Cote d'Ivoire

RHIS Profile: In 2015, Cote d'Ivoire adopted DHIS2 as a platform to track and measure programmatic progress in health. The health management information system, or Système National d'Information Sanitaire (SNIS), is managed by the *Direction de l'Informatique n et de l'Information Sanitaire* (DIIS). The integrated disease surveillance system, or *Surveillance Intégrée des maladies et de la Riposte (SIMR)* collates both routine malaria data and sentinel surveillance data. The DHIS2 is the main data source for routine malaria data.

Acronyms:
CHR: Centre Hospitalier Regional
CHW: Community health workers
DPPEIS: Direction de la Prospective de la Planification et de l'Evaluation et l'Information Sanitaire
NMCP: National Malaria Control Program
NPSP: Nouvelle Pharmacie de Santé Publique
RASS: Rapport Annuel sur la Situation Sanitaire
RDQA: Routine data quality assessment
SNIS: Système National d'Information Sanitaire

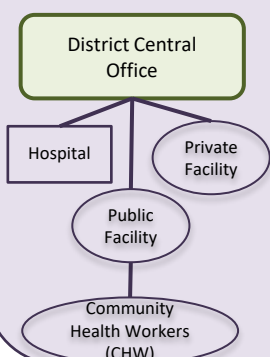|	SNIS	SIMR
	When started: 2015 with DHIS2 **Scale-up status:** National, with deployment in all districts and reference hospitals (General Hospital and Regional Hospital Center)	**When started:** 2015 on DHIS2; sentinel surveillance since 2017 **Scale-up status:** National for DHIS2; 36 health facilities for sentinel surveillance
National	**Reporting format/platform:** DHIS2 **Managed by:** Direction de la Prospective de la Planification et de l'Evaluation et l'Information Sanitaire (DPPEIS) **Dissemination:** Quarterly and annual health report **Key Tasks:** Manage health information system, data analysis and decision making, reporting, commodity forecasting, data quality control and validation.	**Reporting format/platform**: DHIS2 and Excel **Managed by:** DPPEIS for DHIS2 and NMCP for the Excel sheet, which is used to collect sentinel site data **Dissemination:** Annual health report by DPPEIS, no further dissemination of surveillance data **Key Tasks:** Coordination, data analysis, decision making
Regional • 20 regions • Average 4 districts per region	**Reporting format/platform**: DHIS2 **Managed by:** Data manager **Reported to:** n/a **Approval frequency:** Monthly, on 15th of the month following the reporting month **Key Tasks:** Data validation in DHIS2, analysis, quality control, supervision, feedback	**Reporting format/platform:** DHIS2 **Managed by:** Data manager **Reported to:** n/a **Approval frequency:** Monthly **Key Tasks:** Data validation in DHIS2
District • 86 districts • 2023 facilities, 82 general hospital and 17 Centre Hospitalier Regional (CHR) - (Rapport Annuel sur la Situation Sanitaire 2016)	**Reporting format/platform:** DHIS2 **Managed by:** Data manager **Reported to:** DPPEIS **Reporting frequency:** Monthly, on 10th of the month following the reporting month **Key Tasks:** Data collection, aggregation, data entry in DHIS2, online submission, data analysis, data quality assessment, SNIS supervision.	**Reporting format/platform**:DHIS2 and Excel sheet **Managed by:** Data manager/Sentinel surveillance focal point **Reported to:** NMCP on Excel sheet **Reporting frequency:** Monthly **Key Tasks:** Data collection, aggregation, data entry in DHIS2 , online submission, data analysis, data quality assessment, SIMR supervision.
Facility Level District Central Office Hospital — Private Facility Public Facility Community Health Workers (CHW)	**Reporting format/platform:** Paper **Managed by:** Data manager **Reported to:** District data manager, same as SIMR **Reporting frequency:** Monthly; every 5th of the month following the reporting month **Key Tasks:** Data collection on paper tool (file, registers, and monthly report) and transmission. Reference hospitals do data entry directly into DHIS2.	**Reporting format/platform:** Paper **Managed by:** Data manager or health care provider **Reported to:** District data manager, same as SNIS **Reporting frequency:** Monthly; every 5th of the month following the reporting month **Key Tasks :** Data collection on paper based tools, aggregation, and transmission to District.

Table 1: Key Malaria Indicators by System

Number of malaria cases	SNIS	SIMR
Suspect/fever cases	Y	Y
Tested (diagnostically)	Y	Y
Diagnostically confirmed (positive)	Y	Y
Clinical or presumed or unconfirmed	N	N
Outpatient/inpatient	Y/Y	Y/Y
Uncomplicated/severe	Y	Y
Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/Y	Y/Y
Pregnant women	Y	Y
Number of malaria deaths		
Age categories (e.g., <5, 5+) / Sex disaggregation (M, F)	Y/Y	Y/Y
Pregnant women	Y	Y
Commodities (Availability or stock out / Consumption)		
RDT	Y/Y	Y/Y
ACT	Y/Y	Y/Y
Severe malaria treatment	Y/Y	Y/Y
SP	Y/Y	Y/Y
IPTp 1 / 2 / 3(+)	Y/Y /Y	Y/Y/Y
Completeness of reporting	Y	Y

Data Quality Activities:

Routine data quality reviews/audits:
DQA activities include quarterly data validation meetings (includes malaria and other programs) and an annual integrated routine data quality assessment (RDQA). DQA activities occur for both system but more frequently for the SNIS. The health district and regional health office conduct supportive supervision which focus on improving data quality. Both partners and the national government provide funding for supportive supervision.

Monthly or quarterly malaria bulletin:
- Although malaria bulletins have not be done in the past, there is one in development for the upcoming fiscal year.
- The most recent annual statistic report available is from 2016. The 2017 report is under development.

Data availability:
NMCP M&E staff have access to DHIS2 data, but do not consult DHIS2 for malaria data, instead use data validated during the quarterly data validation meetings. District-level focal points and key partners do not have access to these data.

Data use:
Data are used for several purposes including: funding research, planning, supervision, commodity forecasting, reporting, refining NMCP interventions, Nouvelle Pharmacie de Santé Publique (NPSP) commodity forecasting/distribution. The lowest level at which data are routinely analyzed is the facility level. Some examples of analysis include: evolution of malaria cases and analysis of commodity supply.

Additional Context :
Recently, there has been progress in the effectiveness of Cote d'Ivoire's sentinel surveillance and increased involvement of some private sector clinics for reporting malaria data. There are still challenges involving the full integration of the private sector and the community level into the health information system. Both of these have been targeted for system strengthening for the upcoming fiscal year.

The primary donors in Cote d'Ivoire are Global Fund and PMI. Important partners include MEASURE Evaluation, PSI/Impact Malaria, Vector link, Breakthrough Action, IHSC-TA/Chemonics, Save the children, UNICEF, and WHO.

The current national malaria surveillance strategy focuses on the monthly routine surveillance and secondary sentinel surveillance.

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