTAINABILITY

This project is a pilot to demonstrate that it is possible and beneficial to decentralise the SISMA data collection system to the health facility level. This effort necessitates government continuation of this decentralisation model and is not something that can be sustained without full government ownership.

Fortunately, the government is also adopting this model and scaling up decentralisation to health facilities in four districts in Maputo Province and three districts in Maputo City.

This pilot project helped to demonstrate, to the government and donors, that decentralisation of SISMA is feasible and an important way to increase data availability, data quality, and improve malaria surveillance.

The project achieved government ownership by using the Ministry of Health's (MoH) recommended HMIS system, instead of using their own tools, which is what many other organisations use. They had strong collaboration between the M&E team from CISM and the provincial and district M&E teams at the MoH and used regular supervision meetings to improve the capacity of government officials and solve problems in real-time.

GAZA

Massingir,
Guija, Chokwe,
and Bilene