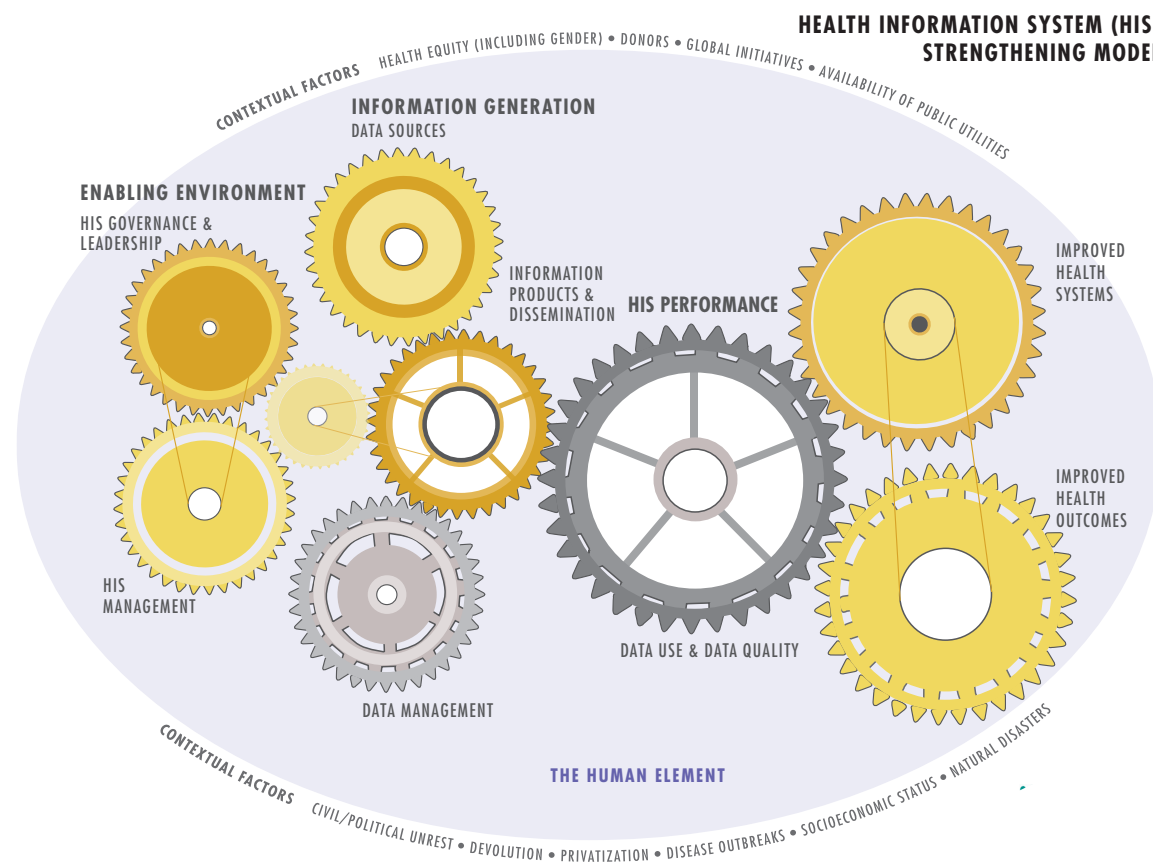


Strengthening Health Information Systems in Madagascar

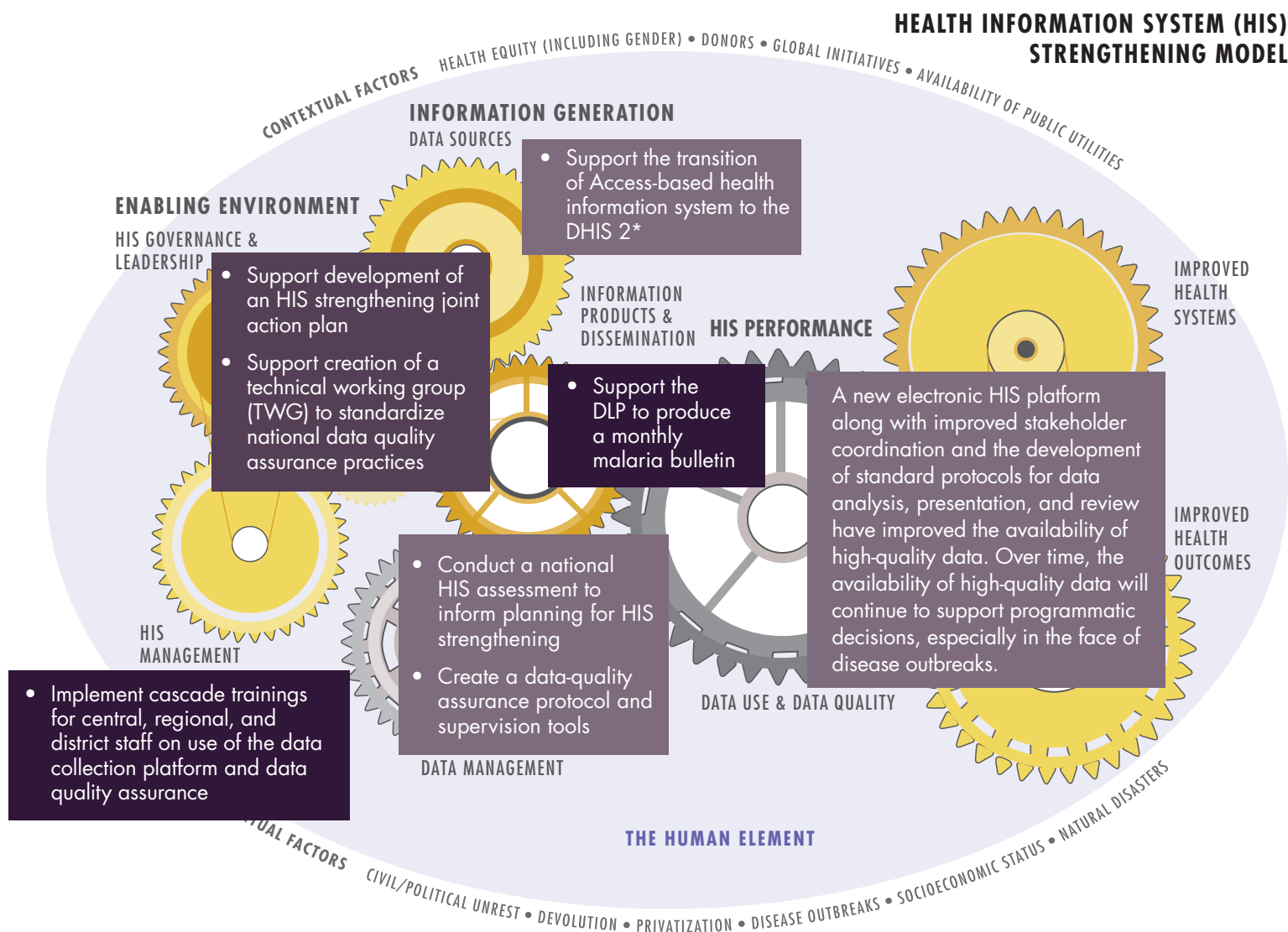
Madagascar's health information system (HIS) has faced challenges resulting from multiple vertical reporting systems and disease-surveillance systems that correspond to program-specific needs. In working toward a more unified HIS, Madagascar's Ministry of Health (MOH) has been collaborating with partners, such as the Directorate for Malaria Control (DLP), to integrate reporting systems, reduce reporting redundancies, and address issues related to data quality. As part of this effort, the USAID-funded MEASURE Evaluation project has supported improvements to Madagascar's routine HIS and integrated disease surveillance and response system (IDSR) to increase the availability and use of high-quality health data. MEASURE Evaluation's involvement in the MOH's efforts to improve the performance of Madagascar's HIS have strengthened the "enabling environment" and "information generation" areas of the HIS, identified in MEASURE Evaluation's Health Information System Strengthening Model (HISSM), shown here.

For example, our work with governmental and nongovernmental stakeholders to develop a roadmap and joint plan of action for national HIS strengthening contributed to the country's enabling environment for a strong HIS. The use of our Performance of Routine Information System Monitoring (PRISM) toolkit to assess the country's routine health information system and integrated disease surveillance system has strengthened Madagascar's information generation area.



The graphic on the next page superimposes on the HISSM depictions of MEASURE Evaluation's activities in the enabling environment and information generation areas to support coordination of vertical information systems and harmonization of data

collection. By displaying key interventions across the model, we see their strategic interaction and how this combination of interventions works to strengthen data quality and data use at all levels of the health system.



*An electronic platform for the collection and analysis of health data

The table below the graphic lists additional MEASURE Evaluation activities that support HIS strengthening in Madagascar. We expect all of these interventions to improve the quality of the HIS data collected and increase the use of those data to generate health indicators and statistics, identify trends, and expand data-informed decision making.

MEASURE Evaluation's Other HIS Strengthening Work in Madagascar					
HISM areas	HISM subareas (years)	Health information system strengthening activities			
		2016	2017	2018	2019
Enabling environment	HIS governance and leadership	<ul style="list-style-type: none"> Help key stakeholders develop a roadmap for HIS strengthening that includes malaria surveillance and malaria monitoring and evaluation (M&E) 	<ul style="list-style-type: none"> Support the creation of a strategic plan, national guidelines, and a learning platform for building a standardized and harmonized data quality assurance system Support the development and subsequent updates of policies, guidance, standard operating procedures, a strategic plan, and national health indicators for the HIS 	<ul style="list-style-type: none"> Support the TWG to harmonize HIS strengthening efforts Support stakeholders to review progress on implementing the HIS Roadmap Support planning for the transition of sentinel surveillance sites into the MOH IDSR system Develop a transition plan for the MOH to advocate that donors provide funding and technical support Develop an M&E plan for the malaria strategic plan 	<ul style="list-style-type: none"> Continue to support the TWG to harmonize HIS strengthening efforts
	HIS management		<ul style="list-style-type: none"> Train central-level data managers on guidelines and use of web-based health information software to support cascade trainings of regional- and district-level staff Build capacity of national, regional, and district managers to train and support community health workers in collection, reporting, and use of community-level data Build capacity of malaria data personnel for data analysis Hold malaria M&E and surveillance workshops for National Malaria Control Program, health region, and district personnel Embed routine health information systems and malaria resident advisors within the DLP and Directorate of Studies and Planning Develop a capacity strengthening plan for the DLP Develop a plan to create regional Centers of Excellence (COE) for malaria surveillance 	<ul style="list-style-type: none"> Embed routine health information system (RHIS) and malaria resident advisors Support the MOH/national DHIS 2 team to customize reporting forms, determine indicators, and develop a data dashboard for country DHIS 2 Support migration of data from GESIS (Madagascar's old electronic system for data collection) to DHIS 2 platform Support installation and configuration of a DHIS 2 server Develop a DHIS 2 training curriculum and user guidelines Train central-level data managers on guidelines for and use of DHIS 2, enabling them to conduct cascade trainings for regional and district level staff and to conduct supervision Develop DHIS 2 supervision tools and guidelines and DHIS 2 standard operating procedures Create data quality assurance (DQA) guidelines and tools for the community, facility, district, regional, and central levels Develop DQA training materials Develop malaria-specific protocols for DQA, data analysis, and data use Create a capacity strengthening plan for the DLP Build capacity for malaria M&E and surveillance in 3 regions Develop a road map for establishing regional COEs for malaria surveillance Conduct a baseline assessment of selected health centers that will serve as COEs Update IDSR guidelines, develop an IDSR training curriculum, and train national-level trainers 	<ul style="list-style-type: none"> Coach MOH facilitators to conduct DHIS 2 cascade trainings in preparation for nationwide rollout of DHIS 2 Finalize the DHIS 2 reporting form for the community level Import the data quality review application into the DHIS 2 to strengthen data quality and use Import historical data into the DHIS 2 platform Develop an M&E plan for the IDSR strategic plan Equip COE facilities with laptops and other supplies

MEASURE Evaluation's Other HIS Strengthening Work in Madagascar					
HISSM areas	HISSM subareas (gears)	Health information system strengthening activities			
		2016	2017	2018	2019
Information generation	Data sources		<ul style="list-style-type: none"> Review, update, and integrate facility-based indicators in the GESIS platform Complete the transition from the Access-based GESIS data-collection platform to DHIS 2 	<ul style="list-style-type: none"> Launch a DHIS 2 pilot in 2 regions Integrate sentinel surveillance sites in the IDSR system for reporting Pilot DHIS 2 in two regions 	<ul style="list-style-type: none"> Roll out the DHIS 2 platform nationwide
	Information products and dissemination			<ul style="list-style-type: none"> Support development of the Monthly Malaria Bulletin and IDSR Bulletin Support development of a national annual health statistics report Develop and disseminate 114 district profiles using 2017 RHIS data 	<ul style="list-style-type: none"> Support development of the Monthly Malaria Bulletin and IDSR Bulletin Support the development of a national annual health statistics report
	Data management		<ul style="list-style-type: none"> Implement malaria-specific data quality assurance protocols Conduct regular data quality audits to comply with national guidelines 	<ul style="list-style-type: none"> Train MOH staff on M&E fundamentals and data analysis using the "R" statistics software Support cascade training on DHIS 2 for data managers and supervisors in pilot regions Conduct supervision visits to assess DHIS 2 use, troubleshoot data entry, and analyze challenges Conduct training on DQA for district data managers Support the National Malaria Control Program (NMCP) to hold meetings to review malaria data from the NMCP database Hold the second national malaria M&E workshop, training 114 district NMCP focal points Initiate monthly data validation meetings at the district level Support national-level IDSR trainers to train 54 people from former fever sentinel sites on using the IDSR system (part of the transition from sentinel sites to IDSR) 	<ul style="list-style-type: none"> Develop guidelines for analyzing DHIS 2 users Conduct data quality review using DHIS 2 data Develop an active malaria surveillance protocol Support data reviews/discussions at the national and district levels Provide training, supervision, and DQA support to COEs Coach regional and district data managers on DQA