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THE EFFICIENCY OF THE EL SALVADOR HIV PROGRAM MISSION REPORT

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THE EFFICIENCY OF THE EL SALVADOR HIV PROGRAM MISSION REPORT

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ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
CDC	Centers for Disease Control
CONASIDA	Comisión Nacional contra el Sida (National Commission Against AIDS)
CONAVIH	Comisión Nacional de Respuesta Integral al VIH (National Commission for the Integrated Response to HIV)
FSW	Female Sex Worker
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
LRN	Laboratorio de Referencia Nacional (National Reference Laboratory)
MSM	Men who have sex with Men
PEPFAR	President's Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother to Child Transmission
PSM	Procurement and Supply Management
RNM	Resource Need Model
STI	Sexually Transmitted Disease
USAID	United States Agency for International Development
WHO	World Health Organization

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1. BACKGROUND AND JUSTIFICATION

This is a survey carried out under El Salvador's National STI/HIV/AIDS Program as an exploratory mission to search for inefficiencies that may require support.

The first finding was that many analyses of the program were already in existence, including previous reports with suggestions for modifications. That led us to introduce a minor variant to the original objective and include a search for opportunities to develop concrete proposals for action.

The purpose of the survey was to gain an understanding of program operations with a focus on where an intervention could make the use of resources more efficient.

The report will present a quick account of the facts to establish a foundation for viable proposals to improve program execution. These recommendations recognize the possibility of diminishing donor financing for El Salvador in the coming years and the need for organizations to become more financially sustainable. This report also highlights that identifying opportunities to improve operational and cost efficiencies is a high priority for El Salvador's STI/HIV/AIDS Program and its partners.

1.1 Economic and Social Profile

El Salvador has a total area of 20,742 sq. kilometers. The country is made up of 262 municipalities divided into 14 departments (CONASIDA 2017). The population of El Salvador is 6.5 million inhabitants (2016), with 62% residing in urban areas. The majority of the Salvadoran population is young, with 63.7% of the population under 30 years of age. Women account for 52.8% of the population.

The Ministry of Health's expenditure increased from US$371.4 million in 2007 to US$662.5 million in 2017. The increase was due to a rise in the number of first-level healthcare positions and civil servants and the Wage Scale Act (Ley de Escalafón), which raises the salaries of civil servants by 5% a year. Public spending also increased to cover the elimination of co-payments made by users. All these measures increased demand for services, which contributed to the rise in spending (CONASIDA 2017).

El Salvador is classified as a country of medium human development with a Human Development Index of 0.68 (UNDP, 2016). Its average life expectancy at birth is 73.3 years, and it has a multidimensional incidence of poverty of 34%.

El Salvador's gross domestic product (GDP) growth rose to 2.4 percent in 2016. This growth was driven mainly by external factors such as increased global demand in commodities. El Salvador has persistent low levels of economic growth, which between 2010 and 2016 averaged 1.9%. Growth in 2017 was estimated to have slowed slightly to 2.3%. As a result, El Salvador has had the lowest levels of growth in Central America in recent years (CONASIDA 2017).

In 2016, El Salvador had an external debt of $16 billion, which represents more than 60% of GDP. The trend for 2017 suggests this burden will be even higher. Amortization and debt servicing limit financial liquidity for covering current expenses (CONASIDA 2017).

1.2 Epidemiological Profile

According to available statistics (CONASIDA 2017), since 1984 there have been 34,977 detected cases of HIV. There is a downward trend in the number of diagnosed cases: in 2007 there were an average of six cases registered per day, which has fallen to three per day in 2017.

64% of new cases are concentrated in men and 36% in women. In key populations, men who have sex with men (MSM) make up 22.9% of people living with HIV/AIDS (PLWHA), female sex workers (FSW) 3.1%, and transgender women 1.4% respectively.

Table 1: Estimations of key population size (2015)

Key population	Estimation of population size
Transgender women	1,835
Men who have sex with men	54,140
Female sex workers	44,972

Source: Estimation of size and survey of knowledge, sexual behavior attitudes and practices, and HIV prevalence in key populations in El Salvador.
Plan International

Table 2: Evolution of HIV prevalence in key populations

Year/Population	FSW (%)	MSM (%)	TW (%)
2002	3.2	15.3	N/A
2008	5.7 (a)	10.8 (a)	25.8 (not adjusted)
2012	3.1	10	N/A
2014	N/A	N/A	16.2
2016	8.1	10.5	N/A

Note: a) Ministry Officials noted that the figures for 2008 was calculated with a different methodology
Source: Global Fund Proposal (Constructed from El Salvador Studies)

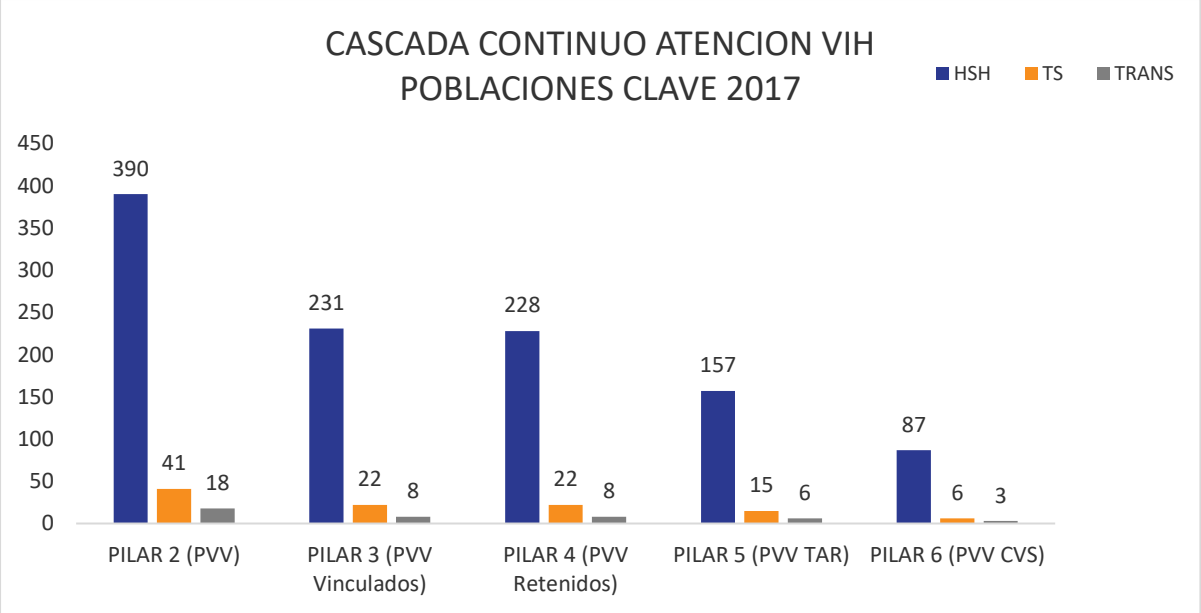
Table 3: Incidence of new HIV-positive cases per key population for 2017

Key population	Total tests	Positive cases	Prevalence
Men who have sex with men	17,141	302	1.8
Female sex workers	8,949	38	0.4
Transgender women	931	17	1.8
Prisoners	38,510	28	0.07

Source: SUMEVE (Sistema Único de Monitoreo y Evaluación de la Vigilancia Epidemiológica [Single System for Monitoring and Evaluation of Epidemiological Surveillance]), from the Ministry of Health

The cascade of continuous HIV care shown in Figure 1 allows the monitoring of patients detected with AIDS and the visualization of the continuity of their treatment.

Figure 1: Cascade of continuous HIV care for key populations 2017



Source: SUMEVE, from the Ministry of Health

Key: Men who have sex with men / hombres que tienen sexo con hombres (HSH); Commercial sex workers / trabajadoras sexuales (TS); People who are transgender / Personas que son transgénero (TRANS)

1.3 Sustainability of Sources of Funding for HIV/AIDS Expenditures

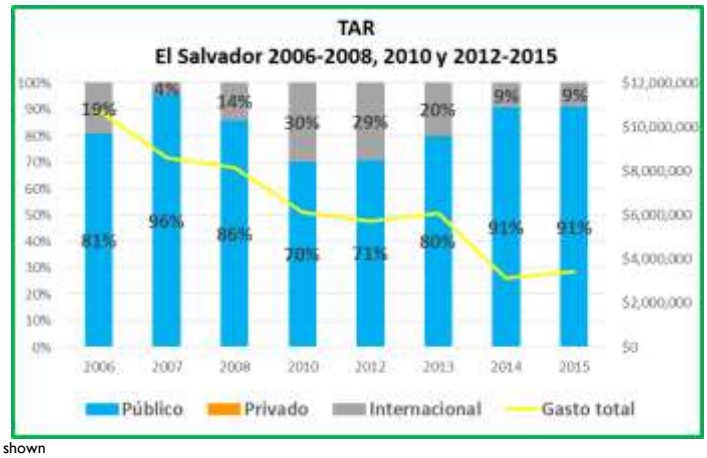
1.3.1 Evolution of External Funding Sources in Three Key HIV Policy Programs

Three key programs were included in the survey: ART, key populations, and prevention of mother-to-child transmission (PMTCT). Understanding financing trends for these programs is important as El Salvador prepares for the eventual withdrawal of Global Fund resources.

1.3.2 ART

Expenditures gradually decreased by 68% from 2006-2013. The public sector, through the central government and social security, is the most important source of funding for antiretroviral treatment (ART). International organizations, especially the Global Fund, also participated during this period, contributing between 9% and 30% of the resources. The exception was 2007, when donors provided only 4% of the total.

Figure 2: El Salvador 2006-2008, 2010 and 2012-2015



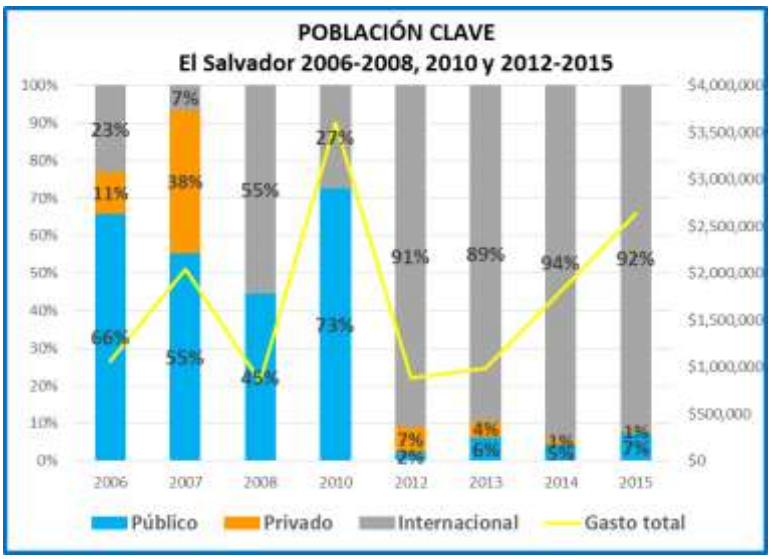
Note: only years with available data are shown

Source: Preliminary UNAIDS document - - Pilar Rivera, Daniel Aran - 2017

1.3.3 Key Populations

Expenditure on key populations in 2015 was 149% higher than in 2006 after peaking in 2010, an outlier year (Figure 3). In 2006-2007, the public sector was the main source of funding for key populations through the central government and social security. For-profit and other private institutions provided 11% in 2006 and 38% in 2007. As of 2009, the international sector, through PEPFAR, other bilateral agencies, the Global Fund, multilateral agencies of the United Nations, other multilateral and other international agencies, began contributing the majority of resources targeting key populations. Simultaneously, and potentially in response to increased donor funding, government and private sector financing for key populations declined significantly.

Figure 3: Key Population, El Salvador 2006-2008, 2010 and 2012-2015

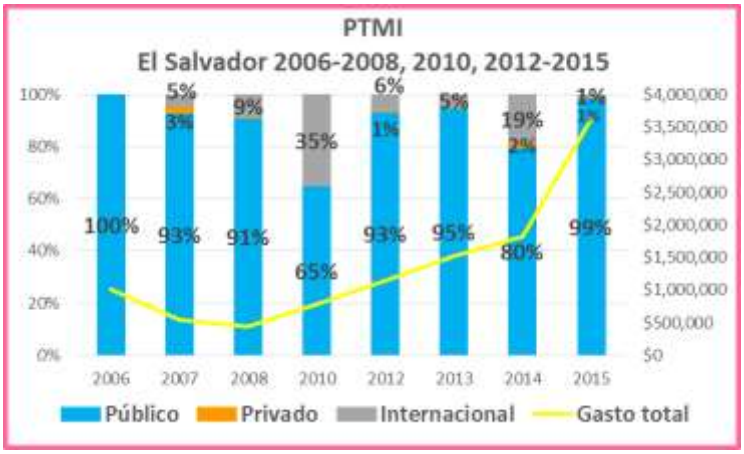


Source: Preliminary UNAIDS document - - Pilar Rivera, Daniel Aran - 2017

1.3.4 PMTCT

Spending on PMTCT increased 255% during the period 2006-2015. During 2006-2015, the public sector funded almost all spending on PMTCT through the central government, with social security contributing only in the first year. International sector participation in funding fluctuated from 1% to 35% in 2007-2015.

Figure 4: PMTCT, El Salvador 2006-2008, 2010 and 2012-2015



Source: Preliminary UNAIDS document - - Pilar Rivera, Daniel Aran – 2017

Conclusion:

The prospect of slowing economic growth and potentially diminishing funding for El Salvador's health programs underscore the importance of improving operational and financial efficiencies from the funding available. Therefore, this mission has focused on identifying opportunities to increase efficiency, support the strategy and ensure the sustainability of the National STI/HIV/AIDS Program.

2. OBJECTIVE

The objective of this visit was to support the development of El Salvador's HIV/AIDS programs that contribute to the best use of resources and promote equity, efficiency, and the financial sustainability of plans and programs.

3. ACTIVITIES

We designed the activities to help understand the functioning of the processes within the National STI/HIV/AIDS Program and the Ministry of Health and to identify inefficiencies. The agenda is the product of a collaboration with the director of the National STI/HIV/AIDS Program, Dr. Ana Isabel Nieto. The people interviewed are listed in Appendix 2.

During the first week, interviewers conducted interviews with technicians of the STI/HIV/AIDS Program and officials from the Ministry of Health, accompanied by Dr. Lucrecia Castillo of USAID. The participation of Dr. Castillo contributed to a better understanding of the activities carried out and the support that was provided with funding from USAID.

At the beginning and at the end of the mission there was a meeting with Dr. Ana Isabel Nieto to organize the activities and evaluate the proposal.

After each visit, a questionnaire was sent in Excel to the heads of the different units to help confirm the conclusions, which are discussed in the findings. We organized the information in the interviews based on the frequency of comments.

In addition, we held a working meeting with Dr. Francisco Carillo, the Executive Secretary of CONAVIH (*La Comisión Nacional para la Prevención y Control del Virus de Inmunodeficiencia Humana* [The National Committee for the Prevention and Monitoring of the Human Immunodeficiency Virus]) and Dr. Luis Francisco López of Regulación y Legislación de la Salud [Health Regulation and Legislation] to analyze the possibility of introducing an amendment to the HIV law that ensures public resources to cover the gap.

4. FINDINGS

4.1 Teamwork and Coordination

Interviewed stakeholders reported a lack of effective teamwork and coordination within the Ministry of Health, and between the Ministry of Health and Ministry of Finance in developing priorities for the use of financial resources for paying suppliers, and in developing efficient processes to streamline procurement. Moreover, stakeholders reported that the Ministry of Finance and others do not prioritize health over other procurements which are not as urgently required as health inputs such as drugs and supplies for the HIV program. For example, the Fiscalia General de la Republic (similar to an Auditor General's office or Accountability Office) must approve all large purchases of drugs and supplies, and this often adds to delays in the procurement process because the purchase requests are processed along with all other government procurements. Better coordination between the various stakeholder involved in procurement could lead to fewer delays and more efficient use of resources.

4.2 The Importance of Civil Society

Civil society continues to try to ensure the sustainability of programs for key populations. But year after year there is less participation due to the lack of resources for their activities. According to NASA figures, (Table 5), expenditures through organized civil society amounted to US$2,435,475 in 2017. Subsidies from the state to fund activities came to US$225,000. NGOs' own resources totaled US$225,530, and the external sector provided US$1,984,945, which represents 81.5% of expenditures by civil society service providers, which are the primary providers for key populations. This supports the idea that funding for civil society is at risk with the decreased funding from international donors. The list of all civil society organizations involved in HIV activities is in Table 6.

The main player that has worked with civil society in recent years is Plan International, which, as the main recipient of Global Fund money, aims to ensure the sustainability of associated organizations. Plan International is preparing the organizations that will be left without the resources of the Global Fund, guiding them to make business plans that ensure their sustainability independently of the external donors. Some of the strongest organizations, such as Entreamigos—which is well-resources and employs good management practices—have demonstrated a change in attitude to reflect the changed environment. Entreamigos has developed a business plan that includes a new private non-profit clinic to attend to the MSM population and recover costs through clinic services.

In 2017, a total of 26 institutions received funding (Table 6). The activities carried out focused on prevention in key groups.

Table 4: Civil Society

Sources of Funding 2017		
	US$	%
Public sector	225,000	9.24%
Own resources	225,530	9.26%
External sector	1,984,945	81.50%
Total	**2,435,475**	**100.00%**

Table 5: Civil Society Institutions

CIVIL SOCIETY
Aapidsh. VIIV ([Aapidsh VIIV])
Asociación Atlacatl (Atlacatl Association)
Asociación CALMA (CALM Association)
Asociación Cristiana el Renuevo (Christian Renewal Association)
Asociación de Mujeres TS Liquidambar ("Sweetgum" Female SW association)
Asociación Nacional de Personas Positivas Vida Nueva (New Life National Assoication of Positive Individuals)
COCOSI (*Comité Contra el SIDA* [Committee Against Aids]) AIDS HEALTHCARE FOUNDATION
COCOSI PWRDF
Colectivo Alejandría (Alejandría Collective)
CONTRASIDA (AGAINST AIDS)
Coordinación de Mujeres Salvadoreñas – CONAMUS (Salvadoran Women's Coordination)
DGH (*DOCTORES PARA LA SALUD GLOBAL* [Doctors for Global Health)
ENTRE AMIGOS HSH (Between Friends MSM)
Fundación Inocencia (Innocence Foundation)
Fundación Nuevos Tiempo (New Times Foundation)
FUNDASIDA (AIDS FUND)
Global
ICW
Iglesia Hermanas (Church of Sisters)
Organización Trabajadoras del sexo (Sex workers' organization)
Orquídeas del Mar (Orchids of the Sea)
REDCA (*Red Centroamericana de Personas con VIH* [Central American Network of People with HIV])
Redsal (*Red Salvadoreña de Personas con VIH/sida* [Salvadoran Network of People with HIV/AIDS])
REDSAL (*Red Salvadoreña de Personas con VIH/sida* [Salvadoran Network of People with HIV/AIDS])
Sinodo Luterano Salvadoreña (Salvadoran Lutheran Synode)
Visión Propositiva (Proposed Vision)

Several USG-financed projects and organizations have a strong collaboration with the STI/HIV/AIDS Program. They contribute to achieving efficiency by working in the following areas:

- **PSM:** (Procurement and Supply Management) purchasing management, estimation of needs, and information systems
- **Capacity:** human resource training and capability building
- **Centers for Disease Control and Prevention:** economic evaluation studies on the impact of the use of lower priced ARVs as suggested by the World Health Organization (WHO)
- **PASMO (Pan American Social Marketing Organization):** condom marketing and use

Table 7: Illustrates the Activities Funded by US Donor Support.

Table 6: Activities Funded with Resources from the United States of America

	2016 US Government	
ASC	**ASC Code Description**	**US$**
ASC.01.06	Prevention – youth not in school	118,321
ASC.01.08.01	VCT as part of programs for sex professionals and their clients	48,193
ASC.01.08.04	Social and behavior change communication (SBCC) as part of programs for sex professionals and their clients	11,427
ASC.01.09.01	VCT as part of programs for MSM	149,967
ASC.01.09.04	Social and behavior change communication (SBCC) as part of programs for MSM	52,237
ASC.01.09.98	Programmatic interventions for MSM not broken down by type	28,239
ASC.01.12	Social marketing of condoms	8,853
ASC.02.01.02.98	Outpatient prophylaxis and treatment of OIs not broken down by type	56,195
ASC.02.01.05	Laboratory monitoring specifically related to HIV	13,761
ASC.02.02.98	Hospital care departments not broken down by intervention	361,251
ASC.02.98	Treatment and care departments not broken down by intervention	79,091
ASC.03.04	Community support for OVC	57,115
ASC.04.01	Program planning, coordination and management	418,221
ASC.04.02	Administration and transaction-related costs associated with the management and disbursement of funds	257,623
ASC.04.03	Monitoring and evaluation	48,095
ASC.04.07	Drug supply systems	128,876
ASC.04.08	Information technology	103,249
ASC.04.09	Patient follow-up	17,957
ASC.04.10.01	Improving laboratory infrastructure and new laboratory equipment	67,793
ASC.05.02	Training to strengthen the workforce on HIV	36,246
ASC.05.03	Training	34,732
ASC.06.02	Social protection via benefits in kind	55,827
ASC.07.01	Sensitization	97,956
ASC.07.02.01	Human rights programs that empower people to reclaim their rights	50,747
ASC.08.03	Epidemiological investigation	2,506
ASC.08.04.01	Behavioral research	39,630
ASC.08.04.99	Research in social sciences [s.c.o.]	50,747
	Total:	2,394,855

Source NASA 2016

4.3 Key Populations

In 2016, prevalence among FSW was 8.1% and 10.5% for MSM (Table 8).

4.3.1 Strategy to Reach Key Populations

The strategy of providing services to key populations through CSOs is based on supplying packages containing condoms, lubricants, and key information for one year. The amount distributed varies depending on the group. The aim is to promote adoption of preventive attitudes and practices. Testing also is encouraged. This strategy currently receives international funding. In the future, the Ministry of Health has an opportunity to lead financial disbursements to these CSOs.

The strategy used until 2016 consisted of HIV program staff reaching each person three times a year to supply condoms, lubricants, and prevention materials with the objective of changing behavior and encouraging uptake of preventive practices. In addition, each person was referred to testing and counseling services.

In 2017, the strategy of reaching key population was modified due to the Ministry's broader primary care strategy. The Ministry of Health began to develop a strategy of ECOS (*Equipo Comunitario de Salud* [Community Health Team]) Primary Care with a single contact per year that encourages testing. If the test was positive, the person was sent to another level of care, and the costs were lower (because the person has been contacted only once instead of 3 times per year). This contact is carried out by a community-based team at the general clinic in the community, rather than a specific HIV clinic. The health workers may not be fully trained in how to address key population needs.

For a possible evaluation of the new strategy's results, it is important to take into account:

- MSM: They belong mostly to a social group with a medium income and can resist identifying themselves as MSM in front of a member of the community
- Approach/contact: MSM are less likely to identify their sexual preferences when the initial

approach is done by a female health worker or social worker

- MSM identification: Of the total MSM population of 54,140 estimated in *Spectrum*, only 51% identified themselves as MSM. Identifying the other 49% has become a big challenge because it is the key to controlling the epidemic
- Bisexuals: They are difficult to identify because they do not often share their identity as bisexuals
- Information systems: They allow registering as MSM when classifying sexual behavior but do not allow a differentiation if the person is bisexual

It is necessary to use a different strategy to address populations that until now have been difficult to reach. One option is massive advertising campaigns, however, politicians and authorities have rejected this approach because of the high cost.

4.3.2 Targets

The estimated national targets for reaching the population with the highest prevalence, MSM, are not completely accurate because the MSM targets also include bisexuals, about whom data capture is very difficult. The following table shows the coverage goals for key populations (Table 8). Defining separate targets for MSM and bisexuals would be important and would help to define a special approach strategy for the latter group.

Table 7: National Targets for Voluntary HIV Test Coverage for Key Populations

National targets	Baseline 2017	National coverage	2019	National coverage	2020	National coverage	2021	National coverage
MSM testing	15,863	29%	21,656	40%	22,089	41%	22,089	41%
Trans testing	1,207	60%	1,287	64%	1,287	64%	1,367	68%
FSW testing	7,750	17%	8,275	18%	9,354	21%	9,354	21%

Source: Proposal Form for the Global Fund

4.4 Budget and Treasury

4.4.1 Purchasing with Different Sources of Funding

Purchasing with different sources of funding (i.e. with funds from Treasury as well as funds from donors) creates delays because of different timeline for authorizations for the different types of funds, and because the Ministry's current practices prioritize bulk orders (using financing from different sources) in one tender rather than processing two separate tenders and purchase requests

Whereas the Global Fund can provide a three-year expenditure authorization, the Ministry depends on its annual approved budget. Typically there is a delay between when the Ministry knows its annual expenditure ceiling and when it needs to begin procuring drugs and supplies, which further delays the tendering process. Further, Ministry of Finance payment depends on monthly Treasury receipts, such that even though a purchase request is processed and approved, payment to providers and suppliers is often delayed.

One potential option to reduce these delays is to manage different tendering processes for the funds from donors and from Treasury so that delays in authorizing public sector budgets and funds do not delay purchases that could be made in a timely fashion using the resources already authorized by the Global Fund.

4.4.2 Customs Duties on Imported Medicinal Products or Reagents

Clearing imported products through customs requires payment of taxes for importation. This payment is made with a check issued by the Ministry of Finance to receive the coverage of taxes set by the Ministry itself. The Ministry of Finance will issue the payment check based on its priorities, which do not necessarily coincide with the needs of the Ministry of Health. This delay in the payment of taxes usually takes three to four months, which implies that storage must be paid for that time. The delay thus increases costs and loses useful months for the items, reducing their period of effectiveness, and preventing patients from receiving the health benefits of the product.

4.4.3 Payment to Suppliers after the Agreed Deadline

Once the goods are delivered, the Ministry of Health issues the payment order to the Ministry of Finance. The Ministry of Finance will make the payment to the suppliers according to their priorities, which are not always the same as the Ministry of Health. The suppliers, aware of this reality when trading, increase the price of medicinal products and reagents to take into account a longer term for the receipt of payment. This price increase creates another inefficiency by decreasing the purchasing capacity of the Ministry of Health.

4.4.4 Management of Financial Flows

Inadequate management of financial flows that leads to misuse of authorized budget is a major inefficiency in two ways: first, because authorized funds are not spent at the end of the fiscal year, and second because delays lead to wastage and also higher prices. This problem could be solved by seeking an agreement between officials of the Ministry of Health and Ministry of Finance or at the level of the heads of both Ministries to create a payment plan that enables the Ministry of Health to set payment priorities. This will make the Ministry of Health reliable, suppliers will avoid inflationary pressure on their prices due to risks, and unnecessary interest payments will be avoided.

4.4.5 Late approval of laboratory reagents

The late approval of purchases of laboratory reagents has resulted in partial deliveries and stock-outs of the reagents. Additionally, there is insufficient time allotted for planning and purchase for the laboratory to avoid stockouts or the expiration of laboratory supplies, which compounds the issue. It is recommended that, whenever possible, the purchase of laboratory reagents should be conducted independently from the purchase of other medicines and supplies in order to minimize delays waiting for budgetary allocation from national funds.

4.5 Cost Reduction and Economic Evaluations

The Ministry of Health's cost system for health services (formerly managed by the Department of Statistics) has not been updated and is no longer used.

At the suggestion of the Pan American Health Organization, the Ministry is experimenting with a new costing system named "PERC" (Productivity, Efficiency, Resources, and Costs). We did not have access to the results because the system was in an experimental phase.

4.5.1 New Medicinal Products (ARVs)

The WHO has suggested the use of a new, lower-cost ARV (Dolutegravir) that replaces higher-cost ARVs. The savings from changing drugs could cover an important part of the deficit that will exist due to the exiting of donors. The advantages of this new medicinal product are:

- Economic point of view: Lower cost. The CDC would do this evaluation
- Technical point of view: Fewer side effects

4.5.2 Frequency of CD4 Testing

CONAVIH and the Ministry of Health are currently considering changing their policy guidelines to reduce the frequency of CD4 tests from two tests a year to one test a year. Interviewed stakeholders estimate it will take two years before the decision is finalized in negotiations between the STI/HIV/AIDS Program and the Ministry of Health. To adopt this recommendation into the country's national guidelines, the Association of Infectious Diseases and Civil Society Organizations will have to review and validate these changes to avoid prosecution from the Federal Attorney's office for possible human right breaches or violations. However, if this decision is fast-tracked, the STI/HIV/AIDS programs would benefit from the reduced cost of CD4 testing in a shorter timeframe.

4.6 Management and Purchasing

Poor purchasing management practices undermine efforts to obtain lower prices and shorter timelines for acquiring the merchandise. This is one of the main causes of inefficiency.

In the Ministry of Health, the purchase process begins with a purchase request that includes the technical specifications made by an expert who knows the product, the advantages of use, and the quantities necessary for the period of purchase. The existence of budgetary credit is then confirmed to make the purchase with resources for that year.

The Purchasing Unit proceeds to make the purchase in accordance with national laws. Once the merchandise is delivered, the payment is released. The payment is made according to financial availability and the priorities of the National Government. Purchases in the Ministry of Health, whether ordered by the National STI/HIV/AIDS program or another division, follow the same procedure.

This is a procedure that can become complicated according to one's particular interpretation of the law. The current Ministry of Health administration has wanted to avoid mistakes that could look like corruption and has prioritized transparency for the purchasing process. This concern has become an obsession and led to creation of steps and challenges not envisioned in the provisions of the law. The timelines for any process are almost double those of other institutions in the Public Administration of El Salvador.

The LACAP (*Ley de Adquisiciones y contrataciones de la Administración Pública* [Public Administration Acquisitions and Contracting Law]) law dating back to 2000 has 64 steps. An omission or error requires the whole process to be redone.

The central unit that conducts the purchasing process is the Institutional Acquisition and Contracting Unit (Unidad de Adquisiciones y Contrataciones Institucionales – UACI). Several management practices and processes contribute to challenges and delays with the procurement process, for example:

- The UACI often questions the technical specifications made by the experts, and without consulting them, can modifying the specifications with requirements that make the purchase almost unfeasible. This occurs despite the fact that the law gives responsibility for specifications to those who request the purchase.

- The purchasing process is fragmented, granting significant autonomy to each department that plays a role in the process. The lack of communication between the different departments and units involved results in delays in procurement.
- The reference price used is historical, based on previous purchases rather than market prices. There is no opportunity to analyze whether the price dropped due to increased competition or new technology, rather than assuming that the price increased with inflation.
- When purchasing processes that are delayed and finalized in the last months of the fiscal year include partial deliveries (due to products' expiration and shelf-life), a portion of those purchases remain without being executed. In the meantime, given the delays, the Ministry must make purchases through other means in smaller volume (and higher prices), or a stockout has to be accepted.
- Centralized bulk purchasing is prioritized. However, there may be other purchasing mechanisms, such as purchases in smaller quantities and with fast payment to suppliers that offer lower costs.
- The Minister of Health must often intervene to resolve administrative conflicts as a result of not buying medicinal products or reagents at the right time.
- Personnel were hired to facilitate purchases for the STI/HIV/AIDS Program using funding from the Global Fund. They were successful. But when these officials were incorporated into the permanent UACI cadre, they were prevented from facilitating processes related to AIDS.
- There are reagents that have different purchasing mechanisms. Hospitals do their purchasing in isolation because they have autonomous budgets. The regions do their purchasing in a centralized way because they depend on the Ministry of Health with technical support from a specialist.
- To finalize the purchase process, a visit from the Auditor's Office (Ministry of Justice) is required. This process adds another one to two more months to the process for the completion of the purchase.
- If the direct purchase mechanism is used, the purchase process avoids passing through the Prosecutor's Office. However, this takes four months. In 2017, this mechanism was used twice.

Social Security is also governed by the LACAP law. In contrast, its timelines for procurement are shorter, and it has a rational interpretation of the law, indicating the Ministry's process generates unnecessary delays. The institution that is above the entire UACI is the Public Administration Acquisitions and Contracting Standard Unit (Unidad Normative De Adquisiciones y Contrataciones de la Administración Pública - UNAC), also has more flexible standards.

Finally, another option to obtain lower prices that was suggested is to explore joint purchasing with other countries in the region through COMISCA (Consejo de Ministros de Salud de Centroamérica [Council of Ministers of Health of Central America]).

4.7 Logistics

4.7.1 National Reference Laboratory (Laboratorio de Referencia Nacional – LRN)

The LRN, a key piece in the diagnosis and evaluation of the degree of the epidemic in HIV/AIDS patients, is constructing a modern building that will resolve existing infrastructure problems. However, the LRN has challenges with other areas of the Ministry of Health that require resolution.

For example, fragmentation of the information systems (and lack of data entry personnel) for HIV test results lead to delayed notification of test results for patients. The solution will require better

integration of information systems in order to achieve faster reporting of results and more efficient use of human resources.

The lack of personnel also creates a conflict over which diseases to prioritize. HIV/AIDS does not always have the highest priority among lab personnel, leading to long wait times before patients receive a result. In many cases the patient has already returned to their home, which may be located in rural areas far from the lab.

Reagents are not always available when they are needed. Currently, the LRN cannot have large quantities in stock due to a lack of space, however this situation will improve when the new building is complete.

4.8 Distribution of ARVs and Monitoring of Patients

The Ministry of Health is taking healthcare closer to the community. It is implementing community healthcare teams in the first level of care, identifying the health status of families and sick people to be treated, and monitoring their progress. Electronic medical records are also being established. It is expected that there will be 1,300,000 online medical records in July.

4.8.1 Distribution of ARVs

These first-level teams do not distribute ARVs that are not included on the list of essential medicinal products. AIDS patients have to go and seek medicinal products at hospitals that are often far from where they live. This does not ensure the continuity of treatment and means additional costs for people traveling to urban centers.

4.9 Human Resources

4.9.1 Training

Ministry of Health managers and hospital directors are often against various types training (including those related to HIV/AIDS, management, or other topics), arguing that they would remain without essential staff for the duration of the training.

- They do not evaluate the impact of training on the performance of trained civil servants
- They see only the gaps left by civil servants when they are in training

The conflict arises around the fact that the training of staff is not coordinated with the hospitals' directorates or managements.

4.10 HIV Law

In 2017, the HIV law was amended (Decreto No. 562. Ley de Prevención y Control de la Infección Provocada por el Virus de Inmunodeficiencia Humana). According to multiple stakeholders, the new law created problems for the implementation and failed to allocate funds to cover the deficit that will exist with the withdrawal of international donors. A legislation group in CONAVIH, working with a parliamentary group open to modifying the law, is studying a package of amendments meant to resolve some of the issues related to the new law

Taking this opportunity into account, the HFG consultant had a meeting with the Executive Secretary of the CONAVIH, Francisco Carillo, and the Director of Health Regulation and Legislation of the Ministry of Health, Luis Francisco López, to learn about a possible amendment that will contribute to the financial sustainability of the AIDS strategy.

Some segments of the Ministry of Health oppose the vertical nature of the STI/HIV/AIDS Program. This situation is reflected in the HIV law approved in 2017.

- The program's inclusion in the provision of services in the Ministry of Health Services Network conflicts with the confidentiality with which the program must be handled.
- All the medical records do not include information about the epidemic because patients are not identified. Thus the opportunity of knowing the demand for services due to the epidemic is lost.
- The ability to do follow-up is lost. Today it is done through the referral and counter-referral system.

4.10.1 Patent Law

A law that favors the purchasing of generic ARVs by eliminating the effects of patents, which increase the cost of an essential medicine, is also being analyzed.

4.10.2 Avoiding the Payment of Taxes Related to the Importing of ARVs and Reagents

PSM is advising that tax exemption be obtained to avoid the payment of interest on the taxes themselves, additional storage costs, and the delivery of the products in shorter terms.

4.11 Survey results

A survey was distributed among the heads of the departments or managers of the Ministry of Health and the STI/HIV/AIDS Program after the personal interviews. A total of 16 surveys were sent and nine responses were received.

The survey was organized into three major areas where inefficiencies are generated; human resources, pharmacy, and governance, with a total of 39 questions that should be answered "yes" or "no." This form was evaluated and improved by Lucrecia Castillo before its distribution.

The results are presented in appendix 1. From the compilation of all returned surveys, a percentage was obtained that signifies the degree of acceptance of the comment by all the interviewees.

A key indicator of an opportunity for addressing inefficiencies is cases where the percentage is greater than 50%. Cases where the answer is equal to 50% indicate indifference. An answer that appears in several areas would mean that any of the two alternatives can be valid if implemented with special requirements.

The answers objectively confirm the problems of inefficiencies identified in the interviews and expressed previously.

Table 8: Inefficiencies Identified

Human Resources	
Talent drain	87%
Shortage of highly qualified personnel	75%
Training not appropriate to the context, lack of in-department training	75%
Practice prevents the lower personnel teams from performing key tasks	62%
Pharmacy	
Loss due to expiration	100%
Poor quantification leads to overstocking and shortages	86%
Non-optimal acquisition processes (both in terms of guidance and regulation)	86%
Suboptimal commercial and fiscal policies for pharmaceutical products	75%
Loss due to poor storage and transportation systems	71%

Governance	
Institutions cannot move funds between items	87%
Weak public financial management	87%
Institutions cannot hire/fire staff	75%
Delays in the transferring of funds result in shortages and scarcity	75%
Corruption	75%
Inability of patients to complete the full course of prescribed medications	75%
Inability to attend follow-up visits or referrals	75%
Institutions cannot transfer funds from year to year	62%
Weak information systems	62%
Weak processes/regulatory systems	62%
Inability to implement healthy behaviors	62%

The greatest number of inefficiencies identified by respondents are grouped around governance, which reaffirms the inability of the Ministry of Health to resolve problems that would be resolved with better planning and agreed-upon strategies. The aspects related to the management of medicinal products or human resources highlight the existence of conflicts and delays in procurement, as well as in the management of personnel.

4.12 M&E – NASA

El Salvador has an annual series of expenditure analyses on HIV using the NASA tool. In April 2018, the expenditure and financing for 2017 had already been calculated. This information has made it possible to evaluate the AIDS policy with details on the expenditure on the activities, beneficiary populations, and their financing.

An exhaustive review of the quality of the El Salvador NASA expenditure estimates was done, and the NASA estimates were compared to estimates in the Global Fund Proposal. The comparison confirmed that the cost of blood safety and hospital care in the NASA report are overestimated and higher than average, compared to the Global Fund Proposal. These differences do not affect the gap between funding needs and projected funds available that was analyzed for the Global Fund proposal, since the proposal used the same overestimated estimates.

The blood safety program is overestimated because the information used by the Department of Monitoring and Evaluation to generate NASA estimates comes from the blood safety program which reports total program expenditure rather than expenditure specifically for HIV. This program, instead of using the specific expenditure for testing for HIV (which amounts to $15 according to the estimates from the 2011-2015 Strategic Plan) reports the total expenditure on screening bags of blood for all pathologies, which amount to $100 per bag of blood. Considering that an average of 50,000 bags of blood are screened per year in the public sector, the expenditure should be estimated at about $750,000.

Another difference we found is that expenditure for inpatient hospital admissions was estimated at US $15 million in 2016 and 8 Million in 2107. The wide variation in the two estimates is the result of different estimation procedures. Expenditures in 2016 were estimated by the Department of Statistics, which reported their estimates to the Department of Monitoring and Evaluation which is responsible for doing the NASA study. In 2017, however, the Department of Statistics did not provide estimates, which forced the Department of Monitoring and Evaluation to conduct its own estimate.

The NASA study reveals which activities are at risk in the face of the transition, that is, which activities are currently funded with external resources.

To increase the quality of the NASA estimates, it was suggested that comparisons be made with the cost estimates made by Resource Need Model [RNM] for the costing of the strategic plan and/or the estimate of necessities made with the Goals Model.

5. DISCUSSION AND OPPORTUNITIES

In summary, the areas of inefficiencies identified are:

a. In the Ministry of Health

- Lack of a shared vision between the Ministry of Health and counterparts at other ministries, for example, mismatched payment priorities between the Ministry of Health and the Ministry of Finance
- Lack of planning and coordination in purchasing processes
- The managers have a different interpretation of the norms and law; they introduce changes in procurement process where is not necessary
- Lack of transparent communication about the financial flows between Ministry of Health managers
- Lack of planning and coordination in personnel training
- Distribution of ARVs at locations not accessible enough to patients, causing loss to follow-up
- Slow decisions in resolving problems where everyone involved knows the solution
- Laboratory reagents with management and funding problems
- Weakness in identifying and reaching key populations
- Updating of the HIV Law, which has complicated the strategy of CONAVIH and the STI/HIV/AIDS program

b. Civil Society

- Weak financial management capacity in civil society institutions
- The existence of a large number of aspects that create inefficiencies led us to find opportunities to act taking into account the deadlines of the HFG project.

5.1 Opportunities

Criteria used to identify opportunities:

- That no other institution was working on this topic
- That the proposed activity was quick to implement
- The opinions of interviewees

Helping the STI/HIV/AIDS Program resolve its inefficiencies will enable it to save money, which it can allocate to new activities it must fund. This will ensure the sustainability of key activities funded today with external resources.

The following opportunities were identified:

1. Improve financial and budgetary management of the purchasing process for supplies and payment to suppliers

2. Improve long-term sustainability of civil society organizations through efficient management of their budgets
3. Secure public resources for HIV in the new HIV law

6. NEXT STEPS

6.1 Efficient Financial and Budgetary Management

6.1.1 Common Interest

All officials of the Ministry of Health must promote the health of the population of El Salvador. Therefore, all their actions must be aimed to facilitate access to services and ensure the distribution of medicinal products and availability of supplies at all levels of care when necessary. Any conflict that arises in the procurement process will be an impediment in attaining this "superior guide" for all officials.

6.1.2 ARVs and Laboratory Reagents

The purchase process for ARVs and laboratory reagents presents a great inefficiency based on the management of the financial and budgetary flows for purchases used by the support units of the Ministry of Health. This process is lengthy, and the requirement of an opinion from the Auditor General's Office adds another two to three months. The result is higher-than-market prices, as well as later arrival at warehouses in timelines not originally planned for.

Delayed payment to suppliers also contributes to high prices of ARVs and laboratory reagents. The origin of the delay is that the Ministry of Finance sets payment priorities without taking into account the benefits of making payments on time.

This inefficiency is aggravated by the existence of a discrepancy between the delivery of the merchandise by the suppliers and the time they receive the payment. This is because the Ministry of Finance sets payment priorities without taking into account the needs of the Ministry of Health and the HIV program. This forces providers to cover themselves by increasing the prices for delayed payments.

6.1.3 Improvement of Financial and Budgetary Management of the Purchasing and Payment Processes

Financial and budgetary management must ensure that the strategic plan attains the results within the established timeframes and with the defined characteristics. For this, it is necessary to address impediments in the support processes that the Ministry of Health offers to the STI/HIV/AIDS Program.

6.1.4 Workshops for Improving Financial and Budgetary Management

- Participants: management staff of the Ministry of Health, personnel of the Ministry of Finance and the Office of the Prosecutor.
- Study of cases linked to their actual situation: a) Decrease in timeframes, b) Distribution of ARVs in the first level of care, c) Financial coordination with the Ministry of Finance, or others at the discretion of the management of the STI/HIV/AIDS Program

6.2 Costs and Sustainability

6.2.1 Challenges

The sustainability of HIV promotion and prevention activities (identifying and covering the key groups) is challenge that the HIV Program must resolve with the reduction of international cooperation.

Plan International began a process of training in efficient management and sustainability with the organizations that they support. Thinking about cost training and budgeting to free up resources can be a supportive task. Most civil society organizations do not always have experience in managing institutions and do not have qualified personnel in this area among their staff.

6.2.2 To improve resource management and financial sustainability: Proposed Workshop on Costing and Budgeting to Increase the Knowledge in Efficiency to Manage Resources

- Participants: Staff from civil society organizations providing HIV services
- Methodology: Training and case analysis in order to improve knowledge and skills related to efficient resource management

6.3 Funding Sustainability in the HIV Law Update

Funding for the fight against AIDS comes from the government, the social security scheme, and external donors. Donor support is not a sustainable source of funding and therefore the financial sustainability of the policy will have to depend on domestic resources.

Due to its legal origin, the Social Security financing scheme (Social Security and Health Institute) financially guarantees access to health services necessary for its beneficiaries in HIV prevention and treatment activities. The government has not secured the resources for beneficiary access to prevention and treatment services.[1] The laws mention only the rights of the beneficiaries, but do not commit the government to the financing of those rights by assigning a budgetary item for them. Committing financing through legislation would represent a stronger commitment to the program's sustainability.

The proposed amendment of the HIV law currently under study provides an opportunity to introduce this commitment, in the same manner as was done with vaccines in the Vaccine Act of El Salvador (2011). Chapter VI (Financing) speaks of the provision of funds (Article 19), or by recourse to international law compared to laws they mention that "*The State will guarantee the services ...*"

This activity was initiated with meetings between Dr. Carillo, López and the HFG consultant to find the best wording and its political viability, drawing from other countries' experiences of success, for example, the ART and PMTCT programs in Brazil and Uruguay. In El Salvador, vaccination legislation has contributed to guaranteeing financing for the vaccination program.

[1] The study of the topic of treatment was left to López and Carrillo to confirm where there was a law in this regard.

7. REFERENCES

CONASIDA. 2016. Plan Estratégico Nacional Multisectorial de VIH e ITS 2016 – 2021.

CONASIDA. 2011. Plan Estratégico Nacional Multisectorial de VIH e ITS 2011 – 2015.

Congreso de El Salvador. 2017. Decreto No. 562. Ley de Prevención y Control de la Infección Provocada por el Virus de Inmunodeficiencia Humana. .

Plan Internacional. 2016. Estudios de tamaño de Poblaciones.

Programa de ITS/VIH/SIDA. 2018. Formulario de solicitud de Financiamiento al Fondo Global

Programa de ITS/VIH/SIDA. 2017. SUMEVE (Sistema Único de Monitoreo y Evaluación de la Vigilancia Epidemiológica [Single System for Monitoring and Evaluation of Epidemiological Surveillance]).

Programa de ITS/VIH/SIDA. 2017. Estudios de Medición del Gasto en SIDA 2016-2017.

UNAIDS. 2017. Preliminary document - - Pilar Rivera, Daniel Aran

APPENDICES

1. Survey on sources of inefficiencies

Table 9: Human Resources

No.	Category	Sources of Inefficiency and Loss of Efficiency	Acceptance %
1	Healthcare Personnel	**Inappropriate Personnel**	
		• Shortage of highly-qualified personnel	75.00%
		• The scope of the practice prevents lower staff members from carrying out key tasks	62.50%
		• Talent drain	87.50%
		• Training not appropriate for the context, lack of training in service	75.00%
2	Healthcare Personnel	**Poorly Motivated Personnel**	
		• High rates of absenteeism	25.00%
		• Low productivity	12.50%
		• Not providing respectful care	37.50%
3	Healthcare Personnel	**Inadequate Salary Policy**	
		• The low salaries create a retention deficit, brain drain.	87.50%
		• Payment mechanisms for suppliers encourages oversupply or insufficient attention, associated quality problems	62.50%
4	Healthcare Personnel	• Ghost officials	12.50%

Table 10: Pharmacy

No.	Category	Sources of inefficiency and loss of efficiency	Acceptance %
5	Pharmaceutical products	**Squandering of Pharmaceutical Products**	
		• Deficient quantification leads to oversupply and shortages	85.71%
		• Loss due to expiration	100.00%
		• Loss due to storage and transport deficiencies	71.43%
6	Products, equipment, infrasctructure	• Non-optimal purchasing processes (both for guidance and regulation)	85.71%
7	Pharmaceutical products	• Counterfeit and low-quality products	0.00%
8	Pharmaceutical products	**Medicinal Products - Overpriced**	
		• Buy trade name medicinal products	12.50%
		• Small-scale purchasing results in weak purchasing power	50.00%
		• Inappropriate mixing of drugs produced in the country versus imported drugs	12.50%
		• Suboptimal commercial and fiscal policies for pharmaceutical products	75.00%
		• Lack of adherence or no adherence to the list of essential medicinal products for purchasing	0.0

Table 11: Governance

No.	Category	Sources of inefficiency and loss of efficiency	Acceptance %
9	Governance, management administration	**Lack of autonomy for first-line suppliers and the local government to administer finances, select the combination of entries**	
		• Institutions cannot assign their own budgets	50.00%
		• Institutions cannot hire/fire personnel	75.00%
		• Institutions cannot move funds between items	87.50%
		• Institutions cannot transfer funds year-on-year	62.50%
		• Delays in the transferring of funds results in shortages and scarcity	75.00%
10	Governance, management administration	**Administrative overlap and duplication**	
		• Fragmentation	50.00%
		• Duplication in vertical programs	25.00%
		• Weak information systems	37.50%
11	Governance, management administration	**Lack of responsibility**	37.50%
		Weak transparency	50.00%
		• Weak managing of public finance	87.50%
		• Corruption	75.00%
		• Weak information systems	62.50%
		• Weak regulatory processes/systems	62.50%
12	Governance, management administration	**Demand side inefficiency**	
		Inability of patients to finish the complete course of prescribed medicinal products	75.00%
		Inability to attend follow-up or referral visits	75.00%
		Inability to collect laboratory results	37.50%
		Inability to implement health beavhiors	62.50%
		Lack of effective commitment from the community to demand care, monitoring and reports	50.00%

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