



# CHISU Results in Action

## Promoting good data quality through data competitions in Mali

January 2024

### Background

Mali adopted the District Health Information System 2 (DHIS2) in 2016 for the management of routine health data, and the DHIS2 platform was deployed in all regions in September 2019. DHIS2 deployment coverage varied from 98 percent for community health centers (CSCoM) to 100 percent for regional health directorates (DRS), referral health centers (CSRef), and hospitals. The use of DHIS2 has enabled Mali's Ministry of Health (MOH) to improve the collection, transmission, processing, analysis, security, availability, confidentiality, and quality of data.

But health facilities in Mali have faced several issues with data quality. There were challenges regarding data availability and access, as well as information sharing. Primary source data registries were fragmented and the CSCoM Technical Directors were not involved in the COVID-19 surveillance data entries.

Epidemic waves have often affected the entire health system in Mali, particularly when it comes to regular data entry. It was no surprise that health facilities were quickly overwhelmed by the large amount of individual data produced in 2020, 2021, and the first quarter of 2022 due to the COVID-19 pandemic.

To address these data quality issues, Mali's Ministry of Health (with the support of technical and financial partners) planned to institutionalize competitions to improve the quality of health data in the country—and included this activity in its priority of health management information system activities (HMIS).

### Steps Taken

To support Mali's MOH in continuing this activity and improving data quality in the country, CHISU (in collaboration with the DHIS2 technical team) helped Mali's regional management teams organize competitions from December 2022 to May 2023 between health facilities (all CSCoM and CSRef) in the program's intervention regions: Bamako, Sikasso, Segou, and Mopti, as well as all hospitals in Mali which manage COVID-19 data.

These competitions focused on the quality of the 2022 epidemiological surveillance data in DHIS2, especially the quality of COVID-19 (surveillance and vaccination) data.

The General Directorate of Health and Public Hygiene (DGSHP) and the Planning and Statistics Unit (CPS)—with the technical and financial support of CHISU—initiated the competition process.

The technical team proposed decentralizing the competition by health region (between hospital, between CSRef, and between CSCom

in each region). Thus, the announcement about the competition was made and each of the regions set up a technical commission in charge of organizing the competition between the CSRefs and the CSComs of that commission’s health region.

The commission developed and shared the terms of reference (TORs), selection criteria for each level of health facilities, and data extraction methodology.

Each of the regional commissions evaluates the health facilities within the region (including both CSRef and CSCom) and selects the winners according to the performance of the reporting (the completeness and timeliness of the data and the concordance of the data between DHIS2 and the primary data collection tools: the notifiable diseases [MADO] report and the daily report of COVID-19 vaccine doses administered, remaining, and lost). The same regional commission is required to organize a local award ceremony, the choice of venue, and invitations.

For hospitals, the metrics used to evaluate data quality included completeness of all forms, timeliness, and indicator performance (such as degree of agreement between entry of confirmed cases of COVID-19 in the Excel file and in the tracker, percent of consultants/patients referred or evacuated received among all hospital consultants, and percent referred or evacuated received at the hospital among all hospitalized).

## Results + Next Steps

With the regionalization of the competition, health districts and hospitals created friendly competition among local providers in their regions—which helped them produce high-quality data. These efforts resulted in improved 2022 data quality performance.

The competition rewarded fourteen health facilities, including eight community health centers (CSCom), four health districts (CSRef), and two hospitals, the results of which are detailed in the table below.



Presidium at the 2023 Data Quality Competition. Photo: CHISU  
**From left to right:** The Resident Advisor of CHISU, the Mayor of Commune IV, the Director of DGSHP, the Minister of Health and Social Development, the representative of USAID Health and the General Secretary of the Ministry of Health and Development Social.

CSRef			
Region	Number of health facilities competing	Winners	
Sikasso	10	CSRef de Yorosso	
Segou	8	CSRef de Niono	
Mopti	8	CSRef de Douentza	
Bamako	6	CSRef Commune IV	
CSCom			
Region	Number of health facilities competing	Winners	
		1st	2nd
Sikasso	271	CSCoM de B-Zangasso	CSCoM de Kabaya
Segou	220	CSCoM de Dogofri	CSCoM de Niamana
Mopti	182	CSCoM de Ouromodi	CSCoM de Konna
Bamako	64	CSCoM ASCOFADJI	CSCoM ASACODJENEKA
Hospitals			
Region	Number of health facilities competing	Winners	
		1st	2nd
Mali	11	Hôpital de Sikasso	Hôpital du Mali

In Bamako, the MOH Minister and her General Secretary, USAID representatives, and all senior officials from the different regions (including the governor or their representative) took part in the ceremony. According to some regional health directors and non-winning health districts, this competition will be an inspiration for creating their own competition in their regions and districts. They will do this through local initiatives aimed at creating positive rivalry between local service providers in the production of high-quality data despite the barriers they face (such as a lack of information technology tools and insufficient internet connection).

At the national level, 11 hospitals competed in the local award ceremony. Sikasso Hospital won first place followed by Hôpital du Mali. This caused other hospitals to emulate these data quality efforts and challenge themselves to be among the winners of the next competition.

Mali's MOH, and especially the regional directorates, have adopted and wish to institutionalize the competition activity supported by CHISU as a means of motivating data managers to do their best work and be rewarded for their efforts.

These efforts will hopefully be a source of inspiration for other health interventions that encourage wider participation and sustained improvement of data quality in the country.



Presentation of awards to the winner of the Sikasso Hospital by the Technical Advisor of the Ministry of Health and Social Development. Photo: CHISU

## Annex: Good practices for data management by health facility level

### CSCoM level

- Availability of a data validation committee at CSCoM level
- Regular and timely entry of weekly and monthly data reports
- Compliance with the deadline for entering monthly report data before the 10th of each month and finally validating the data during the monthly meeting
- Implementation of recommendations from monthly meetings
- Use of the Data Quality application and WHO Data Quality Tool to improve data quality
- Training of CSCoM stakeholders on DHIS2
- Management of the Motivation of CSCoM HIS managers by the presidents of the ASACO

### CSRef level

- Memorandum on the regular holding of monthly meetings on the 10th of each month
- Circular letter from the Chief Medical Officer addressed to the ASACO Presidents for the regular purchase of connection packages for HIS Managers
- The identification and training of alternates to the HIS officer in all CSCoMs in the district
- Establishment of local data validation committee at CSCoM and CSRef level
- Financing of the training of three HIS executives in RHIS course by the CSRef
- Reinforcement of the HIS by three public health doctors and data entry officers to support data entry
- Transmission of the data analysis report and their validation before the 15th of each month
- Use of the Data Quality application and WHO Data Quality Tool to identify and correct outliers and missing data
- Strong collaboration and team spirit

### Hospital level

- Involvement and motivation of staff
- Availability and training of staff
- Strong commitment of the various department heads to the management of the reports
- Involvement of hospital managers so that activity reports and data are available and accessible from all services
- Daily data entry by staff and compliance with the deadline for data transmission to the HIS
- Constant verification of data by department heads and HIS officer
- Existence of a hospital committee for monitoring and coordinating the hospital's performance contract
- Implementation of supervision visits and post-training recommendations



This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of #7200AA20CA00009. Views expressed are not necessarily those of USAID or the United States government.

