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# FINAL REPORT: STRATEGIES TO OPTIMIZE COLOMBIA'S SGSSS RESOURCES

Local Health System Sustainability Project (LHSS)

March 2023

**The Local Health System Sustainability Project**

The Local Health System Sustainability Project (LHSS) under the USAID Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Associates, the five-year project will strengthen local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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**Submitted to:** Scott Stewart, COR
Office of Health Systems
Bureau for Global Health, USAID

**Submitted by:** Abt Associates
6130 Executive Blvd., Rockville, MD 20852
(301) 347-5000

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# CONTENT

## ACKNOWLEDGEMENTS

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# ACRONYMS

| | |
|---|---|
| ANIF | National Association of Financial Institutions |
| DNP | National Planning Department |
| TEG | USAID Technical Efficiency Guide |
| HFG | Health Finance and Governance |
| INS | National Health Institute |
| INVIMA | National Institute for Medicine and Food Surveillance |
| MOH | Ministry of Health and Social Protection |
| RIPS | Individual Registry of Service Delivery |
| SGSSS | General Health and Social Security System |
| USAID | The U.S. Agency for International Development |
| WHO | World Health Organization |

# EXECUTIVE SUMMARY

From 2020 to 2023 the USAID Local Health System Sustainability Project (LHSS) worked with the Government of Colombia to strengthen the government's capacity to provide health services for migrant populations. They identified strengthening the financial sustainability of offering services to these populations as a priority. Accordingly, the Ministry of Health and Social Protection (MOH), the National Department of Planning (DNP), and LHSS determined that the USAID Health Systems Technical Efficiency Guide (TEG) could be implemented in Colombia. The TEG is an analytical tool that facilitates assessing the efficiency of resource allocation within the health sector, therefore strengthening the capacity of the government to integrate the Venezuelan migrant population into the health system.

The TEG assesses the efficiency of the most frequently used health system resources based on a systematic review of national experiences. The guide includes four analytic clusters, which contain modules that group such inefficiencies. Each inefficiency includes an indicator to measure its impact on local systems. The guide contains four traditional clusters: i) Service delivery, ii) health workforce, iii) pharmaceutical products, and iv) financing and governance. For Colombia, a fifth cluster, Health Information System, was added to reflect national priorities.

LHSS adapted and supported implementation of the guide in two steps: first LHSS selected an expert for each TEG cluster that was responsible for identifying inefficiencies in the Colombian health system and indicators to measure these inefficiencies. Second, the MOH led implementation of a participatory methodology in which technical discussion groups with relevant health sector stakeholders, the national government, and experts in each cluster discussed inefficiencies highlighted in the guide, proposed recommendations to address them, and prioritized the inefficiencies by importance. The LHSS team provided the analysis supporting the conclusions and assessed the feasibility of the recommendations.

The following outlines the main recommended strategies resulting from the exercise.

**Table 1. Conclusions, recommendations, key stakeholders, timeline, and feasibility of TEG clusters**

| TIMELINE | |
|---|---|
| Short-term (1 to 2 years) | ▲ |
| Medium-term (2 to 5 years) | ▲ |
| Long-term (Over 5 years) | ▲ |

| FEASIBILITY | |
|---|---|
| High | ● |
| Medium | ● |
| Low | ● |

| Conclusions | Recommendations | Key Stakeholders | Term | Feasibility |
|---|---|---|---|---|
| **Service Delivery** | | | | |
| **Urban-rural gaps in timeliness and access to services exist.** | Develop strategies, including the formation of outreach teams and the promotion of primary health care for communities in remote areas or communities without health facilities. | Territorial Health Directorates<br><br>Ministry of Health and Social Protection |  |  |
| | Create partnerships with the private sector to strengthen service providers technically and financially, strengthen the management of the public health care network, and generate positive health outcomes and patient-centered interventions. | Territorial Health Directorates<br><br>Ministry of Health and Social Protection |  |  |
| | Implement a differentiated quality standard in remote areas to promote comprehensive patient care and implement initiatives without affecting the quality and safety of services. | Ministry of Health and Social Protection |  |  |
| **Health workforce** | | | | |
| **High concentrations of health workers in hospital care and urban areas, which creates a barrier to accessing health services in rural areas and overly focuses on curative care. Limited availability of personnel in rural areas constrains health promotion and prevention activities.** | Increase the availability of workers in rural areas through training incentives that target professionals who studied outside their communities of origin and who want to return. | Ministry of Health and Social Protection |  |  |
| | Implement occupational study programs to promote different health disciplines and profiles to increase the supply of health professionals and improve health care quality. | Ministry of Health and Social Protection<br><br>Academia<br><br>Health worker professional associations<br><br>Ministry of Education |  |  |
| **Health Technologies** | | | | |
| **The current price regulation calculation methodology does not consider certain consequences, including the withdrawal of products from the market and local shortages, among others.** | Adjust the methodology for medication price regulation to improve the treatment of specific diseases. | Ministry of Health and Social Protection |  |  |

| Conclusions | Recommendations | Key Stakeholders | Term | Feasibility |
|---|---|---|---|---|
| **Financing and Governance** | | | | |
| **Budgeting, financing, and operational capacity are unevenly distributed throughout the national territory.** | The MOH has made progress in considering differential risk of health conditions when calculating budgets. This effort must continue so that the system reflects the asymmetries of insurance risks in the country's regions. | Ministry of Health and Social Protection |  |  |
| **Information Systems** | | | | |
| **Information systems are not being used to their full potential to improve health outcomes and services for the population.** | Adapt information to serve as predictive data that generates valuable predictions for system stakeholders. The General Health and Social Security System must also create an open data policy to facilitate information transparency and accountability. | Ministry of Health and Social Protection |  |  |

LHSS employed three complementary strategies to ensure the success of this resource optimization initiative:

i) Transferred knowledge to the national government (DNP and MOH), including reflections on results and recommendations.
ii) Promoted the USAID TEG as a practical analytical tool that expands the MOH's collection of tools to conduct diagnostics.
iii) Supported the MOH in identifying the interventions with the most potential to improve the use of resources in the sector and overcome inefficiencies, and in identifying national and international cooperation partners for implementing these interventions.

The second phase of this initiative includes developing a roadmap which outlines the operational plan for the national government to implement the recommendations resulting from applying the TEG in Colombia. The execution of the plan will be led by stakeholders from the national government with the support of LHSS.

# INTRODUCTION

By adopting the Temporary Protection Statute for Venezuelan Migrants, the Colombian Government identified and regularized approximately 1.8 million Venezuelan migrants to advance this population's economic and social integration in Colombia. To ensure that this integration is effective and sustainable, the Colombian Government must guarantee the financing of health services and access to health insurance for migrants. Strengthening health system financing is vital to providing the migrant population with adequate access to health services. According to LHSS Colombia, it would cost around US 350 million per year, or about 5.7 percent of the annual spending on subsidized health care, to cover approximately 1.8 million migrants under the General Health and Social Security System (SGSSS).[1]

Optimizing the efficiency of resource use at the local level is one strategy to strengthen the financial sustainability of the health system. The health component of the 2022-2026 National Development Plan *Colombia Potencia Mundial de la Vida* includes a health resources sustainability strategy that aims to promote efficiency, effectiveness, and transparency by improving the availability and quality of information systems and strengthening the system's governance.

Moreover, the World Health Organization estimates that globally, between 20 and 40 percent of health system resources are utilized inefficiently (Chisholm & Evans, 2010). Accordingly, the U.S. Agency for International Development (USAID)'s Health Finance and Governance (HFG) project developed a tool called the Technical Efficiency Guide (TEG) to analyze the health systems of low- and middle- income countries and identify their main inefficiencies.

Stakeholders use the TEG to group inefficiencies in four clusters: service delivery, health workforce, pharmaceutical products[2], and financing and governance. Each cluster includes modules that allow stakeholders to identify problems more accurately, conduct a complete system assessment, and create recommendations for prioritized inefficiencies. The TEG focuses on improving health outcomes through technical efficiency, improving results using the least number of inputs with the lowest cost, rather than focusing on an efficient allocation of resources based on the preferences of the population

Accordingly, LHSS Colombia suggested the use of the TEG in Colombia in coordination with the Ministry of Health and Social Protection (MOH) and the National Planning Department (DNP). Considering the need to leverage resources and mechanisms to promote the sustainable financing of care for the migrant population and optimize the use of resources, LHSS Colombia encouraged the Colombian National Government to adapt and apply the TEG.

This process involved two phases: the first phase, which this document outlines, included adapting and implementing the TEG in Colombia. This process resulted in a set of guiding recommendations to improve the efficiency of the use of health sector resources. The second phase will include the creation of a roadmap for implementing the recommendations. This roadmap will describe the national government's operational plan to implement the recommendations derived from the use of the TEG in Colombia.

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[1] Toro, Barliza, and Ortiz 2021; in Year 1 of LHSS Colombia, the project calculated the financing needs for the health coverage of the Venezuelan migrant population.
[2] This terminology was called Health Technologies for the case of Colombia.

This report includes five sections: i) introduction; ii) the methodology to adapt and apply the TEG in Colombia; iii) the analysis conducted, conclusions and recommendation by TEG cluster; iv) the sustainability of the intervention; and v) the references. The Spanish version of this report includes two annexes. Annex A includes additional information from stakeholders who participated in the technical working groups on the implementation of the USAID TEG methodology. Annex B includes the inefficiency modules of the USAID TEG and its adaptation to the Colombian context.

## METHODOLOGY

To implement the USAID TEG methodology in Colombia, LHSS's local partner for this intervention, the National Association of Financial Institutions Center for Studies (ANIF), selected a technical expert for each cluster. In coordination with LHSS Colombia and in accordance with ANIF's methodology, the MOH convened technical discussion groups (see Annex A of the Spanish version of this document). The discussion groups aimed to i) encourage discussions to identify the inefficiencies established by the guide and involve SGSSS stakeholders[3] that are relevant to each topic, ii) propose recommendations to overcome the inefficiencies, and iii) organize the discussion results, prioritizing the inefficiencies according to their negative impact on health system performance. The process of organizing results aimed to identify the most relevant inefficiencies in each cluster, consolidating conclusions and recommendations from each technical discussion group and prioritizing the inefficiencies before disseminating them to the national government.

The technical discussion groups used a methodology that included the following steps: i) review the inefficiencies identified through the implementation of the guide in Colombia, including the available information and a general context provided by the lead expert; ii) discuss the status of the inefficiency with stakeholders, iii) identify progress and challenges, and iv) discuss recommendations to overcome the inefficiencies. In cases where no information was available on the indicators, the groups discussed the inefficiency based on the experiences and perceptions of attendees.

The final prioritization process included discussions among each discussion group and a voting process on four criteria: i) the financial investment needed to address the inefficiency, ii) the political feasibility, iii) the operational feasibility, and iv) the severity of the inefficiency, namely, what is the impact of overcoming the inefficiency on improving the use of resources of the cluster being analyzed.

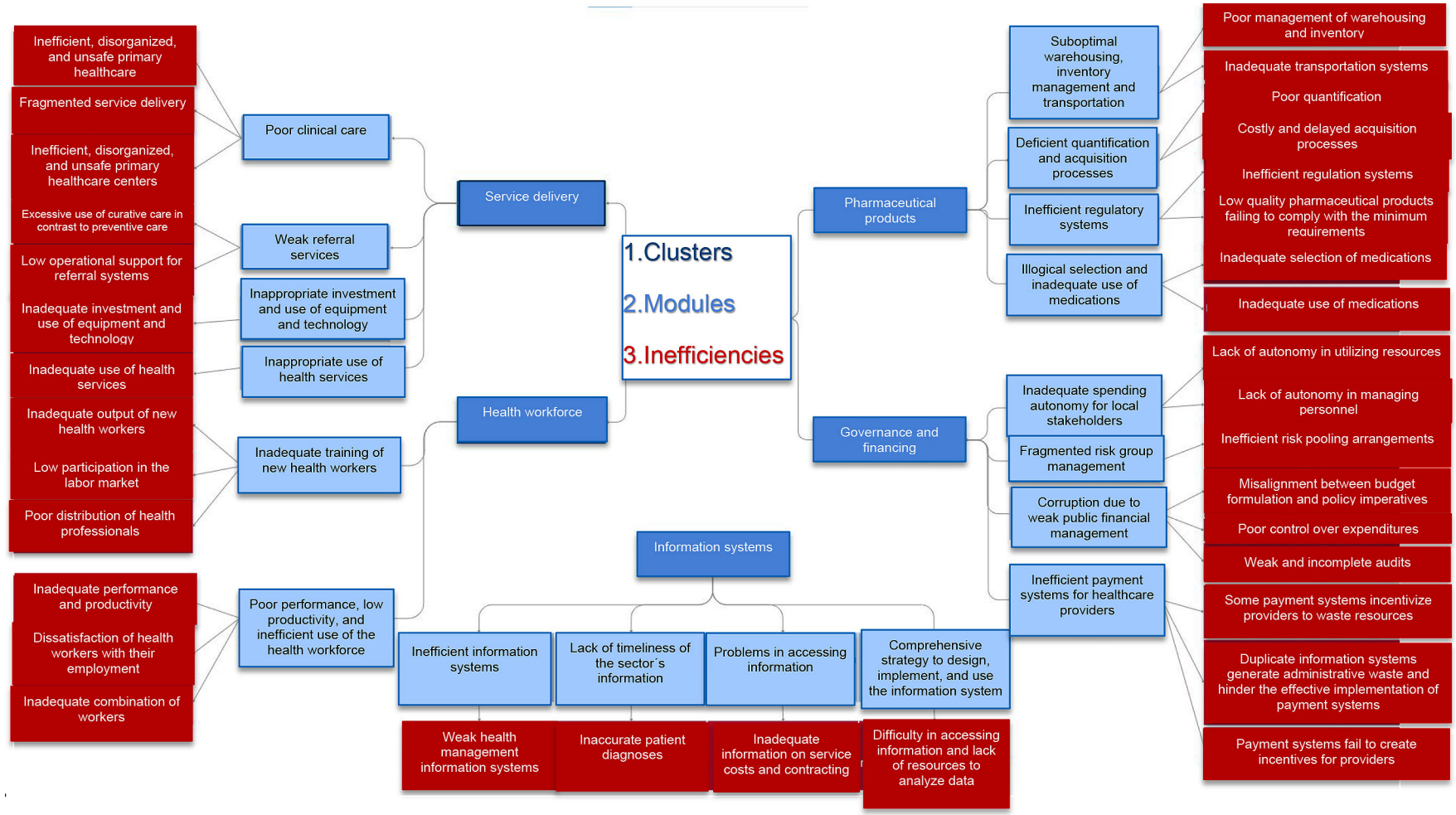
Participants scored the inefficiencies on each criterion using a scale of 1 to 4, where 1 represented the least relevant inefficiency and 4 the most relevant. This process used the "Borda Count" method, which prioritized the inefficiency with the highest score upon completion of the vote. LHSS and its counterparts captured this inefficiency prioritization process in a document for each cluster, which summarizes each technical group's most important discussion points and the results of the prioritization exercise.

[3] Including the national government, territorial entities, academia, healthcare providers, insurers, pharmaceutical sector, and scientific associations.

## PRESENTATION, ANALYSIS, AND RESULTS OF THE PRIORITIZATION OF INEFFICIENCIES IN THE COLOMBIAN SGSSS

Figure 1 features the four analysis clusters of the USAID TEG and a fifth cluster titled "information systems," which was added during the adaptation of the TEG methodology for use in Colombia. The figure also includes each cluster's respective modules and corresponding set of inefficiencies. In adapting the TEG for use in Colombia, stakeholders decided to include Information Systems as its own cluster due to the recognition that the clusters, modules, and inefficiencies are interconnected, with Information Systems cutting across the other clusters.

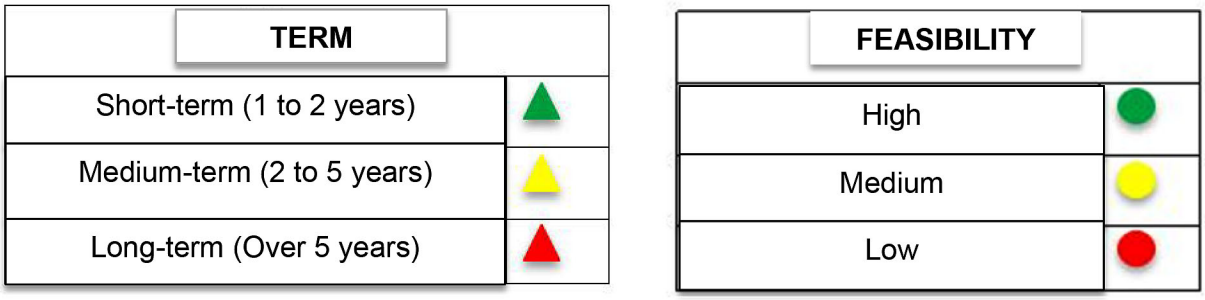
**Figure 1. Clusters, modules, and inefficiencies from the USAID Technical Efficiency Guide**



The following summarizes the main findings, conclusions, and recommendations from the technical tables of the prioritization exercise that conducted an analysis to optimize the SGSSS resources in each of the five clusters.

The structure of the section involves: i) the cluster proposed by the TEG, ii) a discussion of the situation in Colombia based on the literature reviewed by each expert, iii) the report of the discussion in each table, iv) the information on indicators (if available), and vi) conclusions and recommendations. The recommendations include a traffic light exercise. Each expert conducted this exercise considering the feasibility and the time required to deliver the recommendation. All clusters performed the feasibility and time analysis following the scheme presented in Figure 2 below:

**Figure 2: Feasibility and Time Analysis Parameters**




**SERVICE DELIVERY**

The TEG groups the inefficiencies of this cluster in Colombia into four modules as follows:

i) **Poor clinical care:** This module refers to three inefficiencies i) ineffective, disorganized, and unsafe primary health care services, ii) fragmented delivery of health services, and iii) ineffective, disorganized, and unsafe primary health care facilities.

*Colombia*: The technical discussion group reached the following conclusions: The service delivery model does not take into consideration the conditions of each territory (epidemiological, geographical, cultural) to effectively reach different population groups.

Inadequate health services are mainly the result of limited trained health workers and essential equipment and products, lack of access to updated Clinical Practice Guidelines, and weak or non-existent quality assurance systems. These limitations directly impact patients' wait times in health service providers for receiving care or test results.

Likewise, care provided in Colombia often is not comprehensive, meaning that patients frequently have to visit multiple institutions to find an effective solution to their health problems.

ii) **Weak referral systems:** This module refers to two inefficiencies i) the excessive use of curative and non-preventive care and ii) weak operational support in referral systems. The latter is related to the creation of health care service delivery networks.

*Colombia*: The technical discussion group reached the following conclusions: Incomplete, inaccurate, or untimely information prevents the proper evaluation of health outcomes or effective decision-making about patients' cases. Poor data quality also hinders the implementation of interventions that could address inefficiencies, from poor patient registration to problems with laboratories reporting exam results. Likewise, the monitoring

and referral processes are inefficient and costly for some populations due to waiting times, which leads to harmful practices such as self-medication.

iii) **Inappropriate investment and use of equipment and technology:** This module refers to the inefficiencies derived from the maintenance, purchase, and use of health equipment and technologies that do not respond to the population's needs.

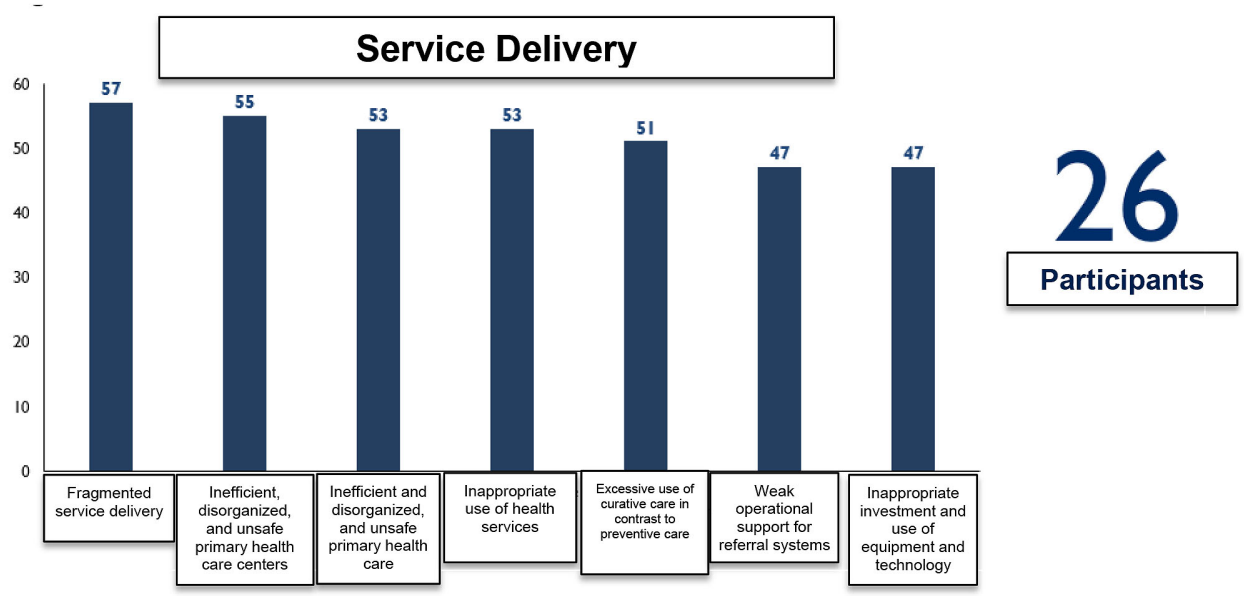
*Colombia*: The technical discussion group reached the following conclusion: There is a lack of coordination among the different levels of care on investment in technology and equipment for comprehensive service delivery networks. Thus, these investments do not improve the quality of services and do not meet the population's health needs.

iv) **Inappropriate use of health care services:** This module refers to the fact that users are unfamiliar with the system, do not rely on the system, and fail to seek the necessary support when medical problems arise. There is also low adherence to medical treatments.

*Colombia*: The technical discussion group also highlighted other factors that influence the inefficiency of the Colombian health system, including low coverage in dispersed areas, sociocultural norms, economic barriers, and supply limitations to seeking adequate care, which is consistent with the studies conducted by Abadia et al., 2009 and Garcia-Subirats, 2014.

According to the results of the prioritization exercise in the Service Delivery technical discussion group, the most critical inefficiency is *Fragmented service delivery,* followed by *Weak information systems for health management* and *Inefficient, disorganized, and unsafe primary health care*.

**Figure 3. Results of the prioritization of inefficiencies for the service delivery cluster**




Accordingly, the following table features the primary conclusions, recommendations, and stakeholders involved in resolving the inefficiencies.

**Table 2. Conclusions, recommendations, key stakeholders, timeline, and feasibility of the Service Delivery cluster**

| Conclusions | Recommendations | Key stakeholders | Term | Feasibility |
|---|---|---|---|---|
| Urban-rural gaps in timeliness and access to services exist. | Develop strategies, including the formation of outreach teams and the promotion of primary health care for communities in remote areas or communities without health facilities. | Territorial health directorates<br>Ministry of Health and Social Protection | ▲ | ● |
| | Create partnerships with the private sector to strengthen service providers technically and financially, strengthen the management of the public health care network, and generate positive health outcomes and patient-centered interventions. | Territorial health directorates<br>Ministry of Health and Social Protection | ▲ | ● |
| | Implement a differentiated quality standard in remote areas to promote comprehensive patient care and implement initiatives without affecting the quality and safety of services. | Ministry of Health and Social Protection | ▲ | ● |
| The data from the information systems is incomplete, inaccurate, or untimely, which hinders a proper evaluation of health outcomes and the decision-making process for patients | Promote territorial epidemiological surveys involving community participation. These surveys will serve as input for strategies to promote the involvement of public and private hospitals, health insurers, and the territorial health directorates for improving data collection, reporting, and use. | Territorial health directorates<br>Ministry of Health and Social Protection<br>Health insurers | ▲ | ● |
| The Colombian health system prioritizes curative care over health promotion and disease prevention. | Strengthen the effectiveness of the primary care level within the framework of the primary care strategy by promoting adjustments and discussions on the relevance and quality of the contents of training for human resources for health, and by prioritizing health promotion and disease prevention initiatives. | Ministry of Health and Social Protection<br>Academia<br>Scientific associations<br>Ministry of Education | ▲ | ● |

**HEALTH WORKFORCE**

The TEG groups this cluster's inefficiencies into two modules as follows:

i) **Inadequate training of new health workers:** This module includes three inefficiencies: the relevance and quality of training processes for health professionals, the relative shortage of health workers, and the poor geographical distribution of health professionals.

*Colombia:* The analysis conducted by the technical discussion group suggests the need to propose a strategy that encourages greater academic interest and selection of health-related studies among secondary school students. Likewise, the imbalance of the country's health professionals by specialty is a barrier to assembling

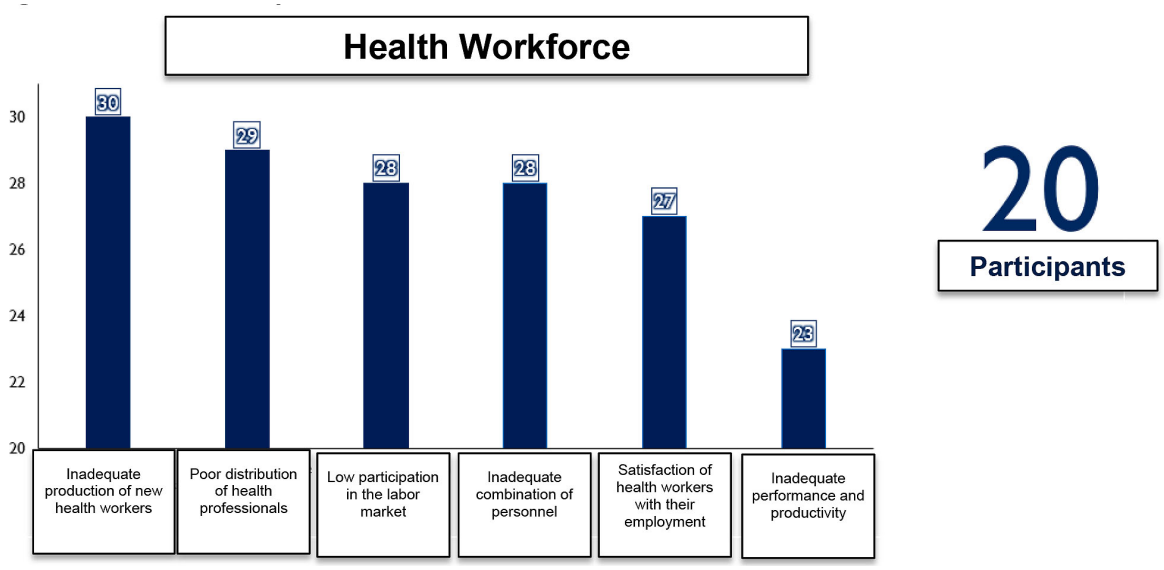
multidisciplinary health teams. The analysis also demonstrated that there is a high concentration of health workers in large cities.

ii) **Poor performance, low productivity, and inefficient use of the health workforce:** This module includes three inefficiencies: inadequate performance, low productivity of health workers, and inefficient use of the health workforce. These three inefficiencies are influenced by poor professional training, lack of motivation, and safety risks, which can all contribute to absenteeism.

*Colombia:* The analysis conducted by the technical discussion group concluded the following: Only approximately half of all graduates in any given year enter a higher-level program the following year, which constitutes an obstacle for many professionals to continue training and professional development. Given the shortage of specialists, countries like Colombia require a more efficient workforce entry process. The analysis also demonstrated that health workers are more satisfied in their current job than other professionals. However, health workers, with the exception of those in technical or technology positions, maintain a more negative perception of stable employment at all levels of education.

According to the analysis conducted by the technical discussion group, the most critical inefficiency is *Inadequate production of new health workers,* followed by *Poor distribution of health professionals* and *Low participation in the labor market.*

**Figure 4. Results of the prioritization of inefficiencies for the health workforce cluster**




This exercise identified the following conclusions and recommendations for this second cluster:

**Table 3. Conclusions, recommendations, key stakeholders, timeline, and feasibility of the health workforce cluster**

| Conclusions | Recommendations | Key stakeholders | Term | Feasibility |
|---|---|---|---|---|
| In Colombia, there is a high concentration of health workers in hospital care and urban areas, which creates a barrier to accessing health services in rural areas and overly focuses on curative care. This limits the availability of personnel in rural areas and hinders the implementation of promotion and prevention activities. | Increase the availability of workers in rural areas through training incentives that target professionals who studied outside their communities of origin and who want to return. | Ministry of Health and Social Protection | ▲ | ● |
| | Implement occupational study programs to promote different health disciplines and profiles to increase the supply of health professionals and improve health care quality. | Ministry of Health and Social Protection<br>Academia<br>Scientific Societies<br>Ministry of Education | ▲ | ● |
| There is limited growth in technical, technological, professional, and medical graduates specializing in health programs compared to other academic disciplines. This implies the need to increase the supply of medical personnel to guarantee health service provision to the population. | Develop mixed strategies to promote training and increase the supply of health professionals and medical specialists. Educational institutions must increase their acceptance rates to promote this strategy. | Ministry of Health and Social Protection<br>Academia<br>Scientific associations<br>Ministry of Education | ▲ | ● |
| Health workers are satisfied with their work but not their contracts or working conditions. Worker satisfaction is strongly correlated with the performance of medical professionals and health care quality. | It is vital to develop mixed strategies for programs to promote postsecondary education to encourage the training of students in areas with limited human resources for health. It is also necessary to design and implement occupational promotion strategies to share information on different health professions and their relevance. The education sector will be a crucial partner in this activity. | Ministry of Health and Social Protection<br>Academia<br>Scientific associations<br>Ministry of Education | ▲ | ● |
| | Promote job stability and continuous professional development to improve the satisfaction of health workers. | Ministry of Health and Social Protection<br>Ministry of Labor<br>Ministry of Education | ▲ | ● |

**HEALTH TECHNOLOGIES**

The TEG groups the inefficiencies of this cluster into four modules as follows:

i) **Suboptimal warehousing, inventory, and transportation management:** This module includes two TEG inefficiencies. The first of which is poor warehousing and inventory management, including poor infrastructure and lack of maintenance for warehouse spaces. This inefficiency may result in physical damage, contamination, degradation, or expiration of resources, and may create opportunities for inventory diversion and shortages. The second inefficiency is weak transportation systems, which are associated with high transportation costs, delivery delays, and the loss of products, which increase the risk of shortages and pose additional costs for the health system.

*Colombia:* The analysis conducted in the technical discussion group concluded that the report currently used to monitor the supply of medicines lacks a traceable or interoperable technological or online system. Consequently, stakeholders lack access to crucial information that could prevent and mitigate the consequences of a shortage of medicines.

ii) **Poor quantification and procurement processes:** This module includes two inefficiencies. The first of which is poor quantification, which refers to the process of planning the supply and demand of pharmaceutical products. Inaccurate estimates lead to an overestimation or underestimation of future demand for medicines and the acquisition of either an excessive inventory (resulting in expiration and waste of medicines) or an insufficient inventory (causing shortages of drugs). The second inefficiency is time-consuming and costly medicine procurement processes.

*Colombia:* The analysis conducted by the technical discussion group concluded that the centralized purchase of medicines is not a systematic process that considers periodic data analysis of the costs for treating different diseases. In addition, regulation of drug prices in Colombia does not effectively regulate the use of and cost of medicines. The current methodology for calculating drug prices does not consider the withdrawal of products from the market and local shortages. This inefficiency jeopardizes the availability and timeliness of medications for patients.

iii) **Ineffective regulatory systems:** This TEG module includes two inefficiencies. The first is inefficient regulatory systems with respect to licensing facilities, medical practices, registration and evaluation of health technologies, quality of medicines, and pharmacovigilance, among others. The second refers to the circulation of low-quality pharmaceuticals that do not meet minimum standards.

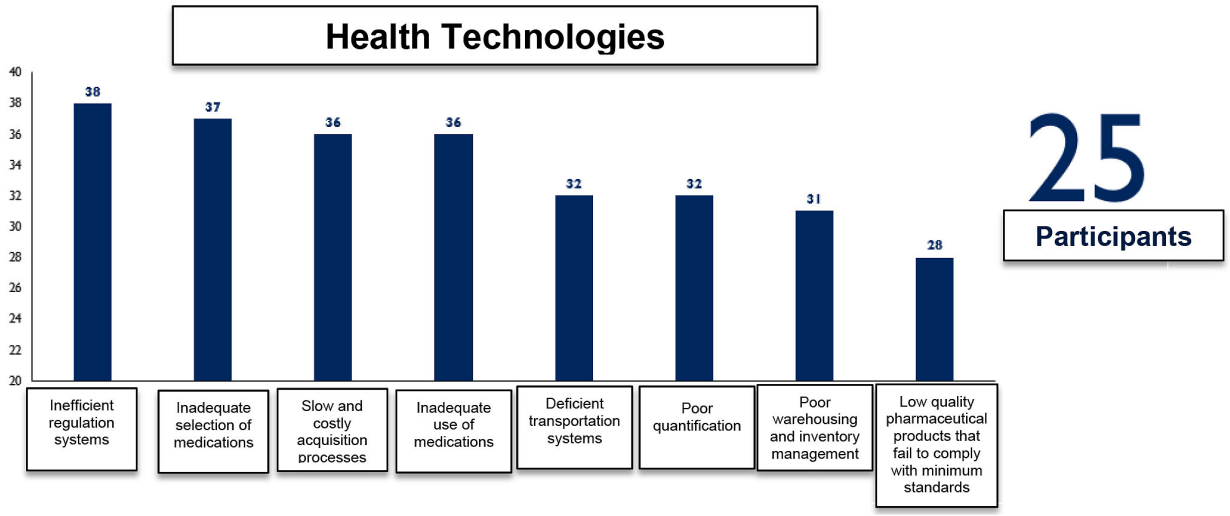
*Colombia*: This technical discussion group concluded that poor coordination among health authorities leads to excessive regulation and stakeholders' lack of understanding of such regulations, which inhibits the availability of and access to health technologies. For instance, the current regulatory framework discourages the entry of different products into the market due to its time-consuming process and the lack of available information.

iv) **Irrational selection of medicines and inadequate use:** This module includes two inefficiencies. The first is the improper selection of medications, referring to the development, updating, publishing, and adoption of standards for prescriptions under the Clinical Practice Guidelines and the list of essential medicines. The second inefficiency involves the inadequate use of drugs, specifically the misuse of medications and the use of expensive technologies that are not specifically required.

*Colombia:* The country has a wide range of medications available, to which all residents are entitled. Colombia does not collect, however, sufficient information on the effectiveness and efficacy of medications in its supply chain indicators. Therefore it is impossible to assess the added value of these technologies.

According to the analysis conducted by the technical discussion group on Health Technologies, the most relevant inefficiency is *Ineffective regulatory systems,* followed by *Inappropriate selection of medications* and *Delayed procurement processes and costs.*

**Figure 5. Results of the prioritization of inefficiencies for the health technologies cluster**




The third cluster identified the following conclusions and recommendations:

**Table 4. Conclusions, recommendations, key stakeholders, term, and feasibility of the health technologies cluster**

| Conclusions | Recommendations | Key stakeholders | Term | Feasibility |
|---|---|---|---|---|
| The current mechanism to monitor the shortage of medicines must include a traceable and interoperable technological tool or online information system to collect the necessary variables to analyze cases. | Implement an information analysis unit that includes different disciplines to develop data analytics models that identify predictive patterns or early warnings with the reported information. | Ministry of Health and Social Protection<br><br>Academia | ▲ | ● |
| | Include a traceable, interoperable, and online report or information system to manage the supply of medication and monitor and deliver early warnings of medicine shortages. This system will define the relevant variables for the analysis of cases, thus enabling traceability from the moment of the report to the closure of the management process. | Ministry of Health and Social Protection<br><br>INVIMA | ▲ | ● |

| Conclusions | Recommendations | Key stakeholders | Term | Feasibility |
|---|---|---|---|---|
| Lack of centralized information on pharmaceutical products across the entire value chain. The current reporting mechanisms do not collect the information required for the indicators that would measure the process. | Centralize information related to pharmaceutical products in a single report with variables across the entire marketing chain and consolidate data from different commercial channels. | Ministry of Health and Social Protection |  |  |
| The supply of medications during the pandemic demonstrated that system stakeholders can properly coordinate actions to ensure the effective provision of medication. To overcome the regulatory and operational barriers to medication delivery, stakeholders must be flexible and able to expedite procedures. | Replicate the model of home deliveries of medicines used in managing the COVID-19 pandemic. | Ministry of Health and Social Protection<br>Health insurers<br>Healthcare Providers |  |  |
| | Implement mobile medicine dispensing systems progressively throughout the territory. | Ministry of Health and Social Protection<br>Health insurers<br>Healthcare Providers |  |  |
| The centralized purchase of medicines is not a systematic process. | Apply and improve the model for purchasing medicines for Hepatitis C to acquire treatments for rare diseases. | Ministry of Health and Social Protection |  |  |
| The current price regulation calculation methodology does not consider certain consequences, including the withdrawal of products from the market and local shortages, among others. | Adjust the methodology for medication price regulation to improve the treatment of specific diseases. | Ministry of Health and Social Protection |  |  |

**FINANCING AND GOVERNANCE**

The TEG groups the inefficiencies of this cluster into four modules for Colombia as follows:

i) **Inadequate spending autonomy for local stakeholders:** This module includes two inefficiencies. The first inefficiency is the lack of local autonomy to utilize resources, which hinders local authorities' capacity to adapt public policies to meet the demands of their territory's population. The second inefficiency is local stakeholders' lack of autonomy to manage personnel due to disharmonized decentralized models that privilege the control and monitoring of policies at the central level in detriment to local governments.

*Colombia:* The technical discussion group identified the primary limitation to regional autonomy as the territorial dependence on resources allocated by the nation's general budget. This dependence constitutes a vulnerability for territorial finances as it hinders their capacity to generate financial resources beyond those provided from the central level.

ii) **Fragmented risk group management:** This module includes an inefficiency associated with risk pooling arrangements in the health system.

*Colombia***:** The technical discussion group reached a consensus on risk management. Each health insurer manages a different risk pool within the country dependent on the characteristics, age, and geographical distribution of their members. Health risk management is a complex task, and the Colombian health system must continue to strengthen capacity of health insurers and the public sector to regulate and guarantee the financial balance of insurers and providers to improve the population's health.

As such, the current distribution of SGSSS resources based on each insurer's risk pool is inefficient, as it produces excessive gains or losses for insurers.

iii) **Lack of transparency due to weak public financial management**: The TEG refers to this module as corruption due to inefficient financial management. The technical discussion group decided to change the word corruption to establish a more general definition that conveys the risks related to transparency in the health system. This module includes three inefficiencies: lack of coherence between budget formulation and policy needs, poor control of expenditures, and weak and incomplete audits.

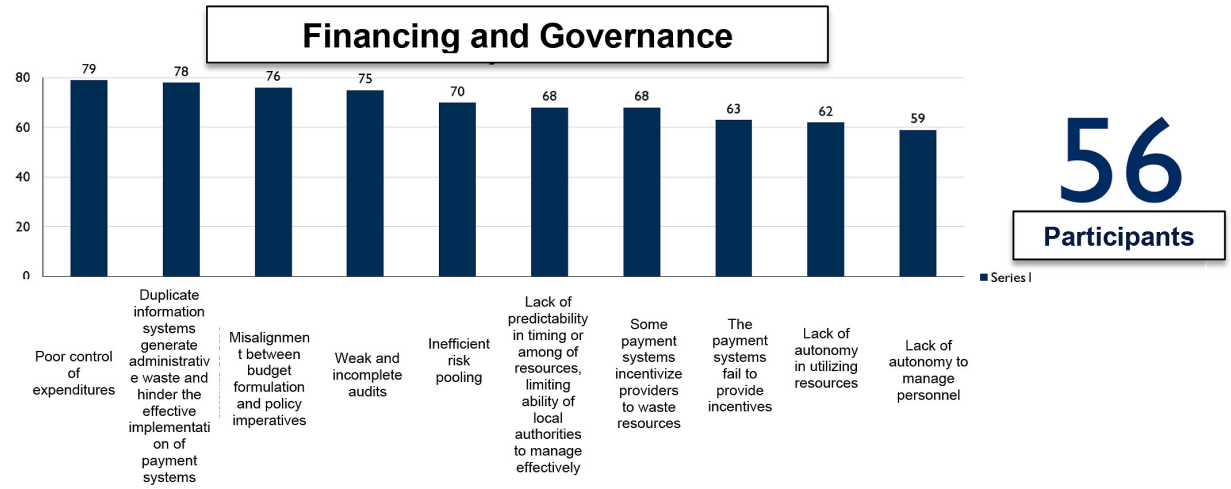
*Colombia:* The technical discussion group highlighted the need to adapt public policy to the reality of the health sector. Namely, it is necessary to increase transparency in contractual relations between the sector's stakeholders. Accordingly, the group identified differences in the reconciliation of accounts between providers and payers in which certain values of the obligations are uncertain. Likewise, there is a lack of control of expenditures and weak audits in verifying the execution of health expenditures and a need to increase information and improve data management.

iv) **Ineffective payment system for healthcare providers**: This module includes three inefficiencies: payment systems that incentivize providers to utilize resources inefficiently, duplicate information systems that create administrative burdens and hinder the effective implementation of payment systems, and payment systems that do not provide adequate incentives to providers.

*Colombia***:** The technical discussion group highlighted the duplication of information requirements in different entities due to differences between systems, their incompatibility, and the inadequate relationship between health service providers and insurers. The technical discussion group also identified the accumulation of debts between users and health providers as a considerable risk to the system's sustainability, as it decreases credibility among stakeholders and increases the risk of providing health care services.

The Financing and Governance discussion group prioritized the following inefficiencies: *Deficient control over expenditures*, *Duplicate Information Systems*, and *Lack of coordination between formulation and policy needs.*

**Figure 6. Results of the prioritization of inefficiencies for the governance and financing cluster**




The fourth cluster identified the following conclusions and recommendations:

**Table 5. Conclusions, recommendations, key stakeholders, timeline, and feasibility of the financing and governance cluster**

| Conclusions | Recommendations | Key Stakeholders | Term | Feasibility |
|---|---|---|---|---|
| Budgeting, financing, and operational capacity are unevenly distributed throughout the national territory. | The MOH has made progress in considering differential risk of health conditions when calculating budgets. This effort must continue so that the system reflects the asymmetries of insurance risks in the country's regions. | Ministry of Health and Social Protection | ▲ | ● |
| | Promote the discussion and review of territorial health responsibilities and the alignment with resources available. These competencies are critical in caring for the irregular migrant population and the uninsured population | Ministry of Health and Social Protection<br><br>National Planning Department | ▲ | ● |

| Conclusions | Recommendations | Key Stakeholders | Term | Feasibility |
|---|---|---|---|---|
| The system has strengthened the institutional capacity of health system stakeholders. However, this process requires consolidation, which involves preparation, training, and knowledge transfer on financing and administrative governance for all the system's actors. | Generate timely and efficient information and audit reports involving all system institutions, from health care providers to surveillance and control entities. | Ministry of Health and Social Protection<br>Health Superintendence<br>Health insurers<br>Health care providers |  |  |
| | To support the creation of knowledge and availability of public information, the national Government must define prices and values of health services by updating the Tariff Manual. | Ministry of Health and Social Protection |  |  |
| There is limited control over the use of resources, gaps between policy formulation and implementation, and problems with documentation. | Promote the use of information systems to increase credibility in the contractual relationship between health system stakeholders and improve efficiency in the health care contracting and payment systems. | Ministry of Health and Social Protection<br>Health Superintendence<br>Health insurers<br>Health care providers |  |  |

**INFORMATION SYSTEMS**

The TEG groups the inefficiencies of this cluster into four modules as follows:

**i)** **Weak integration of systems for information management:** This module includes an inefficiency related to weak information systems for health management.

*Colombia*: The technical discussion group identified high information fragmentation, which hinders the interoperability and cross-referencing of data, thus affecting the utility of such data for medical and public policy decision-making. Additionally, duplication of information increases administrative burdens for the system.

**ii)** **Lack of timely information from the health sector:** This module includes an inefficiency related to inaccurate patient diagnoses.

*Colombia*: The technical discussion group established that the country's information system is not meeting its potential for improving the provision of services. The system does not present information in a standardized manner and does not generate the relevant indicators for informing decision-making regarding patients' care nor for the formulation of public policy.

**iii)** **Difficulties in accessing information:** This module includes an inefficiency related to inadequate information on the cost and contracting of services.

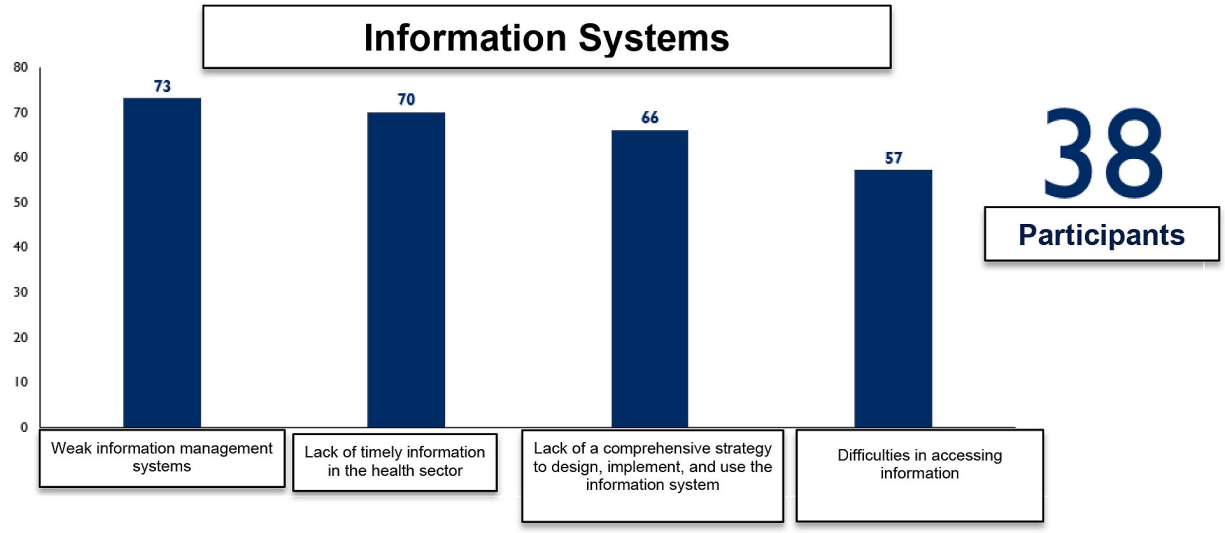
*Colombia*: The technical discussion group identified two critical points. First, it recognized the advancements made in the general public's access to health system information. Nonetheless, it is still necessary to improve databases to provide academia, the national government, and the system's stakeholders with health sector information to facilitate analysis. Likewise, some databases still face quality problems despite some improvement. For example, the Individual Registry of Health care Services (RIPS) has high quality epidemiological data, but its financial data is still undergoing a data cleaning process.

iv) **Lack of a comprehensive strategy for designing, implementing, and using the information system:** This module includes an inefficiency related to barriers in accessing information and lack of resources to thoroughly analyze the information.

*Colombia*: The technical discussion group concluded that the country does not have an institutional architecture with the responsibility and budget for ensuring the interoperability of various health sector databases at the national, territorial, and organizational levels, and there is no strategic plan that calls for the creation of such an institution. Challenges persist with respect to governing the different interests and data requirements of public and private entities.

The information system technical discussion group prioritized the following inefficiencies: *Weak integration systems for managing information, Lack of timely information in the health sector*, and *Lack of a comprehensive strategy for designing, implementing, and using information systems.*

**Figure 7. Results of the prioritization of inefficiencies for the information systems cluster**




The fifth cluster identified the following conclusions and recommendations:

**Table 6. Conclusions, recommendations, key stakeholders, timeline, and feasibility of the information systems cluster**

| Conclusions | Recommendations | Key Stakeholders | Term | Feasibility |
|---|---|---|---|---|
| Despite identification by the system's stakeholders and administrators, problems in SGSSS databases persist. | Create action plans or strategies to clean and improve the quality of data in the sector. Create a specific action plan to improve the elements of the information system. | Ministry of Health and Social Protection |  |  |
| The information system is fragmented across several databases. | Consolidate information in a single database or interconnected systems with high interoperability and standardization, thus avoiding duplication of information and cost. System stakeholders should be able to access and utilize this information. | Ministry of Health and Social Protection |  |  |
| | Create or establish an entity that serves to consolidate data from different sources to better monitor patients' health. | Ministry of Health and Social Protection |  |  |
| Information systems are not being used to their full potential to improve health outcomes and services for the Colombian population. | Adapt information to serve as predictive data that generates valuable predictions for system stakeholders. The SGSSS must also create an open data policy to facilitate information transparency and accountability. | Ministry of Health and Social Protection |  |  |

## SUSTAINABILITY

LHSS strives for health systems improvements that the project has supported to be sustained beyond the life of the project. LHSS is pursuing three strategies to ensure the success and sustainability of improved resource optimization analysis and management that could result from this intervention:

i) Transferring knowledge to the National Government (DNP and MOH), including documentation of the results, recommendations, and discussions of various scenarios that occur during the implementation of the intervention.

ii) Supporting the MOH to institutionalize the use of the USAID TEG as a practical analytical tool.

iii) Implementing the recommendations proposed in this document will help the MOH to define and prioritize strategic interventions with the most significant impact on improving the use of health sector resources, overcome inefficiencies, and identify partners in international cooperation and at the national level to achieve health sector objectives.

Accordingly, as a next step, LHSS will support the MOH in developing a roadmap that includes an action plan, timeline, and responsible parties for implementing the recommendations prioritized in this document.

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