Assessment of DPM Medicine Regulatory System, Mali

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About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

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Medicines, medicines regulatory system, assessment

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CONTENTS

ACRONYMS

CNAM	Centre National d'Appui à la Lutte contre la Maladie
CRO	clinical research organization
CT	clinical trial
CTO	clinical trial oversight
DPM	Direction de la Pharmacie et du Medicament (Directorate of Pharmacy and Medicine)
EC	ethics committee
ECOWAS	Economic Community of West African States
GBT	global benchmarking tool
GCP	good clinical practices
GMP	good manufacturing practices
GVP	good vigilance practices
IEC	independent ethics committee
IMP	investigational medical product
ISP	Health Inspectorate
LNS	Laboratoire Nationale de la Sante
MA	marketing authorization
MAH	marketing authorization holder
MOH	Ministry of Health
PPM	Public Pharmacy of Mali
PV	pharmacovigilance
QMS	quality management system
SF	substandard and falsified medicine
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SOP	standard operating procedure
SPC	summary product characteristics
UEMOA	West African Economic and Monetary Union
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

Background

Despite interventions from government and development partners, health indicators in Mali remain low. High morbidity and mortality rates, especially among children under five and women, are mainly caused by endemic malaria, HIV/AIDS, and reproductive, maternal, and childhood diseases. Medicines and other health supplies are required for prevention and treatment of these medical conditions. In addition to providing medicines through a secured supply chain, it is important to have an effective medicine regulatory system to ensure that medicines and other health supplies that are delivered are safe, efficacious, and good quality.

The DPM, a department of the MOH in Mali expressed to USAID a need for technical assistance to help improve the medicine regulatory system in Mali assessing medicine regulatory functions.

The outputs of the assessment would help identify gaps and weaknesses in the medicine regulation system and provide key recommendations for improving the effectiveness of DPM and moving toward a semi-autonomous agency. This work is in line with implementation of the 2012 National Pharmaceutical Policy and the Pharmaceutical Strategic Plan (2012-2017).

Methodology

A comprehensive assessment of DPM's medicine regulatory system was conducted September to October 2017 by SIAPS funded by USAID. The WHO GBT was used for data collection. The scope of the assessment was focused on the five regulatory functions: national regulatory systems, medicines registration and marketing authorization (MA), pharmacovigilance (PV), market surveillance and control, and clinical trial oversight (CTO).

Results and Findings

National Regulatory System

In Mali, medicine regulatory functions are carried out by separate institutions that are independently mandated by law to execute the different responsibilities:

- DPM for medicine registration and granting MA
- Laboratoire Nationale de la Sante (LNS) for laboratory testing of medicine samples
- Health Inspectorate (ISP) for inspection of premises and health facilities
- Centre National d'Appui à la Lutte contre la Maladie (CNAM) for implementing technical PV activities

The national pharmaceutical policy revised in 2012 provides guidance for the pharmaceutical sector together with a pharmaceutical strategic plan developed also in 2012. Although legal provisions for medicine regulation currently exist, they require review and revision to address the gaps and fragmentation to improve control of medicines and other health products.

DPM, the agency responsible for granting medicine MA, is hampered by insufficient human resources, lack of financial autonomy, and the lack of a quality management system (QMS) to efficiently perform its functions. Communication to the public is limited due to the lack of guidelines and no functional website. Use of manual procedures coupled with the lack of a monitoring and evaluation mechanism makes delivery of services lengthy and unpredictable.

Medicine Registration and Marketing Authorization

The legal framework mandating the regulation of medicines and granting MA is in place. However, the regulations require revision and updating to address the identified gaps such as handling of major variations. To improve efficiency, utilization of a reliable and sustainable electronic system for registration of medicines is an option that should be implemented by DPM. The limited human resources for registration require recruitment of more personnel together with development of a training program to improve the skills and competence of existing personnel.

Pharmacovigilance

Monitoring the safety of medicines on the market is undertaken by DPM and CNAM. The legislation for PV is in place. Guidelines on safety monitoring by marketing authorization holders (MAHs) should be developed and implemented. Stronger and closer collaboration and communication between DPM and CNAM is needed, given that their roles are interrelated.

Market Surveillance and Control

Surveillance and control of medicines on the market is carried out by both DPM and LNS. The role of DPM in control of imports and exports needs to be strengthened, including enhanced collaboration with Customs. A stronger mechanism to control the circulation of substandard and falsified medicines (SFs) needs to be implemented by involving all stakeholders with a clear, documented strategy. Decisions of the National Medicine Commission need to be implemented in a more pragmatic manner.

Clinical Trials Oversight

Control of clinical trials (CTs) is conducted by DPM and CNAM. The role of the CT ethical committees should be clearly specified to avoid misunderstanding roles and responsibilities. Regulations should be put in place to ensure that the pharmaceutical industry complies with good clinical practices (GCP) and that DPM has enforcement powers to halt CTs that do not comply with specified regulations.

Without clear guidance for applicants on the requirements for CTs, requirements are bound to be misinterpreted and time will be wasted, hence the need to develop and implement guidelines for applications for control of CTs.

Recommendations

In spite of the fact that DPM has the legal framework that mandates it to regulate medicines on the market, the current laws and regulations require amendments to address gaps identified. In certain instances, new legislation will need to be created to address the gaps in legislation. Guidelines for all functional processes for applicants and MAHs must be developed and implemented to promote transparency in medicine regulation. Standard operating procedures (SOPs) for all key activities in the medicine regulatory functions should be established for consistency and uniformity. A QMS should be established to improve efficiency in the regulatory system.

Even though legislation on registration of medicines exists, full implementation of the regulation needs to be made with support of sufficient human resources and an efficient electronic medicine registration system.

The legislation on PV was recently amended in 2017 with clear defined roles and responsibilities between DPM and CNAM. Coordination between the different institutions involved in PV activities should be enhanced.

DPM needs to develop stronger collaboration with Customs to control medicine imports. A mechanism and a pragmatic approach involving all stakeholders to eliminate SFs on the market should be established.

Roles and responsibilities of all institutions involved in CTO must be clearly defined. Structures for increased collaboration between DPM and the ethical committees must be established.

Conclusion

DPM expressed a willingness to improve the current medicine regulation system to ensure that the medicines circulating on the market meet the expected specifications and are of assured quality. Despite having a legal framework to regulate medicines in the country, there are still gaps in the laws and regulations that require redress to strengthen them. The need to consolidate all medicine regulatory functions under one agency is paramount to solving the fragmentation of responsibilities. Before this consolidation is achieved, strong collaboration between the existing institutions needs to be established.

Within DPM, establishment of a functional QMS will assist in addressing the weaknesses in documentation control as well as communication and information exchange internally and externally with the public and other stakeholders. Implementation of an electronic medicine registration system will provide a solution to the noted delays in registration of medicines expressed by clients. A clear roadmap developed by DPM based on the findings will ensure follow-up of implementation of the recommendations presented from the assessment.

BACKGROUND

In 2015, Mali had a population of 17,600,000 inhabitants with a rural population of over 70% and life expectancy at birth of 58 years.[1] The fertility rate is 6.1 births per woman with a modern contraceptive prevalence rate of only 9.9%.[2] There is a high rate of early fertility, namely, 188 births per 1000 girls between the ages of 15 and 19. The number increases to 283 among women between the ages of 20 and 24, peaking at 292 between the ages of 25 and 29, and dropping to 25 births between the ages of 45 and 49 according to the 2012/2013 Demographic and Health Survey. High morbidity and mortality rates, especially among children under five and women, are mainly caused by endemic malaria, HIV/AIDS, tuberculosis, and reproductive, maternal, and childhood diseases.

Morbidity and mortality rates due to communicable diseases are high: malaria accounted for 35.35% of medical consultations in 2011 and 40.63% in 2012; in the case of tuberculosis, 69 patients per 100,000 of population were awaiting treatment in 2012; HIV/AIDS prevalence was 1.2% in 2012-2013.[3] Malaria remains a major public health problem and, according to the annual statistics for the Local Health Information System, in 2015, health facilities in Mali reported 3,317,001 suspected cases of malaria, which was the reason for 41.81% of all medical consultations. Non-communicable diseases (diabetes, cardiovascular diseases, cancers, etc.) are becoming increasingly problematic, and neglected tropical diseases continue to be a considerable burden. Medicines and other health supplies are required for prevention and treatment of these medical conditions. Delivery of health care services is affected by insecurity, especially in the northern region.

Mali is among the world's least developed countries and is a beneficiary of the Heavily Indebted Poor Countries Initiative. The poverty rate has been declining. It went from 55.5% in 2001 to 47.4% in 2006, down to 43.6% by 2010. Poverty affects the standard of living, particularly for child health and education. In fact, according to the findings of the 2010 Short-Form Integrated Household Survey:

The gross school enrollment and net enrollment ratios at the primary education level were 75.4% and 54.3%, respectively, showing virtually no change from the 2006 survey figures of 74.5% and 55.2%.

Access to a safe water supply and basic sanitation facilities (latrines) is largely dependent on the economic situation of a given population. The rate of access to drinking water remained unchanged and, in some cases, dropped from 78.3% in 2006 to 72.4% in 2010 and 65.30% in 2015.

[1] http://www.who.int/countries/mli/en/ WHO website Mali health profile
[2] Demographic Health Survey 2013; https://dhsprogram.com/pubs/pdf/FR286/FR286.pdf
[3] World Health Organization Country Cooperation strategy agenda 2010-2015; http://apps.who.int/iris/bitstream/10665/136938/1/ccsbrief_mli_en.pdf?ua=1

The share of the population with access to improved sanitary facilities (pit latrines) in 2010 was 76%, although 19% of households had no latrines (27% of rural households and 5% of urban households). Only 5% of households had sanitary facilities with flushing systems.

The health service delivery structure in Mali is a pyramid with provision of essential health care at the national, regional, district, and community levels. There are 20,000 community health volunteers forming the largest cadre at the bottom; these volunteers report to the community health centers, which are managed by community health associations[4]. Health system performance is weak, due to inadequate human resources, poor coverage of quality health services, and weak health management information systems.

In addition to providing medicines through a secured supply chain, it is important to have an effective medicine regulatory system to ensure that medicines and other health supplies are safe, efficacious, and of good quality.

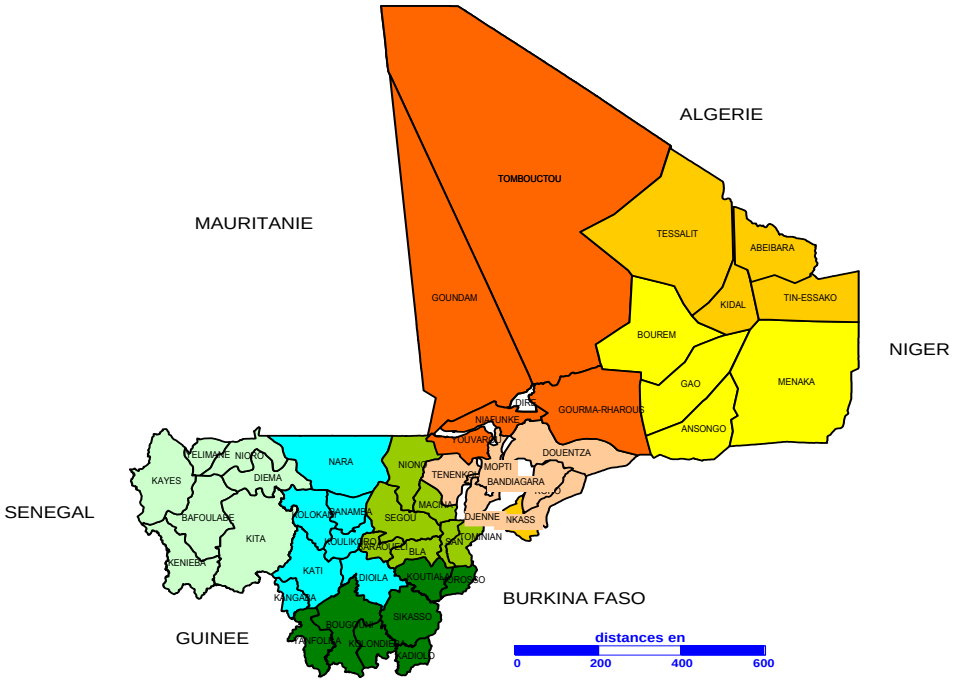

Figure 1. Administrative map of Mali

The main players in the pharmaceutical sector include the Public Pharmacy of Mali (PPM), a public entity that serves as the national purchasing center responsible for importation of pharmaceuticals and 69 other private establishments importing and wholesaling pharmaceuticals (distributing wholesalers).

[4] USAID/Mali. Health Strategy, October 1, 2013 to September 30, 2018; https://www.usaid.gov/sites/default/files/documents/1864/USAID-Mali%20Health%20Strategy%202014-2018.pdf

DPM is a department within the MOH empowered by law to regulate medicines with respect to registration and granting MA. The mandate of DPM is supported by various laws and regulations. DPM is also responsible for developing and implementing national pharmaceutical policies; the current National Pharmaceutical Policy and Pharmaceutical Strategic Plan have been in place for close to five years since 2012. Regulation of medicines is carried out by separate departments of the MOH.

The SIAPS Program received funding from the USAID Mission in Mali to assist the MOH with strengthening the pharmaceutical management system. SIAPS' activities aim to build the capacity of local institutions at the national, peripheral, and community levels in pharmaceutical management and to improve coordination among these institutions.

SIAPS conducted a situation analysis of the medicine regulatory system, including its registration process and regulatory information management system in consultation with the DPM and key stakeholders. The goal was to identify key requirements and high-level specifications to strengthen medicine regulatory functions (given the local context) and the move toward creating a semi-autonomous agency for regulation of medicines. The WHO GBT, an internationally recognized tool, was used to examine the current status of the national medicines regulatory system and the capacity of the national regulatory authority to effectively ensure the safety, efficacy, and quality of medicines.

METHODOLOGY

The SIAPS team conducted a comprehensive assessment of the DPM medicine regulatory system between September and October 2017 with USAID funding. The team utilized the WHO GBT (version V 2017), in line with an agreement among global partners to collaborate and harmonize support provided to countries on regulatory systems strengthening.

The WHO GBT is an electronic Microsoft Access-based national regulatory system assessment tool that measures system functions, national regulatory systems, medicine registration and MA, PV, market surveillance and control, regulatory inspection, licensing of premises, laboratory testing, CTO, and lot release testing. System functions are assessed on the basis of indicators that are categorized into nine sections relating to legal provisions, regulations, and guidelines; organization and governance; QMS; resources (human, financial); regulatory processes; transparency; accountability and communication; monitoring performance; and measurement of impact. The indicators are further divided into sub-indicators with numerical scores to measure the level of maturity of the institution on the basis of computation of scores and qualitative results. Results were generated and presented in the form of an assessment together with an institutional development plan (annex A).The status of the medicine regulatory authority is measured according to maturity levels 1 to 5.

Table 1. Maturity-level classification

Maturity level	Performance level	Guidance
1	No formal approach	No systematic approach evident, no results, poor results, or unpredictable results
2	Reactive approach	Problem - or corrective-based systematic approach; mínimum data on improvement available
3	Stable, formal system approach	Systematic, process-based approach, early stage of systematic improvements; data available on conformance to objectives and existence of improvement trends
4	Continual improvement emphasized	Improvement process in use; good results and sustained improvement trends
5	Best-in-class performance	Strongly integrated improvement process; best-in-class benchmark results demonstrated

A questionnaire on the WHO quantitative indicators for regulatory purposes was used to collect quantitative data (annex B).

The scope of the assessment was limited to five functions, namely, national regulatory systems, medicine registration and MA, PV, market surveillance and control, and CTO.

The SIAPS team administered the GBT to key personnel at DPM to obtain information and data relating to the medicine regulatory system. Further, focus group discussions were held with key stakeholders to gather information on the delivery of services by DPM. These included the Pharmacy Council of Mali, Medical Representative Association, Pharmacists Wholesalers

Association, and one local pharmaceutical manufacturer. Key findings were later disseminated to DPM and other stakeholders in form of a presentation at a meeting held in December 2017 in Bamako (annex C).

Previous assessment reports and other relevant documents were reviewed to obtain information about past and current status of the medicine regulatory system in Mali.

The objectives of the assessment were to:

- Work with DPM focal persons and officials to collect data and information on the status of the medicine regulatory system
- In collaboration with DPM, review and analyze data on the regulatory functions and processes to identify gaps, strengths, weaknesses, and opportunities for strengthening medicine regulatory functions
- Develop a matrix with recommendations and an action plan for strengthening the medicine regulatory system at DPM

Limitations of the Assessment

Given that medicine regulatory functions in Mali are undertaken by separate institutions, it was not possible to interview all key stakeholders. The team was only able to visit and interview key informants from DPM. Only one key informant was interviewed from CNAM.

The GBT does not have any quantitative indicators, which limits its utility, especially in the context of system strengthening.

RESULTS AND FINDINGS

National Regulatory System

Legal Framework for Medicine Regulation

DPM was established by Law No. 01-040 of June 7, 2001 ratifying Ordinance No. 00-039/P-RM of September 20, 2000. The legal provision that defines medical products to be regulated is provided for in Decree No. 04-557/P-RM of 01 December 2004 which establishes the MA of medical products for human and veterinary use in Article 2 e. The scope of medical products to be regulated is not clearly specified in the legal provision. All the different categories of medical products such as vaccines and biologicals are referred to as medicines as stated in the law.

In Mali, separate institutions are involved in medicine regulatory functions and are independently mandated as such by law. LNS is responsible for collection and laboratory testing of medicine samples under the Technical Service of Health created by Ordinance No. 90-34/P-RM of 05/06/1990 and then erected in Public Institution with Scientific and Technological Character by Order No. 040/P-RM of 20/09/2000. ISP is responsible for inspecting premises where medicines are handled, and CNAM is responsible for technical implementation of PV. There is no regulation combining all the institutions and specifying their mandates, roles, functions, and how the different functions are coordinated. The role and function of DPM is specified in Decree No. 2011-753/P-RM of 17 November 2011 establishing the organization and operation of DPM.

The relevant legislation currently in place is provided in table 2.

Table 2. DPM medicine legislation

Year	Law/decree/order no., date	Purpose
1985	Law 85-41/AN-RM of June 22	Authorizing the exercise of private health professions
1986	Law 86-36/AN-RM of April 12	Establishing the National Association of Pharmacists
1991; 1992	Decree 91-106/P-RM of March 15, 1991; decree 92-050/P-RM of August 10, 1992	Organizing the private practice of health professions and its modification
2000	Ordinance 00-039/P-RM of September 20	Establishing the DPM
2001	Ministerial order 01-0023 January 19	Creating a commission for destruction of pharmaceutical products
2001	Law 01-040 of June 7	Establishing DPM ratifying ordinance 00-039/P-RM of September 20, 2000
2002	Decree 02 075/P-RM of February 15	Establishing national commission for the fight against the illegal sale of medicines
2004	Decree 04-557/P-RM of December 1	Establishing the MA of medicinal products for human and veterinary use
2005	Inter-ministerial order 05 2203/MS-MEP-SG of September 20	Determining modalities of application of the authorization for the marketing of medicinal products for human and veterinary use
2008	Inter-ministerial order N8 37 35 MS MEP / SG of 31 Dec	Defining the conditions for advertising medicines and the practices of medical representatives.

Year	Law/decree/order no., date	Purpose
2009	Law 059 December 28	Establishing control of CTs
2011	Decree 2011-4201 October 14	Establishing modalities for implementation of PV
2011	Decree 2011-753/P-RM of November 17	Establishing the organization and operation of the DPM; contains 22 articles and follows 2000 ordinance establishing DPM
2015	Inter-ministerial order 05-2440/MS-MEF-MEP on October 12	Establishing rate and methods of recovery of the fixed duty relating to the MA of medicinal products for human and veterinary use
2017	Decree 2017-0245/P-RM March 13	Establishing control of CTs

Handling expired medicines including destruction is provided for under decree 753/P-RM establishing the organization and operation of DPM article 8 and ministerial order 01-0023. However there are no specific regulations to take actions on the recall, suspension, withdrawal, and/or destruction of SF products. Clear regulation and documented procedure for managing the threats posed by SF products and to recall these products from the market do not exist. A record of the number of complaints, number of recalled medicines, and the action taken, including dissemination of the information to the public, was not available.

Although inter-ministerial order 01-0023 for destroying expired medicines is in place, there were no written procedures describing the action to be taken, including the need to consider a recall, in the case of a complaint concerning a confirmed product defect. If a product defect is discovered in a specified batch of a medical product, DPM issues a written instruction in the form of notification letters to health facilities to recall the products; thereafter the products are collected for destruction and a destruction certificate is issued.

Organizational Structure

A clearly defined structure ensures clear and proper coordination, fulfilling roles and responsibilities, and avoiding overlap of empowerment. Decree 2011-753/P-RM article 8 specifies the roles and functions of DPM. However, there is no approved organogram for DPM. There is a regulation that established communication between DPM and CNAM under inter-ministerial order 2011-4201. However, communication and the decision-making process between DPM and other institutions like LNS and ISP does not exist. DPM is authorized to make decisions independent of researchers, manufacturers, distributors, and wholesalers; the procurement of medicines is undertaken by PPM, a separate department in the MOH. However, DPM is responsible for medicine quantification as well as medicine regulation, implying it is actively engaged in an activity that it regulates.

Quality Management System

Although DPM had initiated the development of a QMS, the work halted when the partner supporting this function closed down operations. Currently, there is no indication that QMS has been implemented, no allocation of a budget to this function, and no designated personnel to implement QMS.

There was no written procedure to define periodic staff appraisal, nor a staff training program. It was not possible to obtain a list of personnel trained in the last three years. There is one officer responsible for human resource matters in DPM and coordination with the Ministry of Public Service responsible for recruitment of staff. The procedure for declaration of interest by both internal and external experts in all functions is nonexistent. There is no written, published, and enforced code of conduct, including conflict of interest for internal staff or external experts and members of advisory committees.

Financing and Infrastructure

DPM mainly receives funding from the Ministry of Finance. The funds collected from service fees paid for registration and modification of registration of medicines are sent to the Treasury, where allocation of funds is determined and implemented according to the Ministry of Finance. Inter-ministerial order 05-2440/MS-MEF-MEP established the rate and methods of recovery of the fixed duty relating to the MA of medicinal products for human and veterinary use and provides for fees and dues to be paid for services offered. However, this information is not available to the public.

The work environment at DPM was considered to be sufficient in terms of office space and condition of the offices. Offices were located in a new building with adequate lighting and air conditioning. Equipment, such as desktop computers and laptops, required for performance of regulatory activities was not adequate.

Collaboration and Information Sharing

Although DPM is part of global, regional, and subregional networks promoting harmonization and collaboration and is an active member of WHO, the Economic Community of West African States (ECOWAS), and the West African Economic and Monetary Union (UEMOA), it did not have a country-specific policy for recognizing and relying on other national regulatory authority decisions.

Information on laws and regulations is kept within DPM. There is no functional website to facilitate dissemination of regulatory information, such as a list of registered medicines, to the public.

DPM uses paper-based systems and Microsoft Office to carry out its regulatory functions. The electronic system for medicine registration, SIAMED, which was installed two years ago, is no longer functional.

A monitoring and evaluation system to assess the progress and performance in implementation of regulatory activities in relation to the strategic plan and established performance indicators was nonexistent.

Medicine Registration and Marketing Authorization

Laws and Regulations

Registering medicines and granting MA is one of the core mandates of DPM. The legislation for holding an MA of medical products for human and veterinary use before placing them on the market was established in decree 04-557/P-RM and inter-ministerial order 05-2203/MS-MEP-SG. However, the classes of medical products (e.g., medicines, vaccines, medical devices, etc.) that require registration/MA before they are marketed and sold and those that are exempted are not specified.

Articles 8 and 9 of inter-ministerial order 05-2203 further empower DPM to request satisfactory information on the quality, safety, and efficacy of pharmaceutical specialties and generic medicines for registration/MA. The MA is granted for a limited validity of five years and subject to renewal before the medical product is reintroduced onto the market as stated in article 4 of decree 04-557. Article 15 of ministerial order 2203 further elaborates on the requirements that need to be fulfilled for renewals.

Article 24 of inter-ministerial order 05-2203 provides the mandate for DPM to withhold, suspend, and/or withdraw or cancel a registration/MA in the event of adverse findings related to the quality, safety, and efficacy of medical products.

Although the withdrawal of a product from the market is provided for in the regulation, it does not state details on when and how to withhold, suspend, and/or withdraw or cancel registration/MA. There is no guideline to that effect.

Article 13 of inter-ministerial order no.05-2203 provides for handling minor variations; however there is no provision in the regulation for major variations. In practice, major variations are handled by DPM and approved by the minister of health.

Article 35 of inter-ministerial order no.05-2203 provides for exemption of MA for products under exceptional circumstances on condition that the applicant submits an application within six months of the import. Such special circumstance is for medical products imported into the country under an open-tender framework for PPM. It is noteworthy that Mali is a signatory to the UEMOA network that currently has medicine registration regulations; DPM hence recognizes the decisions of ECOWAS that are based on UEMOA regulations, however there is no national legal provision to this effect. This is evidenced in the format of dossier submission. Currently, DPM requires applicants to submit dossiers in the common technical document format. This was established on November 1, 2015, in the form of a letter from the director DPM; however it was not incorporated in the guideline or country-specific regulation. The requirement is provided for in the UEMOA regulations for medicine registration.

Registration Guidelines

There are no guidelines for applicants that describe the registration process and requirements for renewal, nor any guidelines detailing the specific regulatory requirements for the quality,

nonclinical/safety, and clinical aspects of the MA dossier, such as the common technical document format originally developed by the International Council on Harmonization.

Specific guidelines on product labelling and packaging, package inserts, and the summary of product characteristics information pamphlet for professionals or equivalent, as well as an information pamphlet for patients are not in existence. There are no guidelines for MAHs to provide guidance on the types and scopes of variations, the format and the documentation required, and specifications of the variations that are subject to prior approval.

In the event of circumstances in which the routine MA procedures may not be followed (e.g., for public health interests), DPM arranges a commission meeting to handle the case as a priority using an accelerated procedure. However, there is no guideline to direct the applicants on the procedure.

Organization and Human Resource Capacity

Decree 2011-753/P-RM established the organization and the operation of the DPM and specifies function and responsibility of DPM for medicine registration/MA activities and their placement on the organizational chart in relation to other entities involved in registration/MA-related activities. However, there are no guidelines or SOPs for registration activities and collaboration with other institutions involved in medicine registration.

The current human resources in the registration division are insufficient for the workload. Currently, the number of personnel involved in medicine registration is five: one head of department, two pharmacists, one veterinary engineer, and one administrative assistant. The number of human resources involved in each of the documented activities along the entire registration process flow is insufficient and the duties and responsibilities for medicine registration personnel are not specified in documented job descriptions. Although the personnel available are competent, they require strengthening of competencies in different areas of medicine registration, e.g., assessment of vaccine and biological products. A training program that enhances the knowledge of personnel was nonexistent.

Without a defined technical committee to review medicine dossiers, DPM relies on a pool of independent experts.

Registration Process and Procedures

The process of registration involves the submission of an application in the form of a paper dossier and two CDs. The application is received and sent to the director for allocation to the appropriate division. After allocation to the division, the head of the division allocates the dossier to the regulation officer for assignment. Assessment of dossiers is conducted by the internal staff and, when possible, technical review by selected external experts. However, the external expert meetings are not frequent because of limited funding.

Article 9 of 2203 provides that a good manufacturing practices (GMP) inspection report and/or certificate be part of the registration process.

Evaluation reports are reviewed by the National Drug Commission; the outcome is submitted in the form of recommendations to the minister of health for endorsement. Thereafter, the decision of the minister is communicated by the director of DPM to the applicant. Delays in approving the registration of medicines were noted at this stage due to the time taken to process the outcome of the decision. The regulation provides for DPM to issue an interim approval awaiting the minister of health approval. However, sometimes the decision of the minister may be contrary to the interim DPM approval. Guidelines on an appeal mechanism do not exist.

According to the UEMOA regulations, the registration process should take no more than 120 days, however an internal study conducted by the registration division reveals that the registration process on average takes 280 days. Although inter-ministerial order 2203 provides for fast track for medicines of public health interest, there are no guidelines and documented procedures for the registration process or a fast-track system for MA applications assessment and granting MA.

As expressed by stakeholders, the time it takes to register a product impacts on business projections and also access to life-saving medicines. As of September 2017, there were 3,319 products registered.

There is no database to keep all medical product registration applications received, approved, rejected, suspended, and/or withdrawn, as well as their essential documentation. The institution had installed SIAMED for two years, but currently that system is no longer functional and not supported. DPM hence currently uses a paper-based system together with MS Excel.

Dossier applications and samples of the registered medicines were stored appropriately in a container and two rooms; one for samples and another for dossiers under process. Space for archiving dossiers could be optimized by use of an electronic medicine registration system.

Pharmacovigilance

Pharmacovigilance Regulations and Guidelines

The establishment of a national medical products PV program is provided for in decree no. 2011-4201. The regulation specifies that DPM is responsible for policy development and regulation and CNAM is responsible for technical implementation of the PV program. In accordance with article 6 of the decree, DPM is responsible for:

- Defining the guidelines for PV
- Coordinating the actions of different stakeholders at the national level
- Playing the role of focal point for cooperation actions at the sub-regional level
- Initiating regulatory acts on PV
- Ensuring compliance with the standards and operating procedures of PV

The Pharmacovigilance National Reference Center created within CNAM is charged with the following tasks:

- Collecting and disseminating information on adverse drug effects
- Analyzing and evaluating the link between health products and adverse effects through accountability
- Coordinating reporting activities within health structures and programs
- Collecting adverse reaction reports of health products from health professionals in the public and private sectors, health programs, and the pharmaceutical industry
- Documenting and archiving information on adverse effects of health products in a database
- Following up and providing feedback to reporters of adverse effects of health products
- Responding to requests for information on adverse drug effects
- Communicating with the WHO International PV Center (Uppsala Monitoring Center) and submitting reports
- Scheduling and carrying out PV surveys
- Providing continuing education for health professionals on PV
- Generating PV signals and alerts

The regulation mandates that manufacturers and/or MAHs establish PV systems for their medical products and obligates manufacturers and/or MAHs to report safety data to the regulatory authority.

The provisions of the legislation are lacking in some areas; it does not authorize CNAM to conduct good vigilance practices (GVP) inspections. There are no guidelines to guide MAHs and manufacturers on how to report safety issues related to their products.

Human Resource and Financial Capacity

There are limited human and financial resources in the two institutions to implement PV activities. Personnel responsible for PV consist of one pharmacist at DPM and one medical doctor at CNAM. According to one key informant, for more effective delivery of services, CNAM requires more staff as follows: one pharmacist, one biostatistician, one medical doctor in charge of disease program/reporting, one administrator, and one coordinator.

Adverse Event Reporting

According to CNAM, the data available showed that from 2011 to 2017 the total number of notifications of adverse events was 120, mostly related to skin disorders.

Regulatory decisions and actions (e.g., suspension, recall, update of product leaflet, withdrawal, and/or MA revocation, etc.) are taken based on PV findings, in accordance with national regulation and WHO recommendations. The organization had only identified two cases of quality issues related to povidone iodine changing color and quinine tablets without an active ingredient that were shared with DPM and thereafter recalled from the market.

Collaboration and Information Sharing

CNAM is a member of the WHO Programme for International Drug Monitoring and regularly communicates with both the international and regional collaborating centers. Staff participate in meetings, conferences, and symposia.

CNAM had established a PV system with a risk communication plan and procedures for communication with different stakeholders relevant to the vigilance program. An illustration of shared information among stakeholders on co-trimoxazole tablets was provided as a record of communication between CNAM and health care professionals.

Market Surveillance and Control

Legal Framework

The mandate for market surveillance and control is shared by two departments of health, DPM and LNS. LNS is responsible for monitoring the quality of medicines on the market by collecting and testing samples and advising on the technical standards of the medicines tested. DPM is responsible for registering products and controlling the import of medicines into the country.

Decree 04-557/P-RM empowers DPM to authorize the sale of medicines, including importation of medicines that do not require MA. It is does not clearly specify the requirements for importation and exportation of registered medicines. Furthermore, there are no regulations or guidelines on importation and exportation of medicines.

Given that DPM does not have personnel at the points of entry, the department relies on customs for quality inspection to check medicines imported into the country. Nonetheless, there is no memorandum of understanding established for this collaboration.

Decree 02 075/P-RM established a national commission to address illegal sales of medicines, however the regulation does not specifically address the handling and sale of SF products. There are no regulations or guidelines for controlling the sale of SFs. Guidelines on the recall and/or disposal of SFs products are not in place.

Legal provisions relevant to the control of promotion, marketing, and advertising of medical products are provided for in decree 04-557/P-RM, which established the MA for medicinal products for human and veterinary use, and inter-ministerial order N8 37 35 MS MEP / SG of 31 Dec 2008, which defines the conditions for advertising medicines and the practices of medical

representatives. Regulations and guidelines relevant to controlling promotion, marketing, and advertising medical products do not exist.

A national committee comprised of different stakeholders to control selling illegal medicines was established by decree 02-075/PRM under the MOH, however it is not functional.

Coordination and Structure

There is no formal structure for coordinating the different institutions involved in market surveillance and control activities, nor clarified roles and responsibilities. According to the interviews held with stakeholders, LNS carries out sample collection and testing of medical products on the market, however, the removal of SFs requires an active coordination mechanism between the various institutions to ensure these products do not continue to circulate on the market. Coordination between DPM and the Pharmacy Council in issuing licenses to private distributors was also not well coordinated as reported in one of the focus groups. The procedure for issuing certificates to operate pharmacies involved both DPM and the Pharmacy Council, however it was not possible to meet and discuss differing observations on a specified application for licensing.

There were no designated persons assigned to market surveillance and control activities under the mandate of DPM.

SOPs for DPM activities on market surveillance and control were not in place; also not covered are:

- Reviewing complaints received from the market
- Preventing, detecting, and/or responding to SF products
- Granting the necessary authorizations and/or permissions for import and export activities
- Ensuring safe disposal of SF products
- Enabling public reporting of suspected SF products

It was not unusual to identify medicines on the market without MA as reported by a key informant. Furthermore, it was proposed that DPM should gain greater control of the private sector, especially combating the illegal sale of medicines and companies dealing in medicines without premises. The ISP is responsible for monitoring the application of laws and regulations in both public and private practice, including licensing of pharmaceutical manufacturers and wholesalers. However, it was not evident that inspection of domestic manufacturers was carried out on a regular basis. The local pharmaceutical manufacturer visited (Usine Malienne de Produits Pharmaceutiques) did not hold a valid GMP certificate.

Clinical Trial Oversight

Clinical Trial Regulations and Guidelines

Control of CTs in Mali is provided for in law 059 and decree 2017-0245/P-RM. DPM is responsible for technical activities of CTO; however two national ethics committees are also involved:

- For medicine, pharmacy, and dentistry faculty from the University of Mali
- For health and life sciences applications from CNAM

Gaps in the legislation include a lack of regulations and guidelines on the format and content preparation for changes/variations to the original protocol, as well as the submission procedure; and regulations that require all institutions involved in CTs, including research centers, researchers, sponsors, and clinical research organizations (CROs), comply with GCP. The legal provision should be supported by detailed and published regulatory requirements for GCP. There are no legal provisions, regulations, or guidelines requiring that investigational medicinal products used in CTs are produced in compliance with GMP for investigational medical products (IMPs).

There is no regulation that clearly states that, in the event of certain circumstances (e.g., in the interest of public health), the routine CT procedure does not need to be followed, nor are there any guidelines or similar documents that list situations where routine CT procedures do not need to be followed. In practice, DPM conducts fast-track processing of CT applications. This pathway was used to review the Ebola vaccine trial, following a global directive to expedite evaluation of the vaccine.

Regulations that cover circumstances where fast-track CT authorization is needed are not available.

Regulations that give DPM the enforcement power to inspect, suspend, and/or stop CTs are not in place, which makes the institution weak in this regulatory function.

Currently, the CT section neither conducts GCP inspections nor suspends or cancel CTs. Applicants do not pay fees for any services offered. The law on CT provides for establishment of the national ethics committee however there are no regulations for establishment of an independent ethical committee.

There are no guidelines on the format and content of the CT application which should be implemented and published on the national regulatory authority's website. Guidelines that stipulate CT application processing timelines are nonexistent. Regulations for internal monitoring for compliance with published timelines for CT application assessment are not in place.

Organization Structure and Human Resource Capacity

The roles/responsibilities/duties of the entities responsible for CTO within the DPM and their place on the organizational chart in relation to other entities involved in CTO are not clearly specified. The organogram for the CT section was drafted as part of DPM's organizational structure but not approved.

Although there is provision in the legislation for the role of DPM and the ethics committees in CTO, there are no SOPs or similar documents that guides and/or inform effective communication

and collaboration between stakeholders. The CT application guidelines that capture duties, roles, and responsibilities of the various stakeholders involved in CTO activities are not available.

There is an insufficient number of personnel and no support from external experts to carry out CTO activities. The section has two staff: one head of section and one research pharmacist.

CT Process and Procedures

The CT application review process involves receipt of the application by the secretary, who forwards it to the director of DPM for allocation to either the Medicine Regulation or Quality Assurance Division. Once allocated to the Quality Assurance Division, the application is forwarded to the head of the division who reviews and sends it to the head of the section. Once the application is evaluated, it is forwarded to the minister of health for approval prior to issuing a ministerial decision to conduct the CT. If additional information is required, it is requested from the applicant. A certificate is issued after technical evaluation and a regulatory decision on the application. The MOH issues a ministerial decision, which is distributed to regional offices, the applicant, all health professional councils, health inspectors, and all departments of MOH for information and execution.

The current volume of work is six applications in 2016 and four in 2017 as reported by the section responsible for evaluating CTs. Although the section has set the timeline for CT application assessment at 15 days, there is no reference to a prescribed guideline or regulation.

DPM Maturity Level

Analysis of the status of the medicine regulatory system at DPM Mali, on the basis of the findings of this assessment, shows that each of the five regulatory functions assessed are at maturity level 1. The PV function had an indicator score above 70% (75%) in arrangements for effective organization and governance while market surveillance and control had the lowest percentage of subindicators met at 6%. This indicates that the medicine regulatory system is not fully implemented and that an action plan should be developed to enlist support from partners to enhance and increase the effectiveness of medicine regulation in Mali.

RECOMMENDATIONS

Effective National Regulatory System

Although DPM has the legal mandate to regulate medicines on the market, the current laws and regulations are insufficient and require amendment to address gaps. In certain instances, new legislation is needed. The Model Law on Medical Products adopted by the African Union in January 2016[5] should be adapted in the process of streamlining legislation for medicine regulation.

- Revise the current laws and regulations to address the gaps identified including:
    - Defining the specific category of products to be regulated
    - Coordinating the different institutions involved in medicine regulation
    - Enforcing the removal of SFs from the market
- Develop and establish regulations that do not currently exist such as:
    - Requiring DPM to disseminate information to the public
    - Involving regulatory authorities in the development of medicine regulations
    - Involving specific sectors of civil society (such as NGOs representing health professionals, industry, consumers, and patients) when developing or adopting guidelines
- Establishing a complaint and appeal mechanism
- Develop and implement guidelines for all functional processes to serve as guidance for applicants and MAHs
- Establish SOPs for all key activities in medicine regulatory functions for consistency and uniformity
- Establish a rapid alert system with documented procedures for handling recalls by DPM and distributors
- Develop and implement a QMS based on international standards, such as WHO QMS and/or ISO 9001
    - Without a QMS in place, the process should be approached in phases by initially allocating a budget for QMS activities, designating responsible officers, and

[5] NEPAD/PATH 'Increasing Access to High-Quality, Safe Health Technologies across Africa–African Union Model Law on Medical Products Regulation' March 2016; http://www.path.org/publications/detail.php?i=2595

conducting training for all staff to ensure knowledge and understanding of the benefits of implementing QMS in the department

- Establish a human resource manual that includes a staff appraisal system, the results of which will help identify training needs

- Develop a human and institutional capacity development plan that will ensure sustainable impact in medicine regulation for the individual and DPM; training may be internal or external

- Advocate for government allocation of more funds to DPM to undertake its functions effectively, especially in medicine registration

- Explore the option of government authorizing DPM to use the funds generated at the source by the department through service fees

- Avail information on the various fees and tariffs to the public by publishing guidelines on fees on a functional website

Efficient Medicine Registration

Although legislation on registration of medicines exists, full implementation of the regulations needs support from sufficient human resources and an efficient registration system.

- Revise the current legislation to address gaps in the decrees and inter-ministerial orders with regard to:

    - Providing the list of the classes of medical products that require registration and those that are exempt

    - Inter-ministerial order 05-2203/MS-MEP-SG to provide details on when and how to withhold, suspend, and/or withdraw or cancel registration/MA

    - Documenting the definition, types, and scope of variations, as well as the corresponding documentation requirements, fees, processes, and procedures for submitting variations to DPM

    - Permitting DPM to recognize and/or use MA decisions, reports, or information from other national regulatory authorities or regional and international bodies

- Develop and implement registration/marketing application guidelines that capture duties, roles, and responsibilities of the various actors involved in registration/MA activities

- Develop and implement SOPs that guide and inform effective communication and collaboration between actors responsible for laboratory, PV, quality control, and CTs

- Recruit more staff to perform medicine registration activities with an established technical committee of experts

    - Technical committee sessions should be held on a regular basis to avoid delays in registration

    - On the basis of the volume of dossiers handled and average number of applications received in a year (approximately 1,000), 15 more technical staff are needed to handle dossier evaluations

- Develop and implement a human resource manual, incorporating a training program and an annual training plan for medicine registration staff

- Develop and implement guidelines and SOPs for all processes and activities related to medicine registration and granting MA

- Revise the regulation to provide for active engagement of technical experts in specialized areas of medicine, e.g., in evaluation of bioequivalence studies, vaccines, and biologicals

- Establish timelines for the assessment of applications and an internal tracking system to follow the targeted time frames

- Develop and implement a functional website where a list of registered medicines and summary product characteristics (SPC)-like information is published together with guidelines and/or SOPs to provide guidance on the content and format of this information as well as the procedure/processes for regularly updating it

- Establish an electronic system with a database to effectively process and keep all medical product registration applications received, approved, rejected, suspended, and/or withdrawn, as well as their essential documentation; explore the use of electronic systems like Pharmadex that have been used in other countries for medicine registration and are functioning properly

- Establish performance indicators that measure the efficiency of the medicine registration process; key performance indicators will include:

    - Number of applications received in a reference year and issued with an MA
    - Number of days taken to issue a regulatory decision
    - Number of dossiers pending evaluation at a specified time, monthly or every quarter

Pharmacovigilance

The legislation on PV was recently amended in 2017 with clear defined roles and responsibilities between DPM and CNAM. There is, however, a need to enhance coordination between the different stakeholders involved in PV activities by establishing a coordinating mechanism for safety monitoring of medicines.

- Revise the legislation on PV to:
    - Authorize CNAM to conduct GVP inspections
    - Allow CNAM to mandate MAHs when necessary to conduct phase IV safety and/or efficacy studies for products with unanswered safety concerns
    - Obligate manufacturers and/or MAHs to designate a qualified person responsible for PV
    - Rely and/or recognize decisions of regional and international organizations as applied to PV
- Develop and implement guidelines on GVP including establishing PV systems, reporting adverse reactions, periodic safety update reporting, risk management planning, post-authorization safety/efficacy studies, safety communication, PV audit, and signal management for MAHs
- Develop and implement SOPs for PV activities, such as report handling, causality assessment, data management, risk-benefit analysis, signal management, and safety communication as part of a comprehensive quality improvement strategy to strengthen the regulatory functions of CNAM
- Strengthen the PV team by recruiting more personnel for CNAM to reinforce the team
    - The following qualified personnel should be considered: one pharmacist/coordinator, one biostatistician, one medical doctor in charge of disease program/reporting, and one administrator
    - Explore the possibility of supplementing existing staff strength with volunteers or temporary staff
- Develop and implement a training program for the PV team at DPM including identification of training needs
- Establish a risk management strategy for PV activities
- Ensure access to information resources relevant to PV processes (e.g., safety information and reference materials) for all personnel in CNAM and DPM including external experts

Market Surveillance and Control

- Establish a mechanism and a pragmatic approach involving all stakeholders to eliminate SFs on the market

- Establish clear regulations and guidelines on:

    - Importation and exportation of medicines, including collaboration with customs
    - Control of SFs on the market
    - Control of promotion, marketing, and advertising of medical products
    - Operation of the national commission on illegal medicines, including institutions involved in routine market surveillance activities

- Establish guidelines for:

    - Importers and exporters on the procedures and format and content of applications to receive the necessary authorizations/permissions

    - Recall and/or disposal of SFs products

- Establish a defined coordination mechanism for the different institutions involved in market surveillance

- Develop a stronger collaboration with Customs to control medicine imports into the country

- Designate competent staff with qualifications in pharmacy to perform market surveillance and control activities with an appropriate human resource development plan to enhance the capacity required to implement surveillance

- Develop and implement documented standard procedures to:

    - Receive, review, and respond to market complaints with respect to medical products
    - Prevent, detect, and/or respond to SF products
    - Grant the necessary authorizations and/or permissions for import and export activities
    - Ensure safe disposal of detected SF products
    - Perform risk-based sampling of medical products from different points in the supply chain
    - Enable public reporting of suspected SF products

- Communicate market surveillance and control activities, including those related to SF products, between different institutions or departments involved in medicine regulation (LNS, ISP, and the Anti-Narcotics Unit)

Control of Clinical Trials

- Specify and clearly define the roles and responsibilities of all institutions involved in CTO; establish structures for increased collaboration between DPM and the ethical committees

- Specify the roles, responsibilities, and duties of the section responsible for CTO within DPM and its placement on the organizational chart

- Develop and implement guidelines and SOPs that specify duties, roles, and responsibilities of the various stakeholders involved in CTO, effective communication, and collaboration between stakeholders

- Strengthen human resource capacity by recruiting more competent staff in medicine and pharmacy and engaging experts in clinical research and medicine

- Establish a training program for staff and devise a mechanism for monitoring the impact of the training

- Develop and implement guidelines for processing CT applications within the prescribed timelines

Approach to Self-Autonomy

According to the agreement among the member states of UEMOA in October 2010, a study was commissioned to establish national medicine regulatory authorities to transition from departments within the MOH to functional agencies with management autonomy.[6] Full autonomy may not be feasible at this stage; however, a phased approach toward operating as a semi-autonomous agency should be sought. Autonomy depends on several factors, including the institution's potential for becoming an effective and efficient organization, capacity for handling responsibilities, and evidence of financial sustainability.[7] The process of changing to a semi-autonomous agency will require, as a first step, a change in legislation to integrate key regulatory functions not currently under the DPM's mandate, e.g., inspection. Another important factor to consider would be conducting a costing analysis to determine the extent to which retaining the fees for the services DPM provides will cover their operational expenses and other development costs and allow them to operate with limited dependence on the government budget. The costing needs to account for all the costs associated with all key medicine regulatory functions.

It is therefore recommended that the directive should be implemented by DPM in a phased manner. Phase 1 will focus on the efficiency and effectiveness of DPM under the current legal framework while preparing for a semi-autonomous state. Phase 2 will involve establishment of a semi-autonomous agency after enactment of the enabling legislation. Table 2 provides a proposed approach toward attaining semi-autonomous status. This will ensure funds generated by DPM are used to carry out activities that will enable proper functioning of the medicine regulatory system, thus impacting on the safety, quality, and efficacy of medicines on the market.

[6] Analyse Synthetique De La Situation De La Reglementation Pharmaceutique Dans Les Etats Membres Del'UEMOA Et Propositions Vol 1, Page 9 UEMOA

[7] Nwokike, J., D. Lee, E. Sagwa, and J. Gaeseb. 2009. Consultancy Report: Strengthening Pharmaceutical Regulatory Capacity in Namibia. Submitted to the U.S. Agency for International Development by the Strengthening Pharmaceutical Systems (SPS) Program. Arlington, VA: Management Sciences for Health.

Table 2. Proposed approach for DPM attaining semi-autonomy

Step	Description	Phase 1/2018-2020	Phase 2/2020-2024
1	Revise all legislation to create a semi-autonomous agency responsible for all key medicine regulatory functions		
2	Develop and revise regulations to further administer the current laws in place for medicine registration, PV, market surveillance, and CTO		
3	Develop and implement guidelines for all medicine regulatory functions undertaken by DPM		
4	Establish a QMS at DPM		
5	Improve human resource capital by recruiting more personnel and implement a human resource development plan		
6	Advocate and pursue authorization for management of funds at source		
7	Implement an electronic system for medicine registration		
8	Strengthen the control of imports and exports		
9	Develop a mechanism for control of SFs, involving all stakeholders		
10	Enhance collaboration and cooperation between the various institutions involved in medicine regulation (LNS, ISP, CNAM) and other stakeholders in the pharmaceutical sector		

Note: gray cells indicate that this is the timeframe for DPM to implement the proposed strategies and activities.

CONCLUSIONS

Medicine regulatory functions in Mali are carried out by separate, different institutions under the MOH. The legal framework for regulating medicines dates back over the years and has been earlier amended to address some of the identified omissions. Review of all the decrees, laws, and regulations governing medicine regulation has to be undertaken to ensure a clear and specific mandate in the pharmaceutical sector, including possibly consolidating all medicine regulatory functions under one semi-autonomous agency. In the interim, it is important to enhance collaboration and coordination between DPM, LNS, ISP, and CNAM.

Within DPM, a clear roadmap on how to address the identified gaps and weaknesses in the medicine regulatory system should be developed with support from partners on the basis of findings and recommendations. High priority should be given to establishment of a QMS and digitalization of the medicine registration system that will enhance the efficiency of the department and contribute to access to essential medicines of ensured quality. There are opportunities to implement changes and improvements given the government's willingness and the potential that exists currently at DPM in terms of human resource capital and infrastructure.

ANNEX A. DPM ASSESSMENT REPORT AND INSTITUTIONAL DEVELOPMENT PLAN

World Health Organization: Benchmarking for the National Health Authority (NRA)

Country Code: MAI Country: Mali Region: AFR
Date of visit: 25 Sep - 06 Oct 2017 Type of visit: Benchmarking
Scope or tools version: Global Assessment Tool Rev V

(Note: some reformatting has been done for improved layout.)

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
RS	RS01: Legal provisions, regulations, and guidelines required to define the regulatory framework of the national regulatory system (NRA).	RS01.01: Legal provision and/or regulation that defines the medical products and technologies that need to be regulated.		The legal provision that defines the medical products that need to be regulated is provided for in Decree No. 04-557/P-RM establishing the market authorization of medicinal products for human and veterinary use in Article 2e). There is need to revise the provision to include specific categories of products like vaccines and biological products.	Yes	1
RS		RS01.02: Legal provision and/or regulation that defines the institutions involved as part of the regulatory system; their mandate, functions, roles, responsibilities, and enforcement power.		There are legal provisions for the different institutions involved in medicine regulation that are provided independently; however, there is no regulation combining all the institutions and specifying their mandates, roles, functions, and how the different functions are coordinated. The role and function of DPM is specified in Decree N ° 2011-753/P-RM of 17 November 2011 fixing the organization and the operation of the DPM.	Partial	1
RS		RS01.03: When more than one institution/authority is involved in regulatory activities, the regulation defines the channels of coordination and an administrative mechanism is defined for it.			No	2
RS		RS01.05: Legal provisions and/or relevant regulations to take actions on recalls, suspensions, withdrawals, and/or destruction of SSFFC medical products.		Legal provision provided in Decree N ° 2011-753/P-RM of 17 November 2011 fixing the organization and the operation of the DPM; article 8 provides for handling of expired medicines; ministerial order 01-0023 19 Jan 2001 specifies destruction of expired, substandard, and nonconforming products seized.	Partial	1

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
RS	RS01: Legal provisions, regulations, and guidelines required to define the regulatory framework of national regulatory system (NRA).	RS01.06: Legal provisions or regulations define requirements of transparency and dissemination of information to the public and relevant stakeholders.			No	2
RS		RS01.07: Guidelines for regulatory activities are developed and/or recognized, regularly updated, and made available to the public.			No	3
RS		RS01.08: Development of the regulations involves the regulatory authority responsible for their implementation and enforcement.		Although in practice, DPM is involved in the development of the regulations, there is need to revise the legislation to specifically include this requirement.	Partial	1
RS		RS01.09: The NRA consults or involves specific sectors of civil society (such as NGOs representing health professionals, the industry, consumers, and patients) during the development or adoption of the guidelines.			No	3
RS		RS01.10: A guideline on complaints and appeals against regulatory decisions is available.			No	3
RS	RS02: Arrangement for effective organization and good governance.	RS02.01: Roles and responsibilities of all structures (regulatory bodies) are defined, documented and implemented.		Decree N2011-753/P-RM of 17 Nov 2011, Article 8 specifies the roles and functions of DPM. However there is no approved organogram.	Partial	3
RS		RS02.02: Channels of communication and decision-making are clearly established between the structures.		There is a regulation that established communication between DPM and CNAM under Inter-ministerial order 2011-4201, 14th October 2011, MS-SGDU Establishing the process of implementing Pharmacovigilance Articles 4, 5, 6. However, communication and decision-making processes between DPM and other institutions like LNS and ISP should be established.	Partial	3
RS		RS02.03: Scientific/advisory committee exists to advise the NRA on scientific topics of interest and future directions.		Inter-ministerial order No-05-2203 MS-MEP SG of 20 September 2005 on the process for requesting market authorization for human and veterinary medicines provides for establishment of a National Commission for Market Authorization to advise DPM on new drugs, traditional medicines, and others in Chapter 3 Article 17.	Yes	3
RS		RS02.04: Independence of NRA from researchers, manufacturers,		There is independence of DPM in decision making from researchers, manufacturers, distributors, wholesalers;	Partial	2

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
		distributors, and wholesalers, as well as the procurement system.		the procurement of medicines is undertaken by a separate department in the MOH. However, DPM is responsible for medicine quantification as well as medicine regulation		
RS	RS03: Strategic plan with clarified objective in place	RS03.01: A national medicines policy, aligned with health policy, exists and is implemented.		The national medicines policy was last reviewed in 2012. There is need to review it taking into consideration the current developments in the pharmaceutical and health sectors. It has been partially implemented.	Yes	4
RS		RS03.02: NRA has established and declared its vision, mission, and strategic priorities.		The vision, mission, and strategic objectives are stated in DPM Strategic Plan 2012. However, given the five years lapse, there is need to revise the strategic plan.	Yes	3
RS		RS03.03: A plan for achieving strategic objectives is developed, implemented, & regularly updated.		Strategic plan 2012, annual reports 2015, 2016	Partial	3
RS		RS03.04: Documented policy is established, with written criteria for recognition & relying on other NRA's decisions (if applicable).		There is no country-specific policy for recognizing and relying on other NRA's regulatory decisions.	No	2
RS		RS03.05: The NRA is promoting good regulatory practices through established policies.		There is no mechanism to promote good regulatory practices through established policies.	No	4
RS	RS04: Regulatory system is supported with leadership and crisis management plans	RS04.01: Leadership ensures that strategic priorities and objectives are well known & communicated throughout the agency.		The strategic priorities and objectives stated in the strategic plan, which is distributed to technical staff only. There was no record of communicating the plan to the staff.	Partial	4
RS		RS04.02: A rapid alert system to react to managing the threats by SSFFC medical products and to recall these products from the market.		There is no clear regulation & documented procedure to manage the threats by substandard & falsified medical products & to recall these products from the market. There is no register for the number of complaints, number of recalled medicines, & actions taken including dissemination of the information to the public.	No	2
RS		RS04.03: A rapid alert and recall system based on documented communication to the appropriate level of the distribution channel and with a feedback mechanism.		There is no rapid alert and recall system in place.	No	3
RS		RS04.04: Recall system based on documented confirmation that appropriate, batch-traceable action and/or destruction has been undertaken when necessary.		There is an Inter-ministerial order N01-0023 MS-SG 19 Jan. 2001 for commissioning the destruction of expired medicines. However, there are no written procedures describing the action to be taken, including the need to consider a recall, in the case of a complaint concerning a possible product defect. If a product defect is	Partial	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				discovered or suspected in a batch, DPM issues written instruction in the form of notification letters to recall the product; thereafter the product is collected together for destruction, and a destruction certificate is issued thereafter. An example of this process was applied to identify quinine tablets without any active ingredient.		
RS	RS05: QMS, including risk management principles, are applied and realized.	RS05.01: Top management demonstrates commitment and leadership to develop and implement QMS.		Although DPM had initiated development of QMS, work halted when the partner supporting this function closed down operations. Currently, no demonstration of implementation of QMS, no allocation of budget to this function, and no designated personnel to implement QMS.	No	3
RS		RS05.02: Quality policy, scope, objectives, and action plans for establishment of QMS are in place and communicated to all levels.			No	3
RS		RS05.03: Organizational chart, roles, responsibilities to establish the QMS are defined and in place.			No	3
RS		RS05.04: Enough competent staff are assigned to develop, implement, and maintain QMS.			No	3
RS		RS05.05: The regulatory authority establishes required mechanisms to continually improve the QMS.			N/A	4
RS		RS05.06: NRA has identified its regulatory processes, determined their interactions, and defined the methods needed to control these processes.			N/A	4
RS		RS05.07: Requirements for documentation management as well as traceability of regulatory activities is established.			No	2
RS		RS05.08: External and internal issues including relevant potential risks are defined and assessed periodically for proper risk mitigation.			N/A	4
RS		RS05.09: The externally provided products and services relevant to regulatory activities are controlled through established mechanisms.			No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
RS	RS05: QMS, including risk management principles, are applied and realized.	RS05.10: A mechanism to evaluate the satisfaction of internal and external customers and other interested parties is in place for system improvement.			N/A	4
RS		RS05.11: Internal and/or external audits of QMS are established & conducted at planned intervals.			No	3
RS		RS05.12: Corrective actions and actions to address risks and opportunities are implemented and documented, and their effectiveness is verified.			N/A	4
RS		RS05.13: Top management reviews and documents the organization's QMS at planned intervals (management review).			N/A	4
RS		RS05.14: Mechanism established to evaluate and demonstrate the effectiveness of training activities.			N/A	4
RS	RS06: Human resources to perform regulatory activities.	RS06.01: NRA has the power to select and recruit its own staff following documented procedures based on its own written criteria (experience, minimum educational background, advanced training).			N/A	4
RS		RS06.02: Periodic staff appraisal system is established to review performance and competencies, identify training needs, and agree on performance targets.		There are no written procedures to define a periodic staff appraisal system, interval of evaluation, and performance target for each function. It was possible to obtain a list of personnel trained in the last three years.	No	4
RS		RS06.03: Written policy/procedure for appointment & recruitment of external experts, defining the selection of candidates by a selection & appointment panel, & making the final decision public.			N/A	4
RS		RS06.04: Written mechanism to handle potential conflicts of interest of internal or external experts and committee members, to gather declarations of interest		There is one officer responsible for human resource matters in DPM and coordination with the Ministry of Public Service responsible for recruitment of staff. There is no procedure for declaration of interest by the	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
		and guarantee the update of these declarations for all regulatory functions.		experts, both the internal and external experts in all functions.		
RS	RS07: Financial resources to perform regulatory activities.	RS07.01: Sources of funding are established for the NRA and affiliated institutions to carry out all regulatory functions.		DPM mainly receives funding from the Ministry of Finance. The funds collected from fees paid for the services delivered are sent to the Treasury; allocation of funds from the Treasury is determined and implemented according to the decision of the Ministry of Finance.	Partial	3
RS		RS07.02: The amount of fees, taxes, tariffs, or dues payable for the services provided are defined and publicly available.		Inter-ministerial order 05-2440/MS-MEF-MEP on Oct. 12, 2015, Fixing the rate and methods of recovery of the fixed duty relating to the MA of medicinal products for human and veterinary use provides for the various fees and dues to be paid for the various services offered. However, this information is not available to the public.	Partial	3
RS		RS07.03: There are provisions relating to reduction or exemption of dues, taxes, tariffs or fees in defined situations in the interest of public health interest.			N/A	4
RS		RS07.04: The NRA has the authority to collect and use the funds generated internally.			N/A	4
RS		RS07.05: The NRA is obliged to periodically publicize its budget.			N/A	4
RS	RS08: Infrastructure and equipment to perform regulatory activities.	RS08.01: The workspace and work environment provided for performing the regulatory activities are adequate.		The work environment at DPM was considered to be sufficient in terms of office space and condition of the offices. Offices were located in a new building with adequate lighting and air conditioning.	Yes	4
RS		RS08.02: The equipment provided for performing the regulatory activities is adequate.		Equipment required for performance of regulatory activities was not adequate. There is need to avail officers with computers and communication devices to facilitate performance of their activities.	No	4
RS	RS09: Mechanisms exist to promote transparency, accountability, and communication.	RS09.01: NRA participates in a regional and/or global network to promote harmonized regulations and expand its collaboration with other regulatory bodies.		DPM is part of global, regional, and subregional networks promoting harmonization and collaboration. It is a member of WHO, ECOWAS, and UEMOA and actively participates in the listed networks.	Yes	4
RS		RS09.02: The information on laws, regulations, procedures, and guidelines is publicly available and is kept duly updated.		Information on laws and regulations is kept within DPM. There is no functional website to facilitate dissemination of regulatory information to the public.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
RS	RS09: Mechanisms exist to promote transparency, accountability and communication.	RS09.03: Information on decisions is accessible to the public.			N/A	4
RS		RS09.04: Information on marketed medical products, authorized companies, and licensed facilities is publicly available.		Information on marketed medical products and authorized companies is not available to the public.	No	3
RS		RS09.05: All publicly available information is kept up-to-date.			N/A	4
RS		RS09.06: Appropriate mechanism exists for management of confidential information and/or proprietary material.		There is no mechanism for ensuring confidentiality of information, like written documents, to describe management of confidential information and adequate infrastructure to keep the confidential information, such as a locked room or secured computerized system.	No	3
RS		RS09.07: Code of conduct, including management of conflicts of interest, is published and enforced for internal and external staff, including members of the advisory committees.		There is no written, published, and enforced code of conduct including conflict of interest for internal staff, external experts, and members of advisory committees.	No	3
RS		RS09.08: The NRA uses computerized systems to automate repetitive activities.		DPM uses paper-based systems and MS Office to carry out its regulatory functions. The computerized system for medicine registration SIAMED, which was installed 2 years ago, is no longer functional.	No	4
RS		RS09.09: The NRA has its own web page with updated information that gives public access to related legal provisions, guidelines, and decisions.		DPM website, which was developed, is no longer functional.	No	4
RS		RS09.10: The NRA supports/ promotes e-governance.			N/A	5
RS	RS10: Mechanism in place to monitor regulatory performance and output.	RS10.01: Requirements established to monitor, supervise, and review performance of NRA and affiliated institutions.		There is no monitoring and evaluation system to assess the progress and performance in implementation of regulatory activities in relation to the strategic plan.	No	4
RS		RS10.02: Performance indicators established & used for monitoring progress to meet strategic plan &/ or institutional development plan.		Performance indicators have not been established.	No	4
RS		RS10.03: Reports at regular intervals on regulatory activities, progression, and status of resources are available.		There were no reports on regulatory activities, progression, and status of resources	No	4

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
MA	MA01: Legal provisions, regulations, and guidelines required to define regulatory framework of registration and/or MA.	MA01.01: There are legal provisions to hold a registration and/or MA before placing the product on the market.		Legal provisions exist for holding an MA before placing a product on the market. This is embedded within Decree No. 04-557/P-RM of 01 Dec 2004 establishing the market authorization of medicinal products for human and veterinary use and Inter-ministerial order No. 05 2203/MS-MEP-SG of 20 Sept 2005 determining the modalities of application of Authorizations for the Marketing of Medicinal Products for Human and Veterinary Use. However, it should provide the list of classes of medical products (e.g., drugs, vaccines, medical devices, etc.) that require registration/MA before they are marketed/ sold and those that are exempted.	Yes	1
MA		MA01.02: There are legal provisions to hold, suspend, and/or withdraw or cancel an MA in case there is/are finding(s) on quality, safety, or efficacy issues.		Article 24 of Inter-ministerial order 2203 provides the mandate for DPM to withhold, suspend, and/or withdraw or cancel a registration/MA in the event of adverse findings related to the quality, safety, and efficacy of the medical products. Although withdrawal of a product from the market is provided for, regulation doesn't present details on when and how to withhold, suspend, withdraw, or cancel registration/MA. There is no guideline to that effect.	Yes	1
MA		MA01.03: There are legal provi-sions that require demonstration of product quality, safety, and efficacy prior to registration/MA.		Article 8 and 9 of Inter-ministerial order 2203 empowers DPM to request satisfactory information on the quality, safety, and efficacy of pharmaceutical specialties and generic medicines for registration/MA.	Yes	1
MA		MA01.04: There are legal provisions and/or regulations regarding the limited duration of validity of the MA and periodic reviews to MAs (i.e., renewals).		The legal provisions that mandate DPM to register/grant MA with limited validity and also request that the registration/MA is renewed before the medical product is reintroduced onto the market are provided in Article 4 of Decree 04-557 with a of validity of 5 years renewable. Article 15 of ministerial order 2203 further elaborates on the requirements that need to be fulfilled for renewals. There are no guidelines for applicants to know the validity of the registration and requirements for renewal.	Yes	2
MA		MA01.05: There are regulations and/or guidelines for the definition, types, and scopes of variations along with the required documentation.		Although Article 13 of inter-ministerial order 2203 provides for handling minor variations; there is no provision for major variations in the regulation; in practice, major variations are handled by DPM and approved by the minister of health.	Partial	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
MA	MA01: Legal provisions, regulations, and guidelines required to define regulatory framework of registration and/or MA.	MA01.06: There are legal provisions to cover circumstances in which the routine MA procedures may not be followed (e.g., for public health interests).		Article 35 of inter-ministerial order 2203 provides for exemption of MA for products under exceptional circumstances; within 6 months the applicant should register the product.	Yes	1
MA		MA01.07: Legal provisions and/or regulations allow the NRA to recognize and/or use MA-relevant decisions, reports, or information from other NRAs or regional and international bodies.		There is no legal provision, however, in practice, DPM recognizes the decisions of the ECOWAS region based on UEMOA regulations.	Partial	1
MA		MA01.08: Specific guidelines on the quality, non-clinical/safety and clinical aspects are established and implemented.		There are no guidelines detailing the specific regulatory requirements for the quality, nonclinical/safety, and clinical aspects of the MA dossier, such as the CTD format originally developed by ICH. Specific guidelines on product labelling and packaging; package insert & the summary of product characteristics information pamphlet for professionals or equivalent; & information pamphlet for patients are not in existence.	No	3
MA		MA01.09: There are guidelines on format and content for submission of MA applications consistent with WHO or other internationally accepted standards.		Currently, DPM requires applicants to submit dossiers in CTD format. This was established since 1 Nov 2015 in the form of a letter from the director of DPM, however it was not incorporated in the guideline or country-specific regulation. The requirement is provided for in the UEMOA regulations for medicine registration.	Partial	3
MA		MA01.10: Guidelines for MAHs defining the types and scopes of variations, the format and the documentation required, and the specifications of the variations that are subject to prior approval.		There are no guidelines for MAHs to provide guidance on the types and scopes of variations, the format and the documentation required, and specifications of the variations that are subject to prior approval.	No	3
MA		MA01.11: There are established guidelines to cover circumstances in which the routine MA procedures may not be followed (e.g., public health interests).		In the event of such a situation, the DPM arranges a commission meeting to handle the case as a priority by using an accelerated procedure. Guidelines should be put in place for waivers of MA.	Partial	3
MA		MA01.12: There are guidelines on the content of product information leaflets, SPCd, packaging, and labelling.		Inter-ministerial order 2203 provides the detail on SMC, however there are no guidelines that provide guidance on the MA application requirements on the content of the product information leaflets, SPC, packaging and labelling, and information to be included in package	Partial	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				inserts (inserts, patient information pamphlets), SPCs (information pamphlet for professionals or equivalent), and labelling of container packaging.		
MA	MA02: Arrangement for effective organization and good governance	MA02.01: There is a defined structure with clear responsibilities to conduct registration and MA activities.		Decree N ° 2011-753/P-RM of 17 November 2011 fixing the organization and the operation of DPM specifies function and responsibility of DPM for medicine registration/MA activities and their placement on the organizational chart in relation to other entities involved in registration/MA-related activities.	Yes	2
MA		MA02.02: Documented and implemented procedures exist to ensure involvement and communication with all relevant regulatory divisions (assessors, QC laboratory, and inspectorate) as necessary.		There are no registration/marketing application guidelines that capture duties/roles and responsibilities of various stakeholders involved in registration/ marketing activities No SOPs that guide and inform effective communication and collaboration between stakeholders, such as the laboratory, vigilance, quality control, CTO, etc.	No	3
MA	MA03: Human resources to perform registration and MA activities.	MA03.01: Enough competent staff (education, training, skills and experience) assigned to perform MA activities.		Number of personnel involved in medicine registration is 1 head of department, 2 pharmacists, 1 veterinary engineer, and 1 administrative assistant. The number of human resources involved in each documented activity along the entire registration process flow is insufficient. Although the personnel available are competent, they require strengthening of competencies in different areas of medicine. There is no defined technical committee to review medicine dossiers though DPM relies on a pool of independent experts. Number of registered medicines Sept 2017: ~3000	No	3
MA		MA03.02: Duties, functions, responsibilities, and necessary competencies are established and updated in the respective job descriptions.		There are no current and up-to-date job descriptions with current duties, responsibilities, and the requisite competence.	No	3
MA		MA03.03: Training plan developed, implemented and updated at least once a year.		There is no training plan and program in place.	No	3
MA		MA03.04: The NRA performs and maintains records of staff training activities.		There are no guidelines or similar documents to guide DPM to perform and maintain records of staff training activities	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
MA	MA04: Procedures established and implemented to perform registration and MA.	MA04.01: Documented procedures/tools are implemented for the assessment of different parts of the application and for assessment of specific requirements of specific classes of medical products (quality, safety, and efficacy).		Documented procedures/tools, including SOPs developed and used in the assessment of different parts of the registration/MA applications as well as in the assessment of specific requirements for specific classes of medical products were not available. No SOPs used for receipt, screening, review, decision, etc. of MA applications. The registration application backlog and its relationship to the timelines for the review process and the number of competent officers involved in the review process.	No	3
MA		MA04.02: Documented procedures are implemented to renew and/or to periodically review the MAs granted.		There are no documented procedures/tools, including SOPs for receipts, screening, review, decision, and issuance of registration number of certificate for renewal of MA	No	3
MA		MA04.03: Documented procedures are implemented for assessing the applications for variation of MAs.		There are no documented procedures implemented for assessing the applications for variations of MAs.	No	3
MA		MA04.04: The same criteria apply for assessing applications regardless of the origin or destination for the use of the medical products (e.g., domestic, foreign, public/private sector).		In practice, the same set of criteria with respect to quality is used to assess registration/MA applications regardless of source/origin and/or destination of the medical product. It is only in the area of fees where traditional medicines are charged a lower fee.	Yes	3
MA		MA04.05: An advisory/scientific committee, including external members, is involved in the review of MA applications as necessary.		Have a pool of experts from hospitals and universities, however, not organized into a committee. There is no regulation for engaging technical experts that can provide expert opinions and assist with evaluation of specialized areas, e.g., bioequivalence studies and the clinical part of the dossiers in registration of medicines with clear objectives, terms of reference, and procedures of operation. However, there is a National Commission provided for in the legislation that is composed of representatives from different institutions, which is responsible for advising the minister of health on approval or rejection of a medicine.	Partial	4

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				The scope/extent of their advisory/scientific contributions to the National Commission is specified, however, there are no SOPs for review activities and their program of work.		
MA	MA04: Procedures established and implemented to perform registration and MA.	MA04.06: There are timelines for the assessment of applications, and an internal tracking system is established to follow the targeted time frames.		There is no specified timeline from receipt of application, assessment by DPM staff and experts, review by commission, and regulatory decision by MOH. On average, based on 2013 study, it takes 280 days, more than double the time recommended by UEMOA. The documented registration application process flow and corresponding timelines for the various registration/MA application route and products class. The internal tracking systems for monitoring adherence to the assessment timelines. Whether timelines are published, easily accessible, & known to all stakeholders including applicants and assessors, and whether they have been implemented and are adhered to during the assessment process. Whether a dedicated unit and/or office is responsible for instituting/implementing and monitoring an assessment timelines tracking system for the purpose of compliance, and whether corrective measures are available for non-compliance.	No	3
MA		MA04.07: There is a documented fast-track mechanism, with specific registration requirements for special situations (e.g., public health interest).		Although Inter-ministerial order 2203 provides for fast tracking, there are no guidelines and documented procedures on a fast-track system for MA application assessment and granting MA.	Partial	2
MA		MA04.08: The SPC, packaging, and labelling information are approved by the NRA as part of the MA.		Regulation that states that the product information on the SPC, packaging, and labelling should comply with the regulations provided to cover product information on medical products is available in 2203, and the information is assessed as part of the registration/MA application pack assessment process. Guidelines on SPC should be put in place.	Yes	3
MA		MA04.09: GMP inspection report and/or certification are considered part of the MA process.		Article 9 of 2203 provides for demanding for a GNP Inspection report and or certificate as part of the MA process	Yes	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
MA	MA04: Procedures established and implemented to perform registration and MA.	MA04.10: Good Review Practices (GRevP) guidelines are established/recognized and implemented.			N/A	5
MA	MA05: Mechanism exists to promote transparency, accountability, and communication.	MA05.01: Web site or other official publication with SPC-like information is available and regularly updated.		There is no functional website where SPC-like information is published. Guidelines and/or SOPs to provide guidance on preparation with respect to the content and format of the SPC-like information are not in existence as well as procedure/processes for regular update (i.e., frequency and processes).	No	4
MA		MA05.02: Updated list of all medical products granted MA regularly published and publicly available.		DPM has list of registered medicines published on MOH website. The list needs to be updated on a regular basis.	Partial	3
MA		MA05.03: Summary of technical evaluation report is published and available to the public.			N/A	4
MA	MA06: Mechanism in place to monitor regulatory performance and output.	MA06.01: There is a database of all product applications received, approved, refused, suspended, and/or withdrawn along with their essential documentation.		There is no database to keep all medical product registration applications received, approved, rejected, suspended, and/or withdrawn, as well as their essential documentation. The institution had installed SIAMED for two years, but currently that system is no longer functional and not supported. DPM hence currently uses a paper-based system together with MS Excel.	No	4
MA		MA06.02: Performance indicators for registration and MA activities are established.		Performance indicators for registration and market authorization activities have not been established.	No	4
PV	VL01: Legal provisions, regulations, and guidelines required to define regulatory framework of vigilance.	VL01.01: Legal provisions for a national vigilance system exist.		There are legal provisions establishing the national medical products vigilance programme in form of a decree and a regulation. However it does not authorize DPM to conduct GVP inspections.	Yes	1
PV		VL01.02: Legal provisions, and/or regulations require manufacturers and/or MAH to set up a vigilance system of their medical products & periodically report vigilance data, including zero events, to the NRA.		Article 35 in the PV inter-ministerial order. Legal provisions mandating manufacturers and/or MAH to establish vigilance systems for their medical products and obligating the manufacturers and/or MAH to report safety data to the NRA. However guidelines on safety reporting by MAH and manufacturers are not available.	Partial	1
PV		VL01.03: Regulations encourage distributors, importers, exporters, health care institutions, other stakeholders, and consumers to report vigilance events to the MAH and/or NRA.		Article 36 of the inter-ministerial order on PV provides for vigilance events reporting to the MAH and/or NRA by importers, wholesalers, and health care professionals.	Yes	1

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
PV	VL01: Legal provisions, regulations, and guidelines required to define regulatory framework of vigilance.	VL01.04: Legal provisions and/or regulations allow NRA to require manufacturers and/or MAH to conduct specific studies on safety, efficacy under specific conditions.		There are no legal provisions and/or regulations authorizing DPM to request phase IV safety and/or efficacy studies.	No	2
PV		VL01.05: Legal provisions, regulations, and/or guidelines require manufacturers and/or MAHs to designate a qualified person responsible for vigilance.		There are no legal provisions and/or regulations obligating the manufacturers and/or MAH to designate a qualified person responsible for vigilance (QPPV).	No	3
PV		VL01.06: There are guidelines for planning, conducting (including monitoring), and reporting vigilance activities.		There are no guidelines for different vigilance activities including planning, conducting, monitoring, and reporting.	No	3
PV		VL01.07: Legal provisions and/or regulations allow recognition and/or reliance on vigilance-relevant decisions, reports, or information from other countries, regional and/or international bodies.		Legal provisions and/or regulations relevant to reliance and/or recognition as applied to vigilance are not available.	No	1
PV	VL02: Arrangement for effective organization and good governance.	VL02.01: There is a defined structure with clear responsibilities to conduct vigilance activities.		Arrete for PV defines the roles and responsibilities of DPM and CNAM, however there is a need to establish a mechanism for coordination between the two institutions. There is also limited budget in the two institutions to implement vigilance activities.	Yes	2
PV		VL02.02: Collaboration between all stakeholders relevant to medical products vigilance is in place.		The regulation on PV identifies the stakeholders to collaborate with on vigilance activities; however there is no availability and implementation of agreements, memoranda of understanding, and/or documented procedures to ensure the active involvement, communication, and collaboration between the identified stakeholders relevant to vigilance of medical products.	Partial	3
PV	VL03: Human resources to perform vigilance activities.	PV03.01: Enough competent staff (education, training, skills and experience) are assigned to perform vigilance activities.		Organization chart not provided. List of staff in DPM: 1 pharmacist; and CNAM: 1 MD CNAM has the following staff: 1pharmacist, 1 biostatistician, 1 medical doctor in charge of disease programme/reporting, 1 administrator, 1 coordinator. DPM would require enhanced collaboration with regional centers in regional hospitals.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				2011-2017: 120 notifications of AEs, mostly related to skin disorders. Use Vigiflow.		
PV	VL03: Human resources to perform vigilance activities.	VL03.02: Respective job descriptions are established and regularly updated with inclusion of duties, functions, responsibilities and necessary competencies.		Job descriptions of staff and designations relevant to medical products regulatory vigilance exist for CNAM and none for DPM	Partial	3
PV		VL03.03: Training plan developed, implemented, and updated at least once a year.		There is no training program for DPM and CNAM and procedures related to training plan have not been established and monitored. Annual training plan of the current and the last year. Collection and/or investigation of training needs. List of trainings performed. CNAM participated in trainings in Morocco, Ghana, and Burkina Faso, however, DPM has not. Tracking of training plan implementation not undertaken.	No	3
PV		VL03.04: The NRA performs and maintains records of staff training activities and training effectiveness verification.		Both DPM and CNAM did not maintain records of staff training activities and training effectiveness verification.	No	3
PV	VL04: Procedures established and implemented to perform vigilance activities.	VL04.01: Risk approach is considered throughout different vigilance activities, including timely response to safety signals.		There are no procedures for risk management nor procedures for risk approach consideration in different vigilance activities.	No	3
PV		VL04.02: Vigilance procedures and tools are in place for collection, assessment, investigation, and interpretation of safety issues.		To provide SOP as evidences: 1. Procedures and records of reporting systems within the country 2. Code and case definition 3. Procedure and method for causality assessment 4. Procedure and action on recommendations arising from causality assessment 5. Investigation reports 6. Documented evidence of what actions following vigilance events (ADRs and/or AEFI) reporting have been taken	Yes	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				7. Notification reports, investigation reports, analysis of data, committee meeting reports, etc. 8. Number of reports within, e.g. 1 year, reporting rate, breakdowns of reports, compare districts reporting activities, products and population involved in AEFI, etc.		
PV	VL04: Procedures established and implemented to perform vigilance activities.	VL04.03: Staff access to information resources relevant to vigilance processes (e.g., safety information sources and reference materials) is ensured.		Although CNAM has access to international literature on safety of medicines, there is a need to create a mechanism for exchange of information with DPM and members of the technical committees. Subscriptions to databases of scientific literature with up-to-date studies and information on medical products safety and/or efficacy. A list of electronic and/or printed materials consulted during the vigilance event analysis and/or investigation (books, international guidelines, international package inserts, others).	Partial	3
PV		VL04.04: Expert committee(s) exists to review serious vigilance events.		Terms of reference and/or standard procedures for the expert committee for review of serious vigilance events. Records of discussions and decisions of the expert committee for review of serious vigilance events. Decree and terms of reference in place. Meeting last week and previous meeting in 2015; irregular meeting times yet the decree requires quarterly meetings.	Yes	3
PV		VL04.05: Assessment of the risk/benefit balance of medical products is regularly conducted considering vigilance data.		There is no standard procedure relevant to the risk-benefit assessment of medical products. Documented evidence of the consideration of the vigilance data in these processes. Regulatory decisions and/or actions for maintaining the favorable risk-benefit balance of medical products placed on the market.	No	3
PV		VL04.06: The development and implementation of a proactive monitoring program to promote adherence to vigilance by NRA.			N/A	4

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
PV	VL04: Procedures established and implemented to perform vigilance activities.	VL04.07: Standard procedures exist and are implemented for enforcement of the national vigilance program.			N/A	4
PV	VL05: Mechanism exists to promote transparency, accountability, and communication	VL05.01: Mechanism for regular feedback to all stakeholders on vigilance events exists and is complemented with a risk communication plan.		Risk communication plan and procedures for communication with different stakeholders relevant to vigilance program. Examples of shared information among those stakeholders. Records of communication between the NRA and those stakeholders. Procedure to be given. Record of ADE on co-trimoxazole.	Yes	4
PV		VL05.02: Vigilance activities and feedback are appropriately communicated to the public.			No	4
PV		VL05.03: Vigilance data and findings are shared with relevant regional and international partners.		Proof of membership of the national vigilance program to relevant regional and/or international partners. Member of WHO. Proof of regular communication and interaction with regional and/or international partners. Annual communication from CNAM to WHO and Morocco regional collaborating center. Proof of engagement of national vigilance program in regional and/or international meetings, conferences, symposia, others for CNAM.	Yes	3
PV	VL06: Mechanism in place to monitor regulatory performance and output.	VL06.01: Vigilance information is used to amend or issue regulatory decisions and consequent actions in timely manner.		Corrective regulatory decisions and actions (e.g., suspension, recall, update of product leaflet, withdrawal and/or MA revocation, others) in accordance with national regulation and consistent with WHO recommendations are taken based on vigilance findings. Two examples of quality issues: povidone iodine changing color and quinine tablets without active ingredient.	Yes	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
PV	VL06: Mechanism in place to monitor regulatory performance and output.	VL06.02: Performance indicators for vigilance activities are established.		The existence and implementation of performance indicators for different activities included under the medical products vigilance program. Detection and/or receipt of vigilance events as complemented with the reporting system, timely review, investigation and/or assessment of vigilance events, storage and management of reported vigilance data, risk assessment, analysis, and evaluation of vigilance data and/or identification of trends, initiation of appropriate actions at the national and/or subnational level when needed, and risk management and risk communication plans.	No	4
MS	MC01: Legal provisions, regulations, and guidelines required to define regulatory framework of market surveillance and control activities.	MC01.01: Legal provisions and/or regulations are in place with respect to import and export activities, including permanent regulatory presence at designated entry and/or exit ports where medical products are being moved.		Decree No. 04-557/P-RM of 01 Dec 2004 empowers DPM to authorize medicines on the market, including importation of medicines that do not require MA. It does clearly specify the requirements for importation and exportation of registered medicines. There are no regulations and guidelines on importation and exportation of medicines. Quality inspection is done by customs to check the medicines coming into the country given that DPM does not have staff at the points of entry. With this arrangement however there is no memorandum of understanding established for this collaboration.	No	2
MS		MC01.03: Legal provisions and/or regulations address relevant products and personnel involved in SSFFC medical products.		Decree No. 02 075/P-RM of 15 Feb 2002 Establishing the National Commission for the Fight against the Illegal Sale of Medicines does not specifically address the handling and sale of substandard and falsified medical products. There are no regulations and guidelines for controlling the sale of substandard and falsified medicines.	Partial	2
MS		MC01.04: Legal provisions and/or regulations exist for the control of promotion of medical products to avoid communication of false or misleading information.		Legal provisions relevant to control of promotion, marketing, and advertising of medical products provided for in Decree No. 557/P-RM of 1 Dec 2004 establishing the MA for Medicinal Products for Human and Veterinary Use. Inter-ministerial Order N8 37 35 MS MEP/SG of 31 Dec 2008 defines conditions of advertising medicines and the conditions of practice of medical representatives.	Partial	2

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				Regulations and guidelines relevant to control promotion, marketing, and advertising of medical products do not exist.		
MS	MC01: Legal provisions, regulations, and guidelines required to define regulatory framework of market surveillance and control activities.	MC01.05: Legal provisions and/or regulations exist for placement of a product's unique identification number on its outer packaging.			N/A	4
MS		MC01.06: Guidelines exist for importers and exporters on format and content of applications and procedures to receive necessary authorizations/permissions.		There are no guidelines for importers and exporters on the format and content of relevant applications and procedures to receive the necessary authorizations/ permissions.	No	3
MS		MC01.07: Guidelines exist on the recall and/or disposal of SSFFC medical products.		There are no guidelines on the recall and/or disposal of substandard and falsified medical products.	No	3
MS	MC02: Arrangement for effective organization and good governance.	MC02.01: There is a defined structure, with clear responsibilities, to conduct market surveillance and control activities.		There is no formal structure for coordinating the different institutions involved in market surveillance and control activities, nor is there documentation clarifying roles and responsibilities.	No	2
MS		MC02.02: Collaboration between all stakeholders relevant to market surveillance and control is in place.		Decree 02 075/PRM 15TH FEB 2002 National committee on control of illegal drug-selling under MOH; however not functional. MOH President; DPM Secretary; Ministries of Sports and Youth, Communication, Justice, Territorial Administration, Trade, Finance, Security, Defense, Promotion of Women and Children, and Culture; Pharmacy Council; Medical Council; Consumer Civil Association; Federation Association of Community Health; Chamber of Commerce; & Journalist Association Last held a meeting in 2015; should meet twice in a year and when necessary, Has regional branches. Developed a strategic plan in 2015 which was not implemented in 2017. There should be an inter-ministerial order/regulation to provide guidance on operation of the commission, including institutions involving routine market surveillance activities.	Partial	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
MS	MC03: Human resources to perform market surveillance and control activities.	MC03.01: Enough competent staff (education, training, skills and experience) assigned to perform market surveillance and control activities.		There were no designated persons assigned to market surveillance and control activities under the mandate of DPM.	No	3
MS		MC03.02: Respective job descriptions are established and regularly updated with inclusion of duties, functions, responsibilities, and necessary competencies.		There are no job descriptions established for duties and responsibilities for market surveillance and control.	No	3
MS		MC03.03: Training plan developed, implemented, and updated at least once a year.		There is no training plan for market surveillance and control.	No	3
MS		MC03.04: The NRA performs and maintains records of staff training activities and training effectiveness verification.		There are no records of staff training activities and training effectiveness verification.	No	3
MS	MC04: Procedures established and implemented to perform market surveillance and control	MC04.01: Documented and implemented procedures exist in the NRA to review any complaints received from the market.		There are no documented standard procedures within DPM to receive, review, and respond to any market complaints with respect to medical products.	No	3
MS		MC04.02: Documented and implemented procedures exist for regulatory decisions (approval or objection) of promotion, marketing, and/or advertisement activities.			N/A	4
MS		MC04.03: Documented and implemented procedures exist to prevent, detect, and/or respond to SSFFC medical products.		There are no documented and implemented procedures to prevent, detect, and/or respond to SF medical products.	No	3
MS		MC04.04: Documented and implemented procedures exist to grant the necessary authorizations and/or permissions for import and export activities.		There are no documented and implemented procedures to grant the necessary authorizations and/or permissions for import and export activities.	No	3
MS		MC04.05: Documented and implemented procedures exist to ensure safe disposal of detected SSFFC medical products.		There are no documented and implemented procedures to ensure safe disposal of detected SF medical products.	No	3
MS		MC04.07: Documented and implemented procedures exist to		There are no documented and implemented guidelines and procedures to enable public reporting of suspected	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
		enable public reporting of suspected SSFFC medical products.		SF medical products.		
MS	MC05: Mechanism exists to promote transparency, accountability, and communication.	MC05.01: Market surveillance and control activities, including those for SSFFC, are appropriately communicated within the NRA.		Market surveillance and control activities including those related to SF products are not properly communicated between institutions/departments/entities involved in medicine regulation (LNS, ISP, Anti-Narcotics Unit).	No	3
MS		MC05.02: Findings and regulatory decisions of market surveillance and control activities, including those relevant to SSFFC, are appropriately communicated to all stakeholders, including the public.			N/A	4
MS		MC05.03: Findings and regulatory decisions of market surveillance and control activities of common interest are shared with other countries and/or international organizations.			N/A	4
MS	MC06: Mechanism in place to monitor regulatory performance and output.	MC06.02: Database is established for product batches that have undergone surveillance along with their relevant testing results and regulatory actions.			N/A	4
MS		MC06.03: Performance indicators for market surveillance and control activities are established.			N/A	4
MS		MS06.01: Database exists of approved and refused promotional materials and advertisements with the supporting documentation.			N/A	4
CT	CT01: Legal provisions, regulations, and guidelines required to define the regulatory framework of CTO.	CT01.01: Legal provisions and/or regulations for CT exist.		The laws/legislation/legal provisions that grants the NRA the legal mandates for CTO responsibilities are provided for in Law 059 Dec 28, 2009, and Decree 2017-0245/ P-RM March 13, 2017. The decree was recently passed and the section did not have a copy. The sections in the law that defines the extent/scope of the CTO mandates allocated to the NRA and other agency(ies) involved in CTO-related activities. DPM is responsible for technical activities of CT; however, there are other agencies involved 1) for	Yes	1

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				approval of ethics in human and veterinary trials called the National Ethics Committee for faculty of medicine, pharmacy, and dentistry for applications arising from the University of Mali and 2) the National Ethics Committee for Health and Life Sciences for applications based in CNAM.		
CT	CT01: Legal provisions, regulations, and guidelines required to define regulatory framework of CTO.	CT01.02: Legal provisions and/or regulations require authorization from NRA and notification to the NRA on changes/variations (amendments) in the original protocol of the CT.		Relevant sections of the law on CTO with emphasis on the requirement for either notification or authorization prior to implementation of changes/variations to original protocol are not provided for. There are no regulations and guidelines on the format and content preparation on changes/variations to the original protocol, as well as the submission procedure.	No	2
CT		CT01.03: Legal provisions and/or regulations require research centers, researchers, sponsors, CROs, and everyone involved in the clinical trial to comply with GCP.		There are no legal provisions and/or regulations that request that stakeholders, including research centers, researchers, sponsors, CROs, and everyone involved in clinical trials to comply with GCP should be in existence, enacted and implemented. The legal provision should be supported by detailed and published regulatory requirements for GCP. The published GCP principles should be current and up to date with information on inspections, suspension and/or stoppage of trials among others. In the event of adoption, there should be documentation to demonstrate recognition.	No	2
CT		CT01.04: Legal provisions, regulations, and/or guidelines require that IMPs comply with GMP for IMPs.		There are no legal provisions/regulations and/or guidelines requiring that IMPs used in CTs be produced in compliance with the principles of GMP for IMPs.	No	3
CT		CT01.05: There are legal provisions to cover circumstances in which the routine CT procedures may not be followed (e.g., public health interests).		There are no legal provisions/regulations that clearly state that in the event of certain circumstances (e.g., in the interest of public health, etc.), the routine CT procedure should not be followed. The guidelines or similar document that provides the list of situations where the routine CT procedures should not be followed. In practice, like for Ebola, which followed a fast track.	No	3
CT		CT01.06: Legal provisions and/or regulations provide enforcement powers for NRA to inspect, suspend, and/or stop CT.		There are no legal provisions and/regulations that gives the NRA the enforcement power to inspect, suspend, and/or stop CTs.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				When, how and whom to inspect, suspend, and/or stop CTs List of CTs to inspect, suspend, and/or stop. Currently, the section does not conduct GCP inspections; does not suspend, stop CTs; applicants do not pay fees, just issue certificates after technical evaluation.		
CT	CT01: Legal provisions, regulations, and guidelines required to define regulatory framework of CTO.	CT01.07: There are legal provision and/or a regulation that requires the establishment of an independent ethics committee (IEC).		The law on CT provides for establishment of the National Ethics Committee however there are no regulations for regulation requesting the establishment of the IEC detailing. The identity of the designated authority mandated to host and assist the IEC in discharging its duties The selection criteria for the members of the IEC and the number of members, as well as their term of office The mechanisms and structures to ensure the independence of the IEC, as well as the code of conduct for its members. The general policy on potential conflicts of interest for members of the IEC	Partial	3
CT		CT01.08: Legal provisions, regulations, and/or guidelines that require authorization for the import, export, and destruction of IMPs.		The legal provisions, regulations, and/or guidelines on the import, export, and destruction of IMPs. There is an inter-ministerial order for controlling importation and exportation of medicines for human and veterinary use. No regulation that requires authorization for the import, export, and destruction of IMPs. The assessor should verify whether IMPs imported and/or exported for the purposes of CT application submissions required authorization. The guidance documents and application forms for requesting assistance from the NRA to import, export, or destroy IMPs, as well as the processes executed upon receipt of an application.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				Examples of IMPs imported, exported, or destroyed since the last NRA inspection. Guidelines or similar documents that provide guidance on the justifiable quantities of IMPs that should be imported and/or exported relative to the timelines in the CT protocol, as well as the stage in the CT application process where IMPs may be imported or exported relative to the timelines of the CT.		
CT	CT01: Legal provisions, regulations, and guidelines required to define regulatory framework of CTO.	CT01.09: There are guidelines on monitoring adverse reactions and periodical reporting.		The guidelines and/or regulation on monitoring adverse reactions and periodic reporting, as well as follow-up. Verify if the guidelines have been implemented. In practice receive and issue guidance on AEs. Article 6 of Ministerial DECISION.	No	2
CT		CT01.10: There are guidelines on the format and content of CT applications.		There are no guidelines on the format and content of the CT application are available, implemented and published on the NRA's website	No	2
CT		CT01.11: Legal provisions and/or regulations allow the NRA to recognize and/or use relevant CT decisions, reports, or information from other NRAs or regional and international bodies.		There are no legal provisions and/or regulation that permit the DPM to recognize and/or use relevant CT decisions, reports, or information from other NRAs or regional and international bodies.	No	1
CT		CT01.13: There are legal provisions and/or regulations to cover circumstances in which fast-track clinical trial authorization applies (e.g., public health concerns).		The legal provisions and/or regulation that cover circumstances/instances where fast-track CT authorization is required/applies are not available. In practice, followed the global directives like in the case of Ebola CT.	No	2
CT	CT02: Arrangement for effective organization and good governance.	CT02.01: There is a defined structure with clear responsibilities to conduct CTO activities.		The roles/responsibilities/duties of the entities responsible for CTO within the NRA and their placement on the organizational chart in relation to other entities involved in CTO are not clearly specified. Draft organogram not approved; there is one head of section (Bayogo) and one research pharmacist	Partial	2
CT		CT02.02: Documented procedures are implemented to ensure the involvement and communication between all stakeholders relevant to CT.		Although there is provision in the legislation for the role of DPM and the Ethics committees in CTO, there are no SOPs or similar documents that guide and/or inform effective communication and collaboration between stakeholders.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				The CT application guidelines that capture duties/roles and responsibilities of various stakeholders involved in CTO activities are not available.		
CT	CT03: Human resources to perform CTO activities.	CT03.01: Enough competent staff (education, training, skills and experience) are assigned to perform CTO activities.		There is an insufficient number of personnel and no support from external experts to carry out CTO activities. The current volume of work involves 6 applications in 2016 and 4 in 2017. There is no CT technical committee to review the work done by the officers in DPM.	No	3
CT		CT03.02: Duties, functions, responsibilities and necessary competencies are established and updated in the respective job descriptions.		There are no job descriptions for staff involved in CTO activities.	No	3
CT		CT03.03: Training plan developed, implemented, and updated at least once a year.		There are no guidelines or similar documents used in the development and implementation of the training plan.	No	3
CT		CT03.04: The NRA performs and maintains records of staff training activities.		There are records of staff training activities.	No	3
CT	CT04: Procedures established and implemented to perform CTO.	CT04.01: An advisory committee is involved in review of CT applications.		There is no advisory committee involved in review of CT applications.	No	4
CT		CT04.02: There is a defined composition of the ethics committees (ECs).		Two ECs available but no information on their composition is available with DPM. The recently passed decree is not yet available to DPM officials.	N/A	3
CT		CT04.03: Preclinical data is considered within CT application review.		There are no regulations/guidelines that state that preclinical data is a requirement in a CT application and that satisfactory review of the preclinical data is a pre-requisite for CT authorization. There are no SOPs that provide guidance during the review of the preclinical data submitted for the purposes of CT application.	Partial	3
CT		CT04.04: There are defined roles for ECs at all levels.		There are no regulations and/or guidelines that provide defined roles of the EC at each level of CTO activities. Guidelines detailing the objectives, functions, roles, and responsibilities of the EC at each level of CTO activities are not available.	No	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
CT	CT04: Procedures established and implemented to perform CTO.	CT04.05: Documented and implemented procedures exist to review CT applications.		There are no SOPs for review of CT applications.	No	3
CT		CT04.07: There are procedures for EC responsibility for clearance and follow-up until completion of the CT.		Procedure for university EC exist for clearance There are no regulations, guidelines, and/or SOPs detailing roles and responsibilities of the EC in clearance and follow-up process of CTs until completion. University of Mali EC has procedures for clearance of CT.	Partial	3
CT		CT04.08: The same criteria are used for the evaluation of CT applications regardless of the applicant (e.g., domestic, foreign, public/private sector).		In practice the same criteria is used for evaluation of CT applications, regardless of the applicant. There are no guidelines that dictate that the criteria applied to evaluate CT applications should be the same regardless of the applicant. A single set of criteria for the evaluation process exists, documented and implemented during evaluation of all CT applications. The criteria should be documented in the form of guidelines and/or SOPs and should present the details of the set of criteria for the evaluation process. The criteria are supported with a checklist used during the evaluation process.	Yes	3
CT	CT06: Mechanism in place to monitor regulatory performance and output.	CT06.01: Internal list/database of all approved & rejected CTs, & the NRA maintains a record of each approved and rejected CT.			N/A	4
CT		CT06.02: Performance indicators for CTO activities are established and implemented.			N/A	4
CT		CT06.03: Feedback report from sponsors or CROs during and after CTs is available and/or sent to NRAs/ECs.			N/A	4
CT		CT06.04: There are timelines for the assessment of CT applications and an internal tracking system to follow the targeted time frames.		Although the section has set the timelines for CT application assessment to 15 days, there is no reference to a prescribed guidance. The process involves receipt of the application by the secretary, forwarded to the director of DPM for sorting & allocation to either the Medicine Regulation or Quality Assurance Division. Once allocated to Quality Assur-ance, it is forwarded to the head of division who reviews & sends the application to the head of section. Once the	Partial	3

Fun	Indicator	Sub-indicator	Evidence provided	Evidence provided confirmed by assessor	Score	ML
				application is evaluated, it is forwarded to the minister of health for approval prior to issue of a ministerial decision to conduct the CT. If additional information is required, it is requested from the applicant prior to consideration. Approval - MOH issues a ministerial decision distributed to regional offices, applicant, all health professional councils, health inspections, all departments of MOH. There are no guidelines that stipulate that CT applications should be processed/assessed per the prescribed timelines The regulations that suggest that the timelines for CT application assessment should be internally monitored for compliance with published timelines		

Institutional Development Plan (IDP)

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
RS01.02: Legal provision and/or regulation defines institutions involved as part of the regulatory system; their mandate, functions, roles, responsibilities, and enforcement power.	Establish a legal provision for defining the roles, functions, and mandate of all institutions involved in medicine regulation and a mechanism of coordination between DPM and other institutions, including LNS, ISP, & CNAM.	DPM, LNS, ISP, CNAM	Proposed	Technical support				USAID, The Netherlands Government			
RS01.03: When more than one institution/ authority is involved in regulatory activities, the regulation defines the channels of coordination and an administrative mechanism is defined for it.	Develop and implement regulations defining clear channels of coordination among the different institutions given that medicine regulation is undertaken by more than one institution & to avoid overlapping of the respective empowerment. Create well defined administrative mechanisms for coordination and exchange of information.	DPM, LNS, ISP, CNAM	Proposed	Technical support				USAID, The Netherlands Government			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
RS01.05: Legal provisions and/or relevant regulations to take actions on recall, suspension, withdrawal, and/or destruction of SSFFC medical products.	Revise Decree N ° 2011-753/P-RM of 17 Nov 2011 fixing the organization and operation of DPM to incorporate handling of all nonconforming medicines on the market including substandard and falsified medicines.	DPM	Proposed	Technical support				USAID, The Netherlands Government			
RS01.06: Legal provisions or regulations de-fine requirements of transparency and dissemination of information to the public and relevant stakeholders.	Revise the legal provision and regulation to incorporate dissemination of information to the public.	DPM	Proposed	Technical support				USAID, The Netherland Government			
RS01.07: Guidelines for regulatory activities are developed and/or recognized, regularly updated and made available to the public.	Develop guidelines on regulatory activities and disseminate them to the public.		Proposed	Technical support				USAID			
RS01.08: Development of regulations involves regulatory authority responsible for their implementation and enforcement.	Although in practice, DPM is involved in the development of regulations, there is a need to revise the legislation to specifically include this requirement.		Proposed	Technical support				USAID			
RS01.09: The NRA consults or involves specific sectors of the civil society (such as NGOs representing health professionals, the industry, consumers and patients) during development or adoption of the guidelines.	DPM to establish a mechanism for consulting civil society and patient organizations in development of guidelines		Proposed	Meeting				USAID			
RS01.10: A guideline is available on complaints and appeals against regulatory decisions.	To establish a guideline on complaints and appeals against regulatory decisions	DPM	Proposed	Technical support							
RS02.01: Roles and responsibilities of all structures (regulatory bodies) defined, documented, and implemented.	There is need to review the roles and responsibilities of DPM and follow up on approval and operationalize the draft organogram	DPM	Ongoing	Meeting				DPM			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
RS02.02: Channels of communication and decision making are clearly established between the structures.	Establish communication and decision making process between DPM and other regulatory institutions, LNS, and ISP		Proposed	Technical support				USAID,			
RS02.04: Independence of NRA from researchers, manufacturers, distributors, and wholesalers, as well as the procurement system.	DPM currently is responsible for both medicine regulation and medicine quantification. Performing the function of medicine quantification may compromise independence of medicine regulation; should be undertaken by a separate institution under MOH.	DPM, MOH	Proposed	Technical support				USAID			
RS03.01: A national medicines policy, aligned with health policy, exists and is implemented.	The current national medicines policy was last reviewed in 2012. There is need to review it taking into consideration the current developments in the pharma-ceutical and health sectors.	MOH, DPM	Proposed	Technical support				USAID			
RS03.03: A plan for achieving strategic objectives is developed, implemented, and regularly updated.	Although the strategic plan was reviewed in 2012, there is need for further review and support to fully implement it.	DPM	Proposed	Technical support				USAID			
RS03.04: A documented policy is established, with written criteria for recognition and relying on other NRA decisions (if applicable).	To establish a country-specific documented policy to recognize and rely on regulatory decisions of other NRAs.	DPM	Proposed	Technical support							
RS03.05: The NRA is promoting Good Regulatory practices through established policies.	DPM to establish and implement Good Regulatory Practices in the functions under their mandate based on international guidelines.		Proposed	Technical support							
RS04.01: Leadership ensures that the strategic priorities and objectives are well known and communicated throughout the agency.	All staff should have access to the strategic plan and understand the strategic priorities. Dissemination of strategic priorities should be carried out in a coordinated manner.	DPM	Proposed	Other				DPM			
RS04.02: A rapid alert system to react to managing the threats by	A clear regulation and documented procedure to managing the threats by	DPM	Proposed	Other							

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
SSFFC medical products and to recall these products from the market.	substandard and falsified medical products and to recall these products from the market should be established. A register to record and monitor the number of complaints and recalls should be put in place. Guidelines for recalls to be developed and disseminated to stakeholders.										
RS04.03: A rapid alert and recall system based on documented communication to the appropriate level of the distribution channel and with a feedback mechanism.	To establish a rapid alert and recall system based on documented communication to the appropriate level of the distribution channel and with a feedback mechanism.	DPM	Proposed	Technical support				USAID, WHO			
RS04.04: Recall system based on documented confirmation that appropriate, batch-traceable action and/or destruction has been undertaken when necessary.	Although there is ministerial order 01-0023 related to destruction of expired products and issue of destruction certificate, there should be written procedures describing the action to be taken, including the need to consider a recall, in the case of a complaint concerning a possible product defect up to the point of destruction at central, regional, and district levels.	DPM	Proposed	Technical support				USAID			
RS05.01: Top management demonstrates commitment and leadership to develop and implement QMS.	DPM to develop and implement a QMS with designated personnel and a budget toward this specific function.	DPM	Proposed	Technical support				USAID			
RS06.02: A periodic staff appraisal system is established to review performance and competencies, identify training needs, and agree on performance targets.	To establish a staff appraisal system to review performance, identify training needs, and determine performance targets.	DPM	Proposed	Other				DPM			
RS06.04: Written mechanism to handle potential conflicts of interest of internal or external	To establish a mechanism for internal and external experts and committee members to declare interests and conflicts	DPM	Proposed	Other				DPM			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
experts and committee members, to gather declarations of interest and to guarantee the update of these declarations for all regulatory functions.	of interest.										
RS07.01: Sources of funding are established for the NRA and affiliated institutions to carry out all regulatory functions.	To advocate for allocation of more funds to DPM so that all regulatory functions are carried out. Further modification of the use of funds so that DPM is allowed by Government to use the funds generated at source.	DPM	Proposed	Other				Ministry of Finance			
RS07.02: The amounts of fees, taxes, tariffs or dues payable for the services provided are defined and publicly available.	To provide information on fees, tariffs on regulatory services to the public.	DPM	Proposed	Other				DPM			
RS08.02: The equipment provided for performing the regulatory activities is adequate.	To acquire equipment for staff involved in registration of medicines, computers and laptops.	DPM	Proposed	Other				USAID			
RS09.02: The information on laws, regulations, procedures and guidelines is publicly available and is kept duly updated.	To establish a functional website with the relevant regulatory information.		Proposed	Other							
RS09.04: Information on marketed medical products, authorized companies and licensed facilities is publicly available.	To publish information on marketed medical products and authorized companies to the public.	DPM	Proposed	Other				DPM			
RS09.06: Appropriate mechanism exists for management of confidential information and/or proprietary material.	To establish a mechanism for securing confidential information.	DPM	Proposed	Other				DPM			
RS09.07: Code of conduct, including management of conflicts of interest, is published and enforced for internal and external staff, including members of the advisory committees.	Establish a written, published, and enforced code of conduct including conflict of interest for internal staff and for external experts and members of advisory committees.	DPM	Proposed	Other				DPM			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
RS09.08: The NRA uses computerized systems to automate repetitive activities.	To explore use of computerized systems for regulatory functions to improve efficiency and effectiveness of DPM.	DPM	Proposed	Technical support				USAID			
RS09.09: The NRA has its own web page with updated information that gives public access to related legal provisions, guidelines and decisions.	To establish a website with updated information that gives public access to related legal provisions, guidelines, and regulatory decisions.	DPM	Proposed	Other				DPM			
RS10.01: Requirements established to monitor, supervise, and review the performance of NRA and affiliated institutions.	To establish a monitoring and evaluation system to assess progress and performance in implementation of regulatory activities in relation to the strategic plan.	DPM	Proposed	Technical support				USAID			
RS10.02: Performance indicators established and used for monitoring progress to meet strategic plan and/or institutional development plan.	Establish performance indicators to monitor progress of implementation of the strategic plan.	DPM	Proposed	Technical support				USAID			
RS10.03: Report at regular intervals on regulatory activities, progression, and status of resources are available.	Produce reports at regular intervals on the regulatory activities, progression, and status of resources.	DPM	Proposed	Other				DPM			
	Provide a regular updated copy of the national medicine register to the public.	DPM	Proposed	Other				DPM			
MA01.01: There are legal provisions to hold a registration and/or marketing authorization (MA) before placing the product on the market.	Revise decree and regulation to provide list of the classes of medical products (e.g., drugs, vaccines, medical devices, etc.) that require registration/MA before they are marketed/sold and those that are exempted.	DPM	Proposed	Technical support				USAID, The Netherlands Government			
MA01.02: There are legal provisions to hold, suspend, withdraw, or cancel an MA in case there is/are finding(s) on quality, safety, or efficacy issues.	Revise regulation/Inter-ministerial order No. 05 2203/ MS-MEP-SG of 9/20/2005, to provide details on when and how to withhold, suspend, withdraw, or cancel registration /MA.	DPM	Proposed	Technical support				USAID, The Netherlands Government			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MA01.04: There are legal provisions and/or regulations regarding the limited duration of validity of the MA & for periodic reviews to MAs (i.e., renewals).	Establish guidelines for applicants stating the validity of the MA and the requirements to be fulfilled for renewal of MA.	DPM	Proposed	Technical support				USAID			
MA01.05: There are regulations and/or guidelines for the definition, types, and scopes of variations along with the required documentation.	Revise the regulations and develop a guideline that documents the definition, types, & scope of variations, as well as the corresponding documentation requirements, appropriate fees, processes, and procedures for submitting variations to DPM for review as well as timelines.	DPM	Proposed	Technical support				USAID, The Netherlands Government			
MA01.07: Legal provisions and/or regulations allow the NRA to recognize and/or use MA-relevant decisions, reports or information from other NRAs or regional and international bodies.	Establish legal provisions and/or regulation that permits DPM to recognize and/or use relevant MA decisions, reports or information from other NRAs or regional and international bodies	DPM	Proposed	Technical support				USAID			
MA01.08: Specific guidelines on the quality, nonclinical/safety, and clinical aspects are established and implemented.	Develop guidelines detailing specific regulatory requirements for the quality, nonclinical/safety and clinical aspects of the MA dossier in the CTD format originally developed by ICH. Develop and publish specific guidelines on product labelling and packaging, package insert, and the SPC information pamphlet for professionals or equivalent; information pamphlets for patients are nonexistant.	DPM	Proposed	Technical support				USAID			
MA01.09: There are guidelines on the format & content for submission of MA applications consistent with the WHO or other internationally accepted standards.	Develop and publish guidelines that provide clarity on format and content of the MA application submission processes and procedures for submitting the application to DPM in CTD format.	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MA01.10: There are guidelines for MAHs defining the types and scopes of variations, format, and documentation required and specifications of the variations that are subjected to prior approval.	Develop and publish guidelines for MAH to provide guidance on the types and scopes of variations, format, and documentation required, as well as specifications of the variations that are subject to prior approval.	DPM	Proposed	Technical support				USAID			
MA01.11: There are established guidelines to cover circumstances in which the routine MA procedures may not be followed (e.g., public health interests).	Develop and publish guidelines that provide guidance to DPM on the application of a nonroutine MA procedure in emergency situation, as well as the corresponding SOPs or similar documents.	DPM	Proposed	Technical support				USAID			
MA01.12: There are guidelines on the content of product information leaflets, SPC, packaging and labelling.	Develop and publish guidelines that provide guidance on the MA application requirements on the content of the product information leaflets, SPCs, packaging and labelling and on the information to be included in the package inserts (inserts, patient information pamphlets), SPCs (information pamphlet for professionals or equivalent), and labelling of container-packaging.	DPM	Proposed	Technical support				USAID			
MA02.02: Documented & implemented procedures exist to ensure involvement and communication with all relevant regulatory divisions (assessors, QC laboratory, & inspectorate) as necessary.	Establish guidelines and SOPs that guide and/or inform effective communication and collaboration between stakeholders such as the laboratory, vigilance, quality control, CTO, etc.	DPM, LNS, ISP, CNAM	Proposed	Technical support				USAID			
MA03.01: Enough competent staff (education, training, skills and experience) are assigned to perform MA activities.	Strengthen the human resource base involved in each of the documented activities along the entire registration process flow by recruiting more officers and developing a training program in medicine registration.	DPM	Proposed	Country training	2/11/2018	2/23/2018	10	USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MA03.02: Duties, functions, responsibilities, & necessary competencies are established and updated in the respective job descriptions.	Develop and implement current and up-to-date job descriptions with current duties, responsibilities, and the requisite competence.	DPM	Proposed	Other				USAID			
MA03.03: Training plan developed, implemented, and updated at least once a year.	Develop and implement a training program with a training plan that is updated on an annual basis.	DPM	Proposed	Other				DPM			
MA03.04: The NRA performs and maintains records of staff training activities.	Develop and implement guidelines or similar documents to guide DPM to perform and maintain records of staff training activities.	DPM	Proposed	Other				DPM			
MA04.01: Documented procedures/tools are implemented to assess the different parts of the application and for the assessment of specific requirements of specific classes of medical products (quality, safety, efficacy).	Develop and implement documented procedures/tools, including SOPs developed and used in the assessment of the different parts of MA/ registration applications and in the assessment of specific requirements for specific classes of medical products.	DPM	Proposed	Technical support				USAID			
MA04.02: Documented procedures are implemented to renew and/or to periodically review the MAs granted.	Develop and implement documented procedures/tool, including SOPs for receipts, screening, review, decision, issuance of registration number of certificate for renew of MA.	DPM	Proposed	Technical support				USAID			
MA04.03: Documented procedures are implemented for assessing the applications for variation of MAs.	Develop and implement documented procedures for assessing applications for variations of Mas.	DPM	Proposed	Technical support				USAID			
MA04.05: An advisory/scientific committee, including external members, is involved in the review of MA applications as necessary.	Establish a regulation for engaging technical experts that can provide expert opinions and assist with evaluation of specialized areas, e.g., bioequivalence studies, clinical part of the dossiers in registration of medicines with clear objectives, terms of reference and procedures of operation.	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MA04.06: There are timelines for assessment of the applications and an internal tracking system is established to follow the targeted time frames.	Establish timelines for assessment of applications and an internal tracking system to follow the targeted time frames.	DPM	Proposed	Other				DPM			
MA04.07: There is a documented fast-track mechanism, with specific registration requirements for special situations (e.g., public health interest).	Establish a documented fast-track mechanism, with specific registration requirements for special situations (e.g., public health interest).	DPM	Proposed	Technical support				USAID			
MA05.01: Web site or other official publication with SPC-like information is available and regularly updated.	Develop and implement a functional website where SPC-like information is published together with guidelines and/or SOPs to provide guidance on preparation with respect to the content and format of the SPC-like information and the procedure/processes for regular update (i.e., frequency and processes).	DPM	Proposed	Technical support				USAID			
MA06.01: There is a database of all product applications received, approved, refused, suspended, and/or withdrawn along with their essential documentation.	Establish a database of all the product applications received, approved, refused, suspended, and/or withdrawn, along with their essential documentation.	DPM	Proposed	Technical support	5/2/2018	11/30/2018	180	USAID			
MA06.02: Performance indicators for registration and MA activities are established.	Establish performance indicators for registration and MA activities.	DPM	Proposed	Technical support				USAID			
PV03.01: Enough competent staff (education, training, skills, and experience) are assigned to perform vigilance activities.	Recruit more competent personnel to handle PV activities at CNAM.	DPM, CNAM	Proposed	Other				CNAM			
VL01.01: Legal provisions for a national vigilance system exist.	Revise the legislation to authorize DPM to conduct GVP inspections.	DPM, CNAM	Proposed	Technical support				USAID			
VL01.02: Legal provisions, and/or regulations require manufacturers	To establish guidelines obligating manufacturers to report data on safety of	DPM	Proposed	Other				DPM			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
and/or MAH to set up a vigilance system of their medical products and periodically report vigilance data, including zero events, to the NRA.	products to DPM										
VL01.04: Legal provisions and/or regulations allow NRA to require manufacturers and/or MAH to conduct specific studies on safety and efficacy under specific conditions.	To revise the inter-ministerial order on pharmacovigilance to provide legal provisions and/or regulations authorizing the NRA to request phase IV safety and/or efficacy studies	DPM	Proposed	Technical support				USAID			
VL01.05: Legal provisions, regulations and/or guidelines require manufacturers and/or MAHs to designate a Qualified Person responsible for vigilance.	Establish a legal provision and/or regulations obligating manufacturers and/or MAHs to designate a qualified person responsible for vigilance (QPPV).	DPM	Proposed	Technical support				USAID			
VL01.06: There are guidelines for planning, conducting (including monitoring) and reporting of vigilance activities.	To develop guidelines for MAHs and competent authorities on vigilance activities, including planning, conducting, and reporting vigilance activities.	DPM,	Proposed	Technical support				USAID			
VL01.07: Legal provisions and/or regulations allow recognition and/or reliance on vigilance-relevant decisions, reports or information from other countries, regional and/or international bodies.	Legal provisions and/or regulations relevant to reliance and/or recognition as applied to vigilance should be put in place.	DPM	Proposed	Technical support				USAID			
VL02.01: There is a defined structure with clear responsibilities to conduct vigilance activities.	To establish procedures for coordination of DPM and CNAM; develop a defined structure for vigilance activities clearly showing roles and responsibilities of different stakeholders.	DPM, CNAM	Proposed	Technical support							
VL02.02: Collaboration between all stakeholders relevant to vigilance of medical products is in place.	To implement agreements, memoranda of understanding (MOU) and/or documented procedures ensuring the active involvement, commun-	DPM, CNAM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
	ication, and collaboration between identified stakeholders relevant to vigilance of medical products. There should be a coordinating mechanism for stakeholders in place.										
VL03.02: Respective job descriptions are established and regularly updated with inclusion of duties, functions, responsibilities, and necessary competencies.	Develop job descriptions for each position in the system and regularly update with inclusion of duties, functions, responsibilities, and necessary competencies.	DPM, CNAM	Proposed	Other				DPM, CNAM			
VL03.03: Training plan developed, implemented, and updated at least once a year.	Develop and implement a training plan, which is regularly updated on an annual basis.	DPM, CNAM	Proposed	Other				USAID			
VL03.04: The NRA performs and maintains records of staff training activities and training effectiveness verification.	Both DPM and CNAM should maintain records of staff training activities and training effectiveness verification.	DPM, CNAM	Proposed	Other				DPM			
VL04.01: Risk approach is considered throughout different vigilance activities, including timely response to safety signals.	Risk approach should be considered throughout different vigilance activities, including timely response to safety signals; develop risk-based plan for conducting vigilance activities	DPM, CNAM	Proposed	Technical support				USAID			
VL04.03: Staff access to information resources relevant to vigilance processes (e.g., safety information sources and reference materials) is ensured.	Access to information resources relevant to vigilance processes (e.g., safety information sources and reference materials) should be ensured for all personnel in CNAM and DPM, including external experts; provide Internet connectivity and grant access to online libraries and databases										
VL04.05: Assessment of the risk/benefit balance of medical products is regularly conducted considering vigilance data.	Assessment of the risk/benefit balance of medical products should be regularly conducted considering vigilance data; adapt methods for benefit-risk assessment suitable for country need and	DPM, CNAM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
	develop SOPs to guide routine implementation.										
VL06.02: Performance indicators for vigilance activities are established.	Establish performance indicators for vigilance activities.	DPM, CNAM	Proposed	Technical support				USAID			
MC01.01: Legal provisions and/or regulations are in place with respect to import and export activities including permanent regulatory presence at designated entry and/or exit ports where medical products are being moved.	Establish clear regulations and guidelines on importation and exportation of medicines including collaboration with customs.	DPM	Proposed	Technical support				USAID			
MC01.02: Legal provisions and/or regulations entail market surveillance and control activities that include product sampling from different points of the supply chain.	Establish legal provisions relevant to surveillance program which includes sampling and submission of samples of medical products to LNS for testing.	DPM, LNS	Proposed	Technical support				USAID			
MC01.03: Legal provisions and/or regulations address relevant products and personnel involved in SSFFC medical products.	Establish specific regulations and guidelines on control of substandard and falsified medicines on the market.	DPM	Proposed	Technical support				USAID			
MC01.04: Legal provisions and/or regulations exist for the control of promotion of medical products to avoid communication of false or misleading information.	Establish regulations relevant to control of promotion, marketing, and advertising of medical products.	DPM	Proposed	Technical support				USAID			
MC01.06: Guidelines exist for importers and exporters on the format and content of relevant applications and procedures to receive the necessary authorizations/ permissions.	Establish guidelines for importers and exporters on the format and content of relevant applications and procedures to receive the necessary authorizations/ permissions.	DPM	Proposed	Technical support				USAID			
MC01.07: Guidelines exist on the recall and/or disposal of SSFFC medical products.	Develop and implement guidelines on recall and/or disposal of SF products.	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MC02.01: There is a defined structure with clear responsibilities to conduct market surveillance and control activities.	Establish a defined coordination mechanism for the different institutions involved in market surveillance. Establish an org chart of the organizations responsible for implementation of market surveillance and control activities along with identification of the particular structure implementing the function.	DPM	Proposed	Other				DPM			
MC02.02: Collaboration between all stakeholders relevant to market surveillance and control is in place.	Establish a regulation to provide guidance on the operationalizaton of the national commission on illegal medicines, including institutions involved in routine market surveillance activities.	DPM, MOH	Proposed	Technical support				USAID			
MC03.01: Enough competent staff (education, training, skills, & experience) are assigned to perform market surveillance & control activities.	Designate competent staff to perform market surveillance and control activities.	DPM	Proposed	Other				DPM			
MC03.02: Respective job descriptions are established and regularly updated with inclusion of duties, functions, responsibilities, and necessary competencies.	Develop job descriptions for staff involved in market surveillance with inclusion of duties, functions, responsibilities, and necessary competencies.	DPM	Proposed	Other				DPM			
MC03.03: Training plan developed, implemented, and updated at least once a year.	Develop and implement a training plan that should be updated at least once a year.	DPM	Proposed	Other				DPM			
MC03.04: The NRA performs and maintains records of staff training activities and training effectiveness verification.	Perform and maintain records of staff training activities and training effectiveness verification.	DPM	Proposed	Other				DPM			
MC04.01: Documented and implemented procedures exist in the NRA to review any complaints received from the market.	Develop and implement documented standard procedures to receive, review, and respond to any market complaints with respect to medical products.	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
MC04.03: Documented and implemented procedures exist to prevent, detect, and/or respond to SSFFC medical products.	Develop and implement documented and implemented procedures to prevent, detect, and/or respond to SF medical products.	DPM	Proposed	Technical support				USAID			
MC04.04: Documented & implemented procedures exist to grant necessary authorizations and/or permissions for import and export activities.	Develop and implement documented and implemented procedures to grant the necessary authorizations and/or permissions for import and export activities.	DPM	Proposed	Technical support				USAID			
MC04.05: Documented and implemented procedures exist to ensure safe disposal of detected SSFFC medical products.	Develop and implement documented procedures to ensure safe disposal of detected SF medical products.	DPM	Proposed	Technical support				USAID			
MC04.06: Documented & implemented procedures exist for risk-based sampling of medical products from different points of the supply chain.	Document and implement procedures for risk-based sampling of medical products from different points of the supply chain.	DPM	Proposed	Technical support				USAID			
MC04.07: Documented & implemented procedures exist to enable public reporting of suspected SSFFC medical products.	Develop and implement guidelines and procedures to enable public reporting of suspected SF medical products.	DPM	Proposed	Technical support				USAID			
MC05.01: Market surveillance & control activities, including those for SSFFC, are appropriately communicated within the NRA.	Market surveillance and control activities including those activities related to SF products should be properly communicated between different institutions/departments/entities involved in medicine regulation (LNS, ISP, Anti-Narcotics Unit).	DPM, LNS, ISP	Proposed	Other				DPM, LNS, ISP			
CT01.01: Legal provisions and/or regulations for CTO exist.	To obtain a copy of decree recently passed in March 2017.	DPM	Proposed	Other				DPM			
CT01.02: Legal provisions and/or regulations require authorization from NRA and notification to NRA on changes/ variations (amendments) in the original protocol of the CT.	Establish regulations on CTO with emphasis on requirement for either notification or authorization prior to implementation of changes/variations to original protocol.	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
	Develop and implement guidelines on the format and content preparation on changes/variations to original protocol, as well as the submission procedure.										
CT01.03: Legal provisions and/or regulations require research centers, researchers, sponsors, CROs, and everyone involved in the clinical trial to comply with GCP.	Establish legal provisions and/or regulations requiring research centers, researchers, sponsors, CROs, and everyone involved in the clinical trial to comply with GCP.	DPM	Proposed	Technical support				USAID			
CT01.04: Legal provisions, regulations and/or guidelines require that IMPs comply with GMP for IMPs.	Establish legal provisions/ regulations and /or guidelines requiring that IMPs used in CTs are produced in compliance with the principles of GMP for IMPs.	DPM	Proposed	Technical support				USAID			
CT01.05: There are legal provisions to cover circumstances in which routine CT procedures may not be followed (e.g., public health interests).	Establish legal provisions/ regulations that clearly state that in the event of certain circumstances (e.g., in the interest of public health, etc.), the routine CT procedure should not be followed.	DPM	Proposed	Technical support				USAID			
CT01.06: Legal provisions and/or regulations provide enforcement powers for NRA to inspect, suspend, and/or stop CT.	Establish legal provisions and regulations that give the NRA enforcement power to inspect, suspend, and/or stop CTs.	DPM	Proposed	Technical support				USAID			
CT01.07: There is a legal provision and/or a regulation that requires the establishment of an independent ethics committee (IEC).	Establish regulations for setting up the National Ethics Committee, its composition, terms of reference, and procedures for execution of their activities and services.	DPM	Proposed	Technical support				USAID			
CT01.08: Legal provisions, regulations and/or guidelines that require authorization for import, export, and destruction of IMPs.	Establish legal provisions, regulations and/or guidelines on the import, export, and destruction of IMPs.	DPM	Proposed	Technical support				USAID			
CT01.09: There are guidelines on monitoring of adverse reactions and	Develop & implement guidelines &/or regulations on monitoring adverse reactions	DPM	Proposed	Technical support				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
periodical reporting.	& periodic reporting & follow-up during CTs.										
CT01.10: There are guidelines on the format and content of clinical trial applications.	Develop and implement guidelines on the format and content of CT applications. The guidelines should be available, implemented, and published on NRA's website.	DPM	Proposed	Other							
CT01.11: Legal provisions and/or regulations allow the NRA to recognize and/or use relevant CT decisions, reports, or information from other NRAs, or regional and international bodies.	Establish legal provisions and/or regulations that permits the NRA to recognize and/or use relevant CT decisions, reports, or information from other NRAs or regional and international bodies.	DPM	Proposed	Technical support				USAID			
CT01.13: There are legal provisions and/or regulations to cover circumstances in which fast-track CT authorization applies (e.g. for public-health concerns).	Establish legal provisions and/or regulations that cover circumstances/instances where fast-track CT authorization is required/ applies.	DPM	Proposed	Technical support				USAID			
CT02.01: There is a defined structure with clear responsibilities to conduct CTO activities.	Specify the roles/responsibilities/duties of the entity(ies) responsible for CTO within NRA and their placement on the organizational chart in relation to other entities involved in CTO.	DPM	Proposed	Other				DPM			
CT02.02: Documented procedures are implemented to ensure the involvement and communication between all stakeholders relevant to CT.	Develop and implement SOPs or similar documents that guide and/or inform effective communication and collaboration between stakeholders. Establish CT application guidelines that capture duties, responsibilities, and roles of various stakeholders involved in CTO activities.										
CT03.01: Enough competent staff (education, training, skills and experience) are assigned to perform CTO activities.	Recruit more competent staff (education, training, skills and experience) to perform CTO activities. Engage experts to provide opinions on specialized areas in medicine and a	DPM	Proposed	Other				DPPM			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
	CT advisory committee to review decisions of evaluators.										
CT03.02: Duties, functions, responsibilities and necessary competencies are established and updated in the respective job descriptions.	Develop job descriptions for all staff involved in CTO, including their duties, functions, responsibilities, and necessary competencies.	DPM	Proposed	Other				DPM			
CT03.03: Training plan developed, implemented, and updated at least once a year.	Develop a guideline or similar document used in development and implementation of the training plan.	DPM	Proposed	Other				DPM			
CT03.04: The NRA performs and maintains records of staff training activities.	Establish a system for recording all staff training activities and a mechanism to evaluate the impact of the training.	DPM	Proposed	Other				DPM			
CT04.01: An advisory committee is involved in review of CT applications.	Establish an advisory committee to review CT applications	DPM	Proposed	Other				DPM			
CT04.02: There is a defined composition of ECs.	Provide information on the composition of the ethics committee and ensure it is available in a statutory reference.	DPM	Proposed	Other				DPM			
CT04.03: Preclinical data is considered within CT application review.	Although in practice preclinical data is considered within CT application review; there is a need to specify this requirement in a regulation, guideline, and procedure.	DPM	Proposed	Other				USAID			
CT04.04: There are defined roles for ECs at all levels.	Establish regulation and/or guideline that provides defined roles of the EC at each level of CTO activities. Develop and implement guidelines detailing the objectives, functions, roles, and responsibilities of the EC at each level of CTO activities.	DPM, University of Mali, CNAM	Proposed	Technical support				USAID			
CT04.05: Documented and implemented procedures exist to review CT applications.	Develop and implement SOPs for review of CT applications.	DPM, CNAM	Proposed	Technical support				USAID			
CT04.07: There are	Establish regulations, guide-	DPM,	Proposed	Technical				USAID			

Sub-Indicator	Recommendation	Benefiting institution	Status	Type of activity	Start date	End date	# of days	Est. source of fund	Est. budget (USD)	Confirmed source of fund	Confirmed budget (USD)
procedures for EC responsibility for clearance and follow-up until completion of the CT.	lines and/or SOPs detailing the roles and responsibilities of the 2 ECs in the clearance and follow-up processes of CTs until completion.	CNAM		support							
CT06.04: There are timelines for the assessment of CT applications and an internal tracking system to follow the targeted time frames.	Develop and implement guidelines that stipulate that CT applications should be processed/assessed per the prescribed timelines and regulations that require that the timelines for CT application assessment be internally monitored for compliance with published timelines										

ANNEX B. WHO QUANTITATIVE INDICATORS FOR REGULATORY PURPOSES

Annex 10. Quantitative indicators for regulatory purposes	Nos.
Module 3 - Regulatory Authority	
QI 3.1 - Total number of the NRA's employees at the end of a reference year	42
QI 3.2 - Number of the NRA's scientific staff performing regulatory functions	6
QI 3.3 - Number of the NRA's support staff	2
QI 3.4 - Number of the NRA's staff IT specialist	3
QI 3.5 - Number of the NRA's staff involved in QMS	0
QI 3.6 - Number of the NRA's staff recruited in the reference year	0
QI 3.7 - Number of the NRA's staff's cancellation in the reference year	0
Module 4 - Marketing authorization	
QI 4.1 - Number of scientific staff involved in the registration process	5
QI 4.2 - Number of products with a valid Marketing Authorization	3319
QI 4.3 - Total number of applications received in the reference year	1640
QI 4.4 - Number of applications received for a new drug in the reference year	1640
QI 4.5 - Number of applications received for a generic product in the reference year	0
QI 4.6 - Number of applications received for variations in the reference year	170
QI 4.7 - Number of applications received for renewal in the reference year	992
QI 4.8 - Number of decisions taken (positive, refusals, suspension) in the reference year	393
QI 4.9 - Number of applications pending as backlog	NN*
QI 4.10 - Average number of days for decision-making on a new drug	NN
QI 4.11 - Average number of days for decision-making on a generic product	280 days
QI 4.12 - Average number of days for decision-making on variations	NN
QI 4.13 - Average number of days for decision-making on renewals	NN
Module 5 - Licensing of manufacturers	
QI 5.1 - Number of scientific staff involved in establishment licensing	1
QI 5.2 - Number of manufacturing plants licensed	2
QI 5.3 - Number of manufacturing plants of API licensed	0
QI 5.4 - Number of applications received for a new premise in the reference year	0
QI 5.5 - Number of modifications of an initial license received in the reference year	0
QI 5.6 - Number of decisions taken (positive negative, suspension or withdrawn) in the reference year	0
QI 5.7 - Number of applications pending as backlog	0
QI 5.8 - Average number of days to issue a decision	NN
Module 6 - Licensing of importers, exporters, wholesalers and distributors	
QI 6.1 - Number of scientific staff involved in establishment licensing	1
QI 6.2 - Number of licensed wholesalers, importers and exporters	69
QI 6.3 - Number of licensed wholesalers, importers and exporters of API	69
QI 6.4 - Number of applications received for a new premise in the reference year	15
QI 6.5 - Number of modifications of an initial license received in the reference year	10
QI 6.6 - Number of decisions taken (positive, negative, suspension or withdrawn) in the reference year	NN
QI 6.7 - Number of applications pending as backlog	NN
QI 6.8 - Average number of days to issue a decision	NN
Module 7 - Licensing of pharmacies and retail outlets	
QI 7.1 - Number of scientific staff involved in establishment licensing	1
QI 7.2 - Number of licensed pharmacies and dispensing/selling outlets	518
QI 7.3 - Number of applications received for a new premise in the reference year	16
QI 7.4 - Number of modifications of an initial license received in the reference year	5
QI 7.5 - Number of decisions taken (positive, negative, suspension or closed) in the reference year	NN
QI 7.6 - Number of applications pending as backlog	NN
QI 7.7 - Average number of days to issue a decision	NN

Annex 10. Quantitative indicators for regulatory purposes	**Nos.**
Module 8 - Registration of pharmacy personnel	
QI 8.1 - Number of administrative staff involved in registration of pharmacy personnel	3
QI 8.2 - Number of pharmacist and pharmaceutical technicians registered	1200
QI 8.3 - Number of application received in the reference year	1300
QI 8.4 - Number of decisions taken (positive, negative, suspension or radiation) in the reference year	NN
QI 8.5 - Average number of days to issue a decision	3
Module 9- Market surveillance	
Import and export Control	
QI 9.1 - Number of application received (import and export)	1762
QI 9.2 - Number of authorizations for importation granted in the reference year and/or number of product authorized for importation	1762
QI 9.3 - Number of certificates for export issued in the reference year	5
QI 9.4 - Average number of days to issue these administrative document	1
Market Control	
QI 9.5 - Number of products monitored	NN
QI 9.6 - Number of products detected as non-compliant or of poor quality in the reference year	NN
Non-compliant Products / Recall Procedures	
QI 9.7 - Number of complaints on pharmaceutical products received in the reference year	NN
QI 9.8 - Number of products/batches recalled in the reference year	NN
Module 10 - Control of drug promotion	
QI 10.1 - Number of staff involved in the control of drug promotion	1
QI 10.2 - Number of drugs advertisement applications received in the reference year	NN
QI 10.3 - Number of promotion and advertisement document monitored	NN
QI 10.4 - Number of decisions taken (approbations, refusals, suspensions) on drug advertisement in the reference year	NN
QI 10.5 - Average number of days for decision-making on drug promotion	NN
QI 10.6 - Number of drug advertisements found to be in violation of the regulation and withdrawn in the reference year	NN
Module 11 - Pharmacovigilance	
QI 11.1 - Number of NRA's professionals involved in the assessment and management of ADR/ADE	3
QI 11.2 - Number of contact points (moral or physical person having sent an ADR/ADE)	164
QI 11.3 - Number of ADR/ADE reported by MAH. Manufacturers, importers or distributors and assessed in the reference year	0
QI 11.4 - Number of ADR/ADE reported by health professional/contact point and assessed in the reference year	64
QI 11.5 - Number of ADR/ADE reported by patients and assessed in the reference year	0
QI 11.6 - Number of periodic report received and assessed in the reference year	3
QI 11.7 - Number of decisions taken (no action taken, product recall, Dear doctor letters, notices for users, etc…) in the reference year	0
QI 11.8 - Number of ADR/ADE reported pending as backlog	0
QI 11.9 - Average number of days for decision-making on pharmacovigilance issues	30
Module 12 - Clinical trial	
QI 12.1 - Number of staff involved in the control of Clinical trial	1
QI 12.2 - Number of clinical trials applications received in the reference year	4
QI 12.3 - Number of applications for amendments of clinical trials received in the reference year	2
QI 12.4 - Number of decisions taken (approvals, refusals, suspensions) on clinical trials applications in the reference year	4
QI 12.5 - Average number of days for decision-making for NRA	15 days
QI 12.6 - Average number of days for decision-making for IRB/IEC	NN
QI 12.7 - Number of staff involved in the inspection of clinical trials	0
QI 12.8 - Number of clinical trials inspected in the reference year	0
QI 12.9 - Average number of days spent on-site per inspection	0
Module 13 - Regulatory Inspection and enforcement activities (undertaken by ISP)	
QI 13.1 - Total number of inspectors for the pharmaceutical products sector	

Annex 10. Quantitative indicators for regulatory purposes	**Nos.**
QI 13.2 - Total numbers of inspections carried out in the reference year	
QI 13.3 - Number of manufacturing inspectors	
QI 13.4 - Number of manufacturing facilities inspected including foreign manufacturers in the reference year	
QI 13.4.1 - Number of manufacturing facilities inspected for pre-approval inspection for	
marketing authorization	
QI 13.5 - Number of manufacturing facilities of API inspected in the reference year	
QI 13.5.1 - Number of manufacturing facilities of API inspected for pre-approval inspection for marketing authorization	
QI 13.6 - Average number of days spent on-site per manufacturing inspection	
QI 13.7 - Number of importers, exporters, wholesalers and distributors inspectors	
QI 13.8 - Number of wholesale/import/export facilities inspected in the reference year	
QI 13.9 - Number of wholesale/import/export facilities of API inspected in the reference year	
QI 13.10 - Average number of days spent on-site per wholesale/import/export inspection	
QI 13.11 - Number of inspectors for retail facilities	
QI 13.12 - Number of retail facilities inspected in the reference year	
QI 13.13 - Average number of days spent on-site per retail facility inspection	
QI 13.14 - Number of facilities inspected on pharmacovigilance in the reference year	
QI 13.15 - Average number of days spent on-site per facilities inspected on	
pharmacovigilance	
QI 13.14 - Number of administrative measures (notice of non compliance or warning letters)	
issued in each of the last three years	
QI 13.15 - Average number of days for taking an administrative measures such as a notice of compliance or a warning letter	
QI 13.16 - Number of license withdrawn or suspended in each of the last three years for noncompliance issues	
QI 13.17 - Number of criminal prosecution submitted to court and/or penal sanctions requested in each of the last three years	
QI 13.18 - Number of legal sanctions applied by the judiciary in each of the last three years	
Module 14 - Quality Control (undertaken by LNS)	
QI 14.1 - Number of pharmaceutical products tested in the framework of an application for a MA in the reference year	
QI 14.2 - Number of active pharmaceutical ingredients tested in the framework of an application for a MA in the reference year	
QI 14.3 - Number of pharmaceutical products tested for import control in the reference year	
QI 14.4 - Number of pharmaceutical products tested for market control in the reference year	
QI 14.5 - Number of pharmaceutical products tested/certificate issued in the reference year	
QI 14.5.1 - Number of pharmaceutical products tested and failed to be compliant	
QI 14.6 - Number of pharmaceutical products recalled based on the results issued by DCL in the reference year	
QI 14.7 - Number of MA suspended or withdrawn based on the results issued by DCL in the reference year	
QI 14.8 - Number of scientific staff in the Quality Control laboratory	
QI 14.9 - Surface of the Quality Control laboratory	
QI 14.10 - Number of analysis not performed because of lack of adequate equipment	

*NN- not known

ANNEX C. POWERPOINT PRESENTATION OF DPM ASSESSMENT FINDINGS

Assessment of Medicine Regulatory System at Direction De la Pharmacie et du Medicament, MALI

September 25th to October 6th, 2017

USAID - SIAPS

Map of Mali

Presentation Outline

- Purpose and Objective of the Assessment
- Scope of the Assessment
- Methodology
- Functions Assessed and Summary of Findings
- Key Recommendations
- Next Steps

Purpose/Objective

- **Purpose**
- To support DPM and conduct an in depth assessment of the national medicine regulatory system

- **Objectives**
- - To identify gaps and opportunities for strengthening the national medicine regulatory system
- - To develop key recommendations and action plan for optimization of regulatory system processes in light of the envisaged health reforms in the health sector with specific focus to DPM

Coordination and Assessment Team

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Scope of Assessment

DPM FUNCTIONS ASSESSED
01-NATIONAL REGULATORY SYSTEM (NRS)
02-REGISTRATION AND MARKETING AUTHORIZATION (RMA)
03-VIGILANCE (PVL)
04-MARKET SURVEILLANCE AND CONTROL (MSC)
05- CLINICAL TRIALS OVERSIGHT (CTO)

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METHODOLOGY

- WHO Global Benchmarking Tool revision V 2017
- Interviews with key personnel
- Focus group discussions
- Review of documents

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WHO GBT

	Item \ Function	NRS	RMA	PVL	MSC	LIC	INE	LAT	CTO	LTR	Grand Total
	Number of Sub-Indicators	62	33	25	26	20	29	37	32	24	288
Rapid benchmarking	Sub-indicators measuring maturity level 1	4	5	4	0	2	3	3	2	2	25
Rapid benchmarking	Sub-indicators measuring maturity level 2	6	3	2	5	1	2	2	7	4	32
Rapid benchmarking	Sub-indicators measuring maturity level 3	24	19	14	14	13	15	26	17	15	157
	Sub-indicators measuring maturity level 4	28	5	5	5	4	6	6	6	2	69
	Sub-indicators measuring maturity level 5	0	1	0	0	0	3	0	0	1	5

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STATUS OF REGULATORY FUNCTIONS MATURITY

Maturity level	Performance level	Guidance
1	No formal approach	No systematic approach evident, no results, poor results or unpredictable results.
2	Reactive approach	Problem- or corrective-based systematic approach; minimum data on improvement results available.
3	Stable formal system approach	Systematic process-based approach, early stage of systematic improvements; data available on conformance to objectives and existence of improvement trends.
4	Continual improvement emphasized	Improvement process in use; good results and sustained improvement trends.
5	Best-in-class performance	Strongly integrated improvement process; best-in-class benchmarked results demonstrated.

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NATIONAL REGULATORY SYSTEMS

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STRENGTHS

- DPM is one of the departments established by Parliament under a Decree in 2000 and has the mandate to regulate medicines including the registration and market authorization
- There are several laws, ordinances and regulations in place that empower the institution to control medicines circulating on the market
- There is adequate infrastructure in terms of a premises for carrying out medicine regulation functions
- A National Pharmaceutical Policy and a Pharmaceutical Strategic plan with specified objectives are in place

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01-NATIONAL REGULATORY SYSTEM (NRS)Sub-indicator(s) need to be addressed

Indicators	Sub-Indicators achieved	Sub-Indicator expected	Sub-Indicators percent
RS01 Legal provisions, regulations and guidelines required to define regulatory framework of national regulatory system (NRA).	2.5	9	28
RS02 Arrangement for effective organization and good governance.	2.5	4	62
RS03 Strategic plan with clarified objective in place	2.5	5	50
RS04 Regulatory system is supported with leadership and crisis management plans	1	4	25
RS05 Quality management systems (QMS) including the risk management principles are applied and realized.	0	14	0
RS06 Human resources to perform regulatory activities.	0	4	0
RS07 Financial resources to perform regulatory activities.	1	5	20
RS08 Infrastructure and equipment to perform regulatory activities.	1	2	50
RS09 Mechanisms exist to promote transparency, accountability and communication.	1	10	10
RS10 Mechanism in place to monitor regulatory performance and output.	0	3	0

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RECOMMENDATIONS I

- Revise the current laws and regulations to address the gaps identified including
  - defining the specific category of products to be regulated,
  - coordination of the different institutions involved in medicine regulation,
  - power to enforce the removal of substandard and falsified medicines from the market
- Develop and establish regulations and guidelines that do not currently exist such as:
  - requiring DPM to disseminate information to the public,
  - involvement of relevant regulatory authorities in the development of medicine regulations,
  - involvement of specific sectors of civil society (such as NGOs representing health professionals, industry, consumers and patients) when developing or adopting guideline, establishment of a complaint and appeal mechanism.

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Recommendations II

- Establish a rapid alert system with documented procedures for handling recalls for DPM and distributors
- Develop and Implement a Quality Management System
- Establish a Human Resource Manual that includes a staff appraisal system resulting into identifying training needs.
- Advocate for Government allocation of more funds to DPM. Explore the option of government authorizing DPM to use the funds generated at source
- Avail information on the various fees, tariffs to the public by publishing guidelines on fees which may be accessed through a functional website.

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REGISTRATION AND MARKETING AUTHORIZATION

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STRENGTHS

- There are legal provisions in form of a Decree and regulations that require all medicines to be registered and hold a marketing authorization prior to placement on the market
- A defined structure with clear responsibilities to conduct registration and marketing authorization activities exists.

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02-REGISTRATION AND MARKETING AUTHORIZATION (RMA)

Indicators	Sub-Indicators achieved	Sub-Indicator expected	Sub-Indicators percent
MA01 Legal provisions, regulations and guidelines required to define regulatory framework of registration and/ or marketing authorization.	7.5	12	62
MA02 Arrangement for effective organization and good governance.	1	2	50
MA03 Human resources to perform registration and marketing authorization activities.	0	4	0
MA04 Procedures established and implemented to perform registration and marketing authorization.	4	10	40
MA05 Mechanism exists to promote transparency, accountability and communication.	0.5	3	17
MA06 Mechanism in place to monitor regulatory performance and output.	0	2	0

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RECOMMENDATIONS I

- Revise the current legislation to address the gaps in the decrees and inter-ministerial orders with regard to:
  - providing the list of the classes of medical products that require registration and those that are exempted.
  - The Inter-ministerial order No. 05 2203 / MS-MEP-SG of 20 September 2005, to provide details on when and how to withhold, suspend and /or withdraw or cancel registration /marketing authorization
  - Documenting the definition, types and scope of variations, as well as the corresponding documentation requirements, appropriate fees, Processes and procedures for submitting variations to DPM.
  - Permitting DPM to recognize and/or use relevant MA decisions, reports or information from other NRAs or regional and international bodies

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Recommendations II

- Develop and implement registration /marketing application guidelines that capture duties/roles and responsibilities of the various stakeholders involved in registration /marketing authorization activities
- Develop and implement Standard Operating Procedures (SOPs) that guides and/or inform effective communication and collaboration between stakeholders such as the Laboratory, vigilance, Quality control, CTO, etc
- Recruit more staff (about 15 basing on the volume of dossiers handled) to perform medicine registration activities with an established technical committee of experts
- Develop and implement a Human Resource Manual incorporating a training programme and an annual training plan

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Recommendation III

- Develop and implement guidelines and standard operating procedures for all processes and activities related to medicine registration and granting of marketing authorization.
- Revise the regulation to provide for active engagement of technical experts in specialized areas of medicine to provide expert opinion on medicines.
- Establish timelines for the assessment of the applications and an internal tracking system to follow the targeted time frames

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Recommendation IV

- Develop and implement a functional website where a list of registered medicines and SPC-like information is published together with Guidelines and /or SOPs to provide guidance on preparation with respect to the content and format of the SPC-like information as well as the procedure/processes for the regular update (i.e., frequency and processes).
- Establish a computerized system (e.g Pharmadex) with a database to effectively process and keep all medical products registration applications received, approved, rejected, suspended and/or withdrawn, as well as their essential documentation.
- Establish performance indicators for registration activities

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PHARMACOVIGILANCE

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STRENGTHS

- There is a legal provision for pharmacovigilance and a programme to report adverse events by CNAM
- There are defined roles and responsibilities for pharmacovigilance activities to be undertaken by DPM and CNAM
- Active participation of CNAM in regional and international networks

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03-VIGILANCE (PVL)

Indicators	Sub-Indicators achieved	Sub-Indicator expected	Sub-Indicators percent
VL01 Legal provisions, regulations and guidelines required to define regulatory framework of vigilance.	2.5	7	36
VL02 Arrangement for effective organization and good governance.	1.5	2	75
VL03 Human resources to perform vigilance activities.	0.5	4	12
VL04 Procedures established and implemented to perform vigilance activities.	2.5	7	36
VL05 Mechanism exists to promote transparency, accountability and communication	2	3	67
VL06 Mechanism in place to monitor regulatory performance and output.	1	2	50

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RECOMMENDATIONS I

- Revise the legislation on pharmacovigilance:
  - to authorize DPM to conduct Good Vigilance Practices (GVP) inspections.
  - to provide for allowing DPM to request for phase IV safety and/or efficacy studies
  - obligating the manufacturers and/or MAH to designate a Qualified Person responsible for Vigilance (QPPV).
  - to rely and/or recognize decisions of regional and international organizations as applied to vigilance
- Develop and implement guidelines for Marketing Authorization Holders and competent authorities on vigilance activities including planning, conducting and reporting of vigilance activities

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Recommendations II

- Establish guidelines obligating manufacturers to report data on safety of products
- Strengthen the Pharmacovigilance team by recruiting more personnel in CNAM to reinforce the team
- Develop and implement a training programme for the Pharmacovigilance team at DPM including identification of training needs.

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Recommendations III

- Establish a risk management strategy for pharmacovigilance activities
- Access to information resources relevant to vigilance processes (e.g. safety information sources and reference materials)should be ensured for all personnel in CNAM and DPM including external experts
- Develop a risk benefit assessment mechanism of medical products

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MARKET SURVEILLANCE AND CONTROL

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04-MARKET SURVEILLANCE AND CONTROL (MSC)

Indicators	Sub-Indicators achieved	Sub-Indicator expected	Sub-Indicators percent
MC01 Legal provisions, regulations and guidelines required to define regulatory framework of market surveillance and control activities.	1	6	17
MC02 Arrangement for effective organization and good governance.	0.5	2	25
MC03 Human resources to perform market surveillance and control activities.	0	4	0
MC04 Procedures established and implemented to perform market surveillance and control	0	7	0
MC05 Mechanism exists to promote transparency, accountability and communication.	0	3	0
MC06 Mechanism in place to monitor regulatory performance and output.	0	3	0

Recommendations I

- Establish clear regulations and guidelines on:
  - Importation and exportation of medicines including collaboration with customs
  - control of substandard and falsified medicines on the market
  - control of promotion, marketing and advertising of medical products
  - guidance on the operation of the national commission on illegal medicines including institutions involved in routine market surveillance activities
- Establish Guidelines for:
  - importers and exporters on the format and content of the relevant applications and procedures to receive the necessary authorizations/permissions.
  - the recall and/or disposal of Substandard and Falsified medical products.

Recommendations II

- Establish a defined coordination mechanism for the different institutions involved in market surveillance(LNS, ISP, Anti-Narcotics Unit)
- Designate competent staff to perform market surveillance and control activities with appropriate human resource development plan to enhance the capacity to implement the surveillance function.

Recommendations III

- Develop and implement documented standard procedures:
  - to receive, review and respond to any market complaints with respect to medical products
  - to prevent, detect and/or respond to SF medical products
  - to grant the necessary authorizations and/or permissions for import and export activities.
  - to ensure safe disposal of detected SF medical products.
  - to enable public reporting of suspected SF medical products.

CLINICAL TRIAL OVERSIGHT

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08-CLINICAL TRIAL'S OVERSIGHT (CTO)

Indicators	Sub-Indicators achieved	Sub-Indicator expected	Sub-Indicators percent
CT01 Legal provisions, regulations and guidelines required to define regulatory framework of clinical trials oversight.	1.5	12	12
CT02 Arrangement for effective organization and good governance.	0.5	2	25
CT03 Human resources to perform clinical trials oversight activities.	0	4	0
CT04 Procedures established and implemented to perform clinical trials oversight.	2	7	29
CT06 Mechanism in place to monitor regulatory performance and output.	0.5	4	12

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Recommendations I

- Specify the roles/responsibilities) /duties of the section responsible for CTO within DPM and its placement on the organizational chart.
- Develop and implement Guidelines and Standard Operating Procedures (SOPs) that guides captures duties/roles and responsibilities of the various stakeholders involved in CTO, effective communication and collaboration between the stakeholders

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Recommendations II

- Strengthen the human resource capacity for personnel involved in clinical trial oversight by recruitment of more competent staff, engagement of experts,
- Establish a training programme for staff and devise a mechanism for monitoring the impact of the training
- Develop and implement guidelines for processing CT applications with the prescribed timelines.

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Status of Regulatory Functions at DPM

NRA Function assessed	Sub Indicators MET/Expected to be MET	Indicators MET/Expected to be MET	Sub Indicators % MET	Status of the functions assessed	Maturity level
01-NATIONAL REGULATORY SYSTEM (NRS)	11.5 out of 60	3 out of 10	19	Not Implemented	1
02-REGISTRATION AND MARKETING AUTHORIZATION (RMA)	13 out of 33	2 out of 6	39	Not Implemented	1
03-VIGILANCE (PVL)	10 out of 25	3 out of 6	40	Not Implemented	1
04-MARKET SURVEILLANCE AND CONTROL (MSC)	1.5 out of 25	0 out of 6	6	Not Implemented	1
08-CLINICAL TRIAL'S OVERSIGHT (CTO)	4.5 out of 29	1 out of 6	16	Not Implemented	1

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Status of SIAPS recommendations

Regulatory functions	Total number of Recommendations
01-NATIONAL REGULATORY SYSTEM (NRS)	35
02-REGISTRATION AND MARKETING AUTHORIZATION (RMA)	24
03-VIGILANCE (PVL)	16
04-MARKET SURVEILLANCE AND CONTROL (MSC)	19
08-CLINICAL TRIAL'S OVERSIGHT (CTO)	25
Total	119

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NEXT STEPS

- Develop a roadmap towards implementation of the key recommendations in order to address the gaps and strengthen medicine regulatory system in MALI.

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Acknowledgement

World Health Organization for providing Global Benchmarking Tool which was used to collect data on medicine regulatory functions

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