Identification of Bottlenecks Affecting Consolidated Purchases of Antimalarials through the Strategic Fund

Walter Flores

February 2013
Translation June 2013

USAID
FROM THE AMERICAN PEOPLE

SIAPS
Systems for Improved Access to Pharmaceuticals and Services

Identification of Bottlenecks Affecting Consolidated Purchases of Antimalarials through the Strategic Fund

Walter Flores

February 2013
Translation June 2013

USAID
FROM THE AMERICAN PEOPLE

SIAPS
Systems for Improved Access to Pharmaceuticals and Services

This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.

About SIAPS

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

Recommended Citation

This report may be reproduced if credit is given to SIAPS. Please use the following citation.

Flores, W. 2013. *Identification of Bottlenecks Affecting Consolidated Purchases of Antimalarials through the Strategic Fund*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Key Words

malaria, antimalarials, Strategic Fund

Systems for Improved Access to Pharmaceuticals and Services Program
Center for Pharmaceutical Management
Management Sciences for Health
4301 North Fairfax Drive, Suite 400
Arlington, VA 22203 USA
Telephone: 703.524.6575
Fax: 703.524.7898
E-mail: siaps@msh.org
Website: www.siapsprogram.org

CONTENTS

ACRONYMS AND ABBREVIATIONS

AMI	Amazon Malaria Initiative
SF	Strategic Fund
MOH	Ministry of Health
MSH	Management Sciences for Health
PAHO	Pan-American Health Organization
NMCP	National Malaria Control Program
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SPS	Strengthening Pharmaceutical Systems
USAID	US Agency for International Development

EXECUTIVE SUMMARY

This study had the following objectives:

- To prepare an organizational map of the processes, activities, actors, and roles played with regard to the various phases of the process for making consolidated purchases through the Strategic Fund (SF) of the Pan-American Health Organization (PAHO)
- Based on the organizational map prepared, to identify and analyze any bottlenecks found
- To present recommendations for eliminating, or decreasing the effects of, the bottlenecks so identified

The bottleneck analysis was carried out by applying the organizational mapping tool to the processes involved in making consolidated purchases of pharmaceuticals through the PAHO/SF mechanism. The mapping exercise followed the various phases involved in the SF's established purchasing procedure.

The analysis identified bottlenecks in each of the six required phases of the procedure for making purchases through the SF. It was also determined that each phase involves different actors whose scope of activity extends beyond malaria programs and technical supply units. In some phases, these additional actors operate as employees or units within the Ministry of Health (MOH). In other phases, however, ministries other than the MOH are involved, which increases the degree of complexity of certain key activities that must be carried out in the various phases involved in the procurement of commodities using the SF mechanism.

In addition, the analysis determined that completion of the various phases and activities that make up the SF purchasing process involves three types of roles. In addition to the role involving technical documentation, which is the most obvious, roles involve authorization or decision making with regard to documents and processes, and the administrative follow-up that must be conducted to obtain final approval of processes and the signing of all required documents.

The study also analyzed key periods involved in medicine purchase planning, the purchase order process, and the flow of financial resources in individual countries. The information analyzed identified the likely existence of a mismatch between key dates established by the SF for its consolidated purchase procedures and the dates by which individual countries will have put together all of the information required to prepare their planning of medicine needs and secured the cash flow to make the deposits required for the products to be purchased.

The study concludes with suggestions for strategies to be adopted, together with concrete recommendations for eliminating the bottlenecks identified.

INTRODUCTION

In 2001, the US Agency for International Development (USAID) launched its Amazon Malaria Initiative (AMI), the goal of which is to improve malaria control and treatment in the countries of the Amazon Basin (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, and Suriname). Since that time, with support provided by AMI, these countries have modified their treatment policies to include more effective therapeutic combinations.

Through its USAID-funded projects, Management Sciences for Health (MSH) has been a technical partner of AMI since 2002, providing support in the area of pharmaceutical supply management. Together, AMI partners and counterpart institutions—namely, the Pan-American Health Organization (PAHO), the US Centers for Disease Control and Prevention, the Promoting the Quality of Medicines program currently being implemented by the United States Pharmacopeial Convention, managers of National Malaria Control Programs (NMCPs), and local MSH missions implementing the Rational Pharmaceutical Management Plus Program and Strengthening Pharmaceutical Systems (SPS) Program—have helped strengthen the capacity of NMCPs to develop strategies aimed at improving their management of medicines and pharmaceutical supplies.

Within this context, individual countries have undertaken a wide range of activities designed to improve their medicine supply management. In 2008,[1] MSH/SPS prepared a document that described the status of the management of medicine supplies for treating malaria in countries of the Amazon Basin, and in 2009 a document was prepared describing the status of the management of supplies of antimalarial medicines in the countries of Central America.[2] Both reports revealed the existence of problems involving the supply of antimalarials in most of the countries of the region.

In April 2011, a regional workshop was held in Cartagena, Colombia, to analyze problems affecting management of antimalarial medicine supply. The workshop concluded with the presentation and discussion of work plans prepared by country representatives, together with commitments from cooperating agencies to support those plans.[3] Included among the agreements arising out of the workshop was the commitment to use the PAHO/SF for making consolidated purchases as an alternative for resolving problems involving the supply of antimalarials in the region.

---

[1] Barillas, Edgar, Claudia Valdez, and Silas Holland. 2008. *Situación de la gestión del suministro de medicamentos para el tratamiento de la malaria en los países que comparten la Cuenca Amazónica*. Submitted to the US Agency for International Development by the Strengthening Pharmaceutical Systems (SPS) Program. Arlington, VA: Management Sciences for Health.

[2] Strengthening Pharmaceutical Systems (SPS). 2008. *Situación de la gestión del suministro de medicamentos para el tratamiento de la malaria en los países de Centroamérica*. Submitted to the US Agency for International Development by the SPS Program. Arlington, VA: Management Sciences for Health.

[3] Strengthening Pharmaceutical Systems (SPS). 2010. *Informe técnico: Reunión de trabajo para el análisis de los criterios de selección, programación de necesidades y adquisición de medicamentos antimaláricos.* Submitted to the US Agency for International Development by the Strengthening Pharmaceutical Systems (SPS) Program. Arlington, VA: Management Sciences for Health.

The SF is a mechanism created in 2000 by PAHO with the goal of facilitating procurement of strategic public health supplies in that organization's member states. Through the provision of procurement-related technical support, the SF promotes the continuous availability of high-quality, low-cost strategic supplies. The SF also helps strengthen the capacity of member states to properly manage pharmaceutical supply and the process of procurement planning and programming. In addition, the SF uses prequalified international providers meeting the standards established by both PAHO and the World Health Organization.

The SF operates with a procurement timetable that includes a number of stages delimited by specific, previously defined starting and ending dates. In addition, given its function as a mechanism for consolidated purchasing, it requires that all participating countries carry out all established activities and procedures within those pre-established time periods. This presents a significant challenge in view of the wide range of administrative procedures in place in each of the participating countries, as well as the considerable variety of antimalarial treatment regimens used in the countries of the region.

Given that challenge, this study seeks to contribute to the identification of potential solutions by carrying out an exercise involving the organizational analysis of the various steps and processes involved in the consolidated purchase of antimalarials through the SF.

OBJECTIVES

- To prepare an organizational map of the processes, activities, actors, and roles played with regard to the various phases of the process for making consolidated purchases through the PAHO/SF
- Based on the organizational map prepared, to identify and analyze any bottlenecks found
- To present recommendations for eliminating, or decreasing the effects of, the bottlenecks so identified

METHODOLOGY

Bottleneck analysis is a strategic planning procedure that seeks to identify the factors, activities, processes, and actors that constrain processes of organizational change or management routines. The analysis is conducted following the identification of processes of organizational change when implementation of proposed action plans has been complicated by a combination of underlying factors not evident in the implementation process. The analysis uses one or more organizational analysis tools, such as stakeholder analysis, policy mapping, and organizational mapping. The specific tools used are determined by the organizational process being analyzed.[4]

For this study, the bottleneck analysis was conducted using a tool designed to create an organizational map of the processes involved in purchasing medicines through the PAHO/SF mechanism. The mapping exercise followed the six pre-established phases of the SF purchasing procedure (see annex 1): (a) planning the purchase, (b) estimating prices, (c) depositing funds to cover payment of the purchase, (d) approving prices, (e) placing the purchase order, and (f) receipt of products.

Activities

For each of the phases described, the following information was collected and analyzed:

- Identification of significant activities and technical procedures
- Identification of tasks involving decision making, which are prerequisites for proceeding to subsequent activities
- Identification of the actors involved in the various technical and decision-making activities
- Identification of key stages in the flow of public resources for medicine purchases

Sources of Information

The following were sources of information for the study:

- Guidelines and instructions for using the PAHO/SF mechanism

[4] Holland, J. 2007. *Tools for Institutional, Political, and Social Analysis of Policy Reform: A Sourcebook for Development Practitioners.* World Bank: Washington, DC.

- Reports on the status of medicine supply in the countries of the Amazon Basin prepared by MSH projects engaged in the field of pharmaceutical supply management,[5] which were in turn based on information provided by individual countries
- Presentations made by individual countries on the status of pharmaceuticals at the regional workshop held in Lima, Peru (July 2011)
- Individual interviews with the officials from each country responsible for pharmaceutical management, all of whom were present at the regional workshop in Lima, Peru
- Individual interview with the PAHO/SF coordinator

Results of the Analysis

The results, or findings, of the analysis are shown in a table that combines the various activities involved in each phase of the SF mechanism (along the vertical axis) with the various actors and/or units/ministries having a role in each of those activities (along the horizontal axis). In addition, the roles played by the various actors were classified into three categories: (a) preparation of technical documentation, (b) decision making/authorization, and (c) follow-up on administrative processes.

[5] Strengthening Pharmaceutical Systems (SPS) and Systems for Improved Access to Pharmaceuticals and Services (SIAPS).

FINDINGS

The findings for each of the six phases involved in the procedure for making purchases through the SF are listed below:

- Planning the purchase
- Estimating prices
- Depositing funds to cover payment of the purchase
- Approving prices
- Placing the purchase order
- Receipt of products

Planning the Purchase

The phase involving planning for the purchase includes two main activities: (a) preparation of the technical specifications for each product, and (b) preparation of a procurement plan. The technical specifications include preparation of the technical data sheets for each medicine, which is a detailed procedure. According to information received from key informants, preparation of the data sheets is a painstaking process because of the amount of information and the degree of detail required. In most cases, countries do not have these data sheets readily available and must therefore prepare them prior to their initial procurement of commodities through the SF. Despite the prolonged nature of the data sheet preparation exercise, it offers the advantage that for subsequent years the data need only be updated, thereby significantly reducing this task for future years' purchases.

Preparation of a procurement plan requires that estimates be made of the amounts of each medicine to be purchased. Based on information provided by key informants, the amounts of medicines to be purchased typically fluctuate during the purchase process. It is a common occurrence for countries to request, over the course of the purchase process, that adjustments be made to the amounts to be procured. Even when adjustments to the purchase plan are readily foreseeable, the significant nature of changes in quantities—whether upward or downward—draws attention. The opinion of one key informant was that *in reality these adjustments reflect the fact that estimates of the required amount of medicines are either poorly calculated or based on incomplete information*. This observation is confirmed by a number of reports indicating that, at the country level, preparation of estimates of the amount of medicines to be procured is one of the weakest areas of the pharmaceutical management process.[6]

[6] Jiménez, Magdalena, Claudia Valdez, John Marmion, and Edgar Barillas. 2012. *Situación de la gestión del suministro de medicamentos para el tratamiento de la malaria en los países que comparten la cuenca Amazónica y Centroamérica – octubre 2011.* Submitted to the US Agency for International Development by the Strengthening Pharmaceutical Systems (SPS) Program. Arlington, VA: Management Sciences for Health (MSH).

According to the information obtained, two actors involved in this phase were identified: (a) malaria programs and (b) MOH technical supply units. Between them, these two actors are responsible for preparing all technical documentation.

Estimating Prices

The principal activity in this phase involves the request for prices, which is sent to PAHO by the MOH. This request must include the list of medicines, the amounts to be purchased, and the cards containing technical specifications.

As mentioned in the preceding section, compliance with the requirement involving submission of official documentation to support the request for prices tends to lag in countries making first-time purchases. For all other countries, however, submission of the request and accompanying documentation to complete this phase of the process is carried out more expeditiously.

Participating in this stage are four actors: (a) NMCPs, (b) MOH technical supply units, (c) the MOH financial authority, and (d) the Minister of Health. Each actor performs a specific function in the process. The malaria program and the technical supply unit that prepared the technical documentation are required to carry out administrative follow-up with the financial authority that approved the purchase plan and the request for prices. The Minister of Health must approve both the technical documentation and the request for prices, by signing and forwarding on the official letter of request to PAHO. The malaria program and the technical supply unit also conduct administrative follow-up to ensure that the letter has been signed and subsequently delivered to PAHO.

Because the actors who perform technical functions are different from those who approve or authorize procedures, a bottleneck may occur: even when the quantification exercise is completed in a technically correct manner and within the time periods stipulated in the SF procurement timetable, countries must commit to covering purchase and/or authorization of the purchase plan. Interviews with key informants revealed that arranging for the approval and/or authorization is a process that can at times become quite complex, and one that is often beset by delays. One civil servant interviewed commented: *Even if our goal is to obtain the signature of the Minister on the letter approving the purchase plan, we need to remember that many other Ministry units and programs are simultaneously requesting or awaiting approval for the purchase of supplies.*

Depositing Funds to Cover Payment of the Purchase

Two major activities take place in this phase: (a) forwarding by PAHO to the MOH of the official letter containing the price estimate and terms of delivery, along with the names of authorized providers, and (b) the procedural steps taken by the MOH to deposit funds for the purchase as laid out in the purchase plan submitted in the preceding phase.

According to information obtained from key informants (country authorities and SF coordinating officials), this is one of the two phases in the purchase process most likely to be affected by significant delays. This study has identified several reasons for these delays.

In some countries, legislation governing purchases made with public funds limits the extent to which such purchases can be prepaid. In those cases where exceptions to this rule can be arranged, the corresponding procedure can be quite drawn out. In other countries, to obtain financing, a specific agreement must be reached with PAHO to disburse funds for an entire year, which in turn requires the involvement of additional actors, such as legal departments.

Some countries also impose restrictions on making payments in foreign currency (US dollars). Because SF regulations in effect in 2011 required that all prepayments had to be made in US dollars, some countries experienced delays and complications that were well beyond the control of national malaria programs and even beyond the control of health ministries themselves.[7]

Depositing funds in advance of receipt of goods involves difficulties in obtaining approval from the appropriate authorities, given that payments must also be made to other providers who do not require prepayment. One malaria program official made the following observation: *It is a difficult task to get authorities to prioritize authorization for payment for supplies that have not yet been received when a substantial number of other providers that have already delivered supplies are still waiting to be paid.*

As for the actors involved, to the four identified in the preceding phase—(a) malaria programs; (b) MOH technical supply units; (c) the MOH financial authority; and (d) the Minister of Health—must now be added the Ministry of Finance or Economy. The reason for this is that prepayment in foreign currency in many cases requires the approval or authorization of the ministry responsible for the country's monetary and financial policy.

As for the functions performed, the malaria program and the technical supply unit are responsible for following up on administrative processes. The other ministries or units perform a function related to approval and decision making. This situation provides evidence of another potential bottleneck. In the two preceding phases, even with the involvement of several actors, they were all directly connected in one way or another to the MOH. However, the phase involving the deposit of funds for purposes of prepayment includes a new actor, the Ministry of Finance or Economy, which typically operates with a substantial degree of autonomy and independence. Although the role of administrative follow-up falls to the malaria program and the technical supply unit, it is not difficult to see how this follow-up process can be further complicated when dealing with a ministry other than the MOH because of a lack of familiarity with its administrative procedures and timelines.

[7] According to information provided by the SF coordinator, beginning in 2012 regulations have been modified, with countries now able to request a loan from PAHO to cover prepayment of purchases of pharmaceuticals.

Approving Prices

This stage involves two primary activities: (a) transmitting the country's letter officially confirming approval of prices, and (b) forwarding the deposit confirmation document as evidence of payment.

From information gathered from key informants, it was determined that this phase involves the second-longest delays in the process of procuring medicines through the SF. This is because PAHO requests prices and specifications from SF suppliers based on purchase plans received from individual countries. The providers send PAHO their price quotes, which are valid for a specific period of time (typically from two to three months). If countries delay in sending their price approval letter and their deposit confirmation documentation, the SF will have to again contact providers to request updated product prices and specifications. Many of the individuals interviewed indicated that PAHO/SF frequently finds itself forced to contact providers a second time with modified price requests.

One of the comparative advantages of purchasing through the SF is the savings possible from economies of scale. To obtain this advantage, all purchase orders, from all countries participating in this mechanism, must be consolidated. Thus, if delays occur in some countries, the other countries are affected, and if the delays are substantial, the likely result is that fragmented or individual purchases must be made. The bottom line is that any delays in the procedure eliminate the opportunity to reap the benefits that are possible through large-scale purchases.

During the course of the analysis, four actors were identified: (a) the NMCP; (b) the MOH technical supply unit; (c) the MOH financial authority; (d) the Minister of Health. The first two perform an administrative follow-up function, whereas the latter two are responsible for approving prices and authorizing transmission of the documentation confirming the deposit of funds for payment of the purchase.

Placing the Purchase Order

In the purchase order phase, the country's MOH reviews and subsequently approves the purchase order.

Even though this phase might appear to be relatively straightforward, involving a single administrative follow-up, in practice it too is affected by delays and complications. The section of this report listing the findings regarding the purchase planning phase described how the terms and specifications prepared in conjunction with the estimate of medicines required remained unchanged in only a few cases. According to information gathered from a review of documentation and interviews with key informants, countries not uncommonly request subsequent changes in the amounts and specifications submitted during the initial purchase planning phase. Naturally, changes in medicine amounts and specifications require that modifications be made to the purchase order, which in turn leads to delays and in most cases requires a second consultation with providers based on the revised amounts and specifications.

The described modifications delay review and approval of the purchase order and have a negative effect on the actors involved and the functions they perform in this phase. For example, changes in amounts and specifications make it highly likely that the malaria program and technical supply units will need to prepare technical documentation to justify the changes made to the estimates of medicines to be purchased. In the event of a modification involving an increase in the amount of medicines to be purchased, it is very likely that the procedural steps necessary to obtain additional foreign currency resources will once again involve the ministry of finance and/or economy.

In reviewing and approving the purchase order, the Minister of Health consults with the technical supply unit and the malaria program. Accordingly, these two actors perform a dual role: submission of technical documentation in the event of changes made to the amount of medicines to be procured and participation in the authorization or approval of the purchase order.

Receipt of Commodities

Two significant activities take place in this phase: (a) forwarding of shipping documents to the country by PAHO/SF, and (b) clearing the products through customs by the MOH once the shipping documents have been received.

As is the case in the preceding phases, delays can also occur here. Based on the interviews held with the individuals involved, the following causes for delays were identified:

- Loss or misplacement of the shipping documents necessary for the commodities to clear customs.
- In some cases, the medicines ordered by the countries are not included in the national sanitary registry, as a result of which they cannot clear customs until the appropriate sanitary certificate of product registration has been obtained.
- In some countries, medicine imports are subject to taxes, as a result of which they cannot clear customs until either the appropriate taxes have been paid or a tax exemption has been obtained.

Four actors are identified in this stage: (a) NMCPs; (b) MOH technical supply units; (c) the agency responsible for regulation of sanitary registration; and (d) the national tax/customs authority.

The role played by the first two actors is to prepare and submit all technical documentation required for the commodities to clear customs, including taking all steps necessary to obtain the appropriate sanitary certificate of product registration, import permits, and/or tax exemptions for the shipment in question. The role played by the other two actors (i.e., the pharmaceutical regulatory entity and the tax/customs authority) involves deciding on and/or authorizing customs clearance for the goods shipped.

It should be noted that completion of the described procedural steps (sanitary registration and tax exemptions) can require a considerable amount of time. Accordingly, an additional bottleneck is identified in the process of purchasing medicines and supplies through the SF.

CRITICAL PERIODS IN THE PROGRAMMING AND PROCUREMENT OF MEDICINES THROUGH THE STRATEGIC FUND

Based on the analysis conducted of the SF's guidelines and timetable, as well as on the results of interviews with key informants, it was possible to identify critical periods in the process of programming and procuring medicines through the SF. These critical periods are described below.

- **Planning of requirements:** According to the established timetable for procuring commodities through the SF, planning must take place during the months of June and July.

- **Purchase order:** Assuming no delay in the process, the SF timetable establishes that the purchase order is to be reviewed and approved during October–November.

- **Availability of financial resources for purchases:** In most countries, financing for purchases is not continuously available on demand throughout the year; rather, financing is made available to health units and ministries during certain periods. From the interviews conducted, it was possible to identify the existence of two main periods: February–April and September–December. Clearly, these periods during which resources are available for making purchases influence the planning process. For example, in a scenario involving the planning of purchases through the SF in June/July, it is possible that countries may have recently replenished their inventories of certain medicines in the local market, which would in turn imply the preparation of a conservative purchase plan. Toward the month of October, which is when deposit for payment of purchases must be made, that payment must compete for access to the country's available resources with payments that need to be made to local providers who have already delivered commodities. This provides evidence that even though resources may be available during the month in which the purchase order must be approved, those resources necessarily compete with other needs.

Figure 1 diagrams the three periods described previously: (a) planning of requirements, (b) placement of purchase order, and (c) availability of resources.

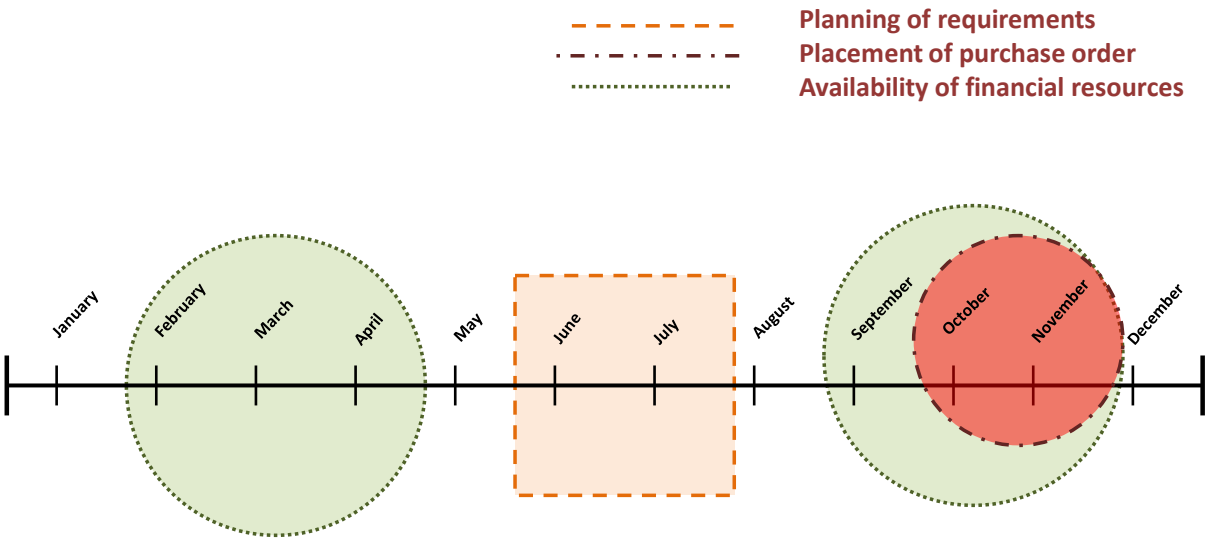


Figure 1. Critical periods during the calendar year for planning for and procuring medicines

CONCLUSIONS

The analysis presented in the preceding sections has identified bottlenecks in each of the six phases involved in the procedure for making purchases through the SF. Table 1 summarizes the bottlenecks for each phase.

Table 1. Summary of Bottlenecks Identified in Each Phase of the Procurement Process

Phases	Bottlenecks
Planning the purchase	Because of incorrect estimation of needs, the amounts of medicines to be purchased fluctuate during the purchase process. It is not uncommon for countries to request, over the course of the purchase process, adjustments to the amounts to be procured.
Estimating prices	The actors who perform technical functions differ from those who approve or authorize procedures. Even when quantification is carried out in a technically correct manner and in accordance with the SF timeframe for making purchases, administrative and financial offices do not always base their actions on the opinions of the technical office.
Depositing funds for payment of the purchase	Countries have in place different types of constraints on advancing funds for prepayment: ▪ Legislation governing purchases with public funds prohibits (or otherwise restricts) prepayment of expenses. ▪ To obtain financing, a specific agreement must be prepared authorizing the disbursement of funds for an entire year, a task requiring the involvement of additional actors, such as legal departments. ▪ Restrictions exist regarding payments to be made in foreign currency (US dollars). ▪ The transfer of funds for prepaying purchases involves a second ministry (finance/economy). MOH technical staff are frequently unaware of the procedures and timetables established by that second ministry.
Approving prices	▪ The MOH experiences delays in forwarding the letter approving prices and the deposit confirmation document. ▪ It is a common occurrence for PAHO/SF to need to consult multiple times with providers to make modifications to price requests as a result of incorrect estimations of needs.
Placing the purchase order	▪ Countries request changes to the amounts and specifications submitted in the initial phase of the purchase planning, and as a result, the purchase order must be modified. ▪ Purchase order modification creates delays and leads to the need for additional consultations with providers regarding the revised amounts and specifications.
Receipt of commodities	▪ Loss or misplacement of the shipping documents necessary for clearing customs. ▪ In some cases, country technical staff are not aware that the medicines being ordered by their country require registration with national drug regulatory agency, as a result of which medicine arrivals may not be cleared from customs until the appropriate certifications are obtained. ▪ In some countries, medicine imports are subject to taxes. The procedural steps required to obtain the necessary resources to pay these taxes, or to obtain an exemption from payment, can delay the customs clearing process.

It has also been determined that each of the stages involves different actors not directly involved with malaria programs or technical supply units. In some phases, the additional actors continue to carry out their functions as staff or units operating within the MOH. However, other phases involve other ministries that are independent from the MOH. This situation further complicates the key activities that need to be carried out in each of these phases.

The analysis also determined that completion of the various phases and activities that make up the SF purchasing process involves three types of roles. In addition to the technical documentation role, which is the most obvious, decision making or authorization of documents and processes, and administrative follow-up are necessary to obtain the appropriate approvals of processes and signatures on documents. Table 2 summarizes the actors and roles involved in each phase.

Table 2. Summary of the Actors Involved and Their Roles in the Various Phases of the Procurement Process

Phases	Actors						
	NMCP	MOH technical supply unit	MOH financial authority	Minister of Health	Official in the Ministry of Finance/ Economy	Agency regulating sanitary registration	Tax/customs authority
Planning the purchase	✣	✣					
Estimating prices	#	#	*	*			
Depositing funds for payment of the purchase	#	#	*	*	*		
Approving prices	#	#	*	*			
Placing the purchase order	*	*	*	*	*		
Receipt of commodities	✣	✣				*	*

Key:
✣ Technical documentation
\# Follow-up on administrative procedures
* Decision making/authorization

Also analyzed were key periods involving planning of medicine requirements, placement of purchase orders, and the flow of financial resources. The information analyzed identified the likelihood of a mismatch between the key dates established by the SF for making consolidated purchases and the dates by which countries have compiled all of the requisite information to

enable them to conduct a medicine planning exercise and have available the cash flow required to pay the costs involved.

Finally, it is important to bear in mind that this bottleneck analysis was aimed at mapping the overall current situation and identifying activities, actors, and key roles. Now that the overall mapping has been carried out, a detailed exercise should be conducted in each country aimed at determining if additional activities, actors, and roles exist that are specific to the context of each country—for example, regulations governing purchasing processes that aggravate existing bottlenecks or create new ones; additional actors involved in the purchase process, such as decentralized governments; or some other role in addition to the three identified during the course of the current exercise.

RECOMMENDATIONS

The purpose of a bottleneck exercise is to identify strategies for overcoming the bottlenecks identified. From the current exercise, it is possible to identify a number of strategies, which are described below.

- **Institutionalize the option of providing countries with loans with which to make purchases:** In those cases in which the difficulties relate to anticipatory payments for medicine purchases that stem from a country's public procurement regulations, no changes should be expected over the short term. Accordingly, it is recommended that PAHO institutionalize the option of providing a temporary loan to a country to facilitate purchases. This particular mechanism offers considerably greater feasibility than does the prospect of waiting until reforms are made to the laws governing public purchases in the countries of the region.

- **Strengthen the administrative follow-up role:** From the information gathered, it is evident that the role involving administrative follow-up on procedures and approvals is not regarded as having the same importance as the role involving preparation of technical documentation. It would not be illogical to feel that the delays occurring during the various phases might also be influenced by the absence of actors responsible for effectively performing the administrative follow-up function. Accordingly, it is suggested that (a) activities related to administrative follow-up be added to the job description of current officials or that (b) a profile be developed for a new staff position that would be responsible for administrative follow-up on processes involving purchases. Even more important, countries should develop process flows specific to their own context (laws governing purchases, MOH organization, etc.) that identify actors, tasks, and timeframes. These flows would make it possible to anticipate potential difficulties that could delay the process of procuring medicines through the SF mechanism.

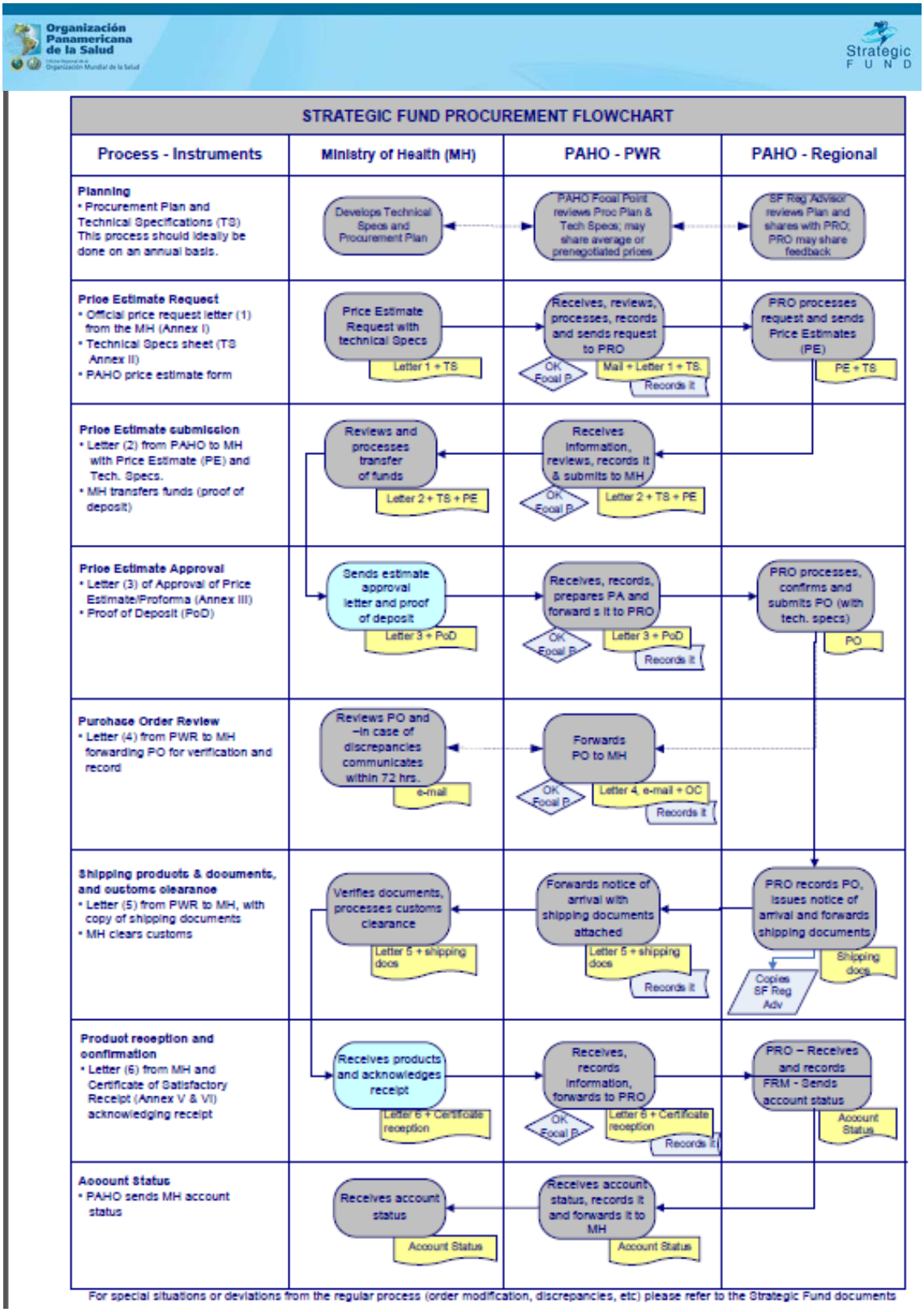
- **Strengthen drug procurement methodologies and criteria:** As described in the findings section, several of the bottlenecks involve the constant changes made to procurement plans during the procurement process. Several of the individuals interviewed were of the opinion that, in most cases, the changes in purchase plans are the result of poor estimating of requirements. The ongoing strengthening of the capabilities of units to prepare reliable estimates will lead to reductions in, or to the total elimination of, the effects caused by this type of bottleneck. In addition, the procurement plan, when prepared following SF guidelines, should include information on the funds to be used for the purchase. This would require that the responsible individuals identify in advance the sources of financing, including whether or not the country will request a loan from PAHO to make the purchase (which in turn would involve procedural steps of an administrative nature related to the loan request).

- **Support country technical units in preparing technical data sheets for antimalarials:** These data sheets constitute one of the basic elements of medicine procurement, given

that they contain the technical specifications of the medicines, any regulatory requirements governing their purchase, and any requirements that need to be met for quality assurance purposes. If the technical data sheets are prepared properly and filled out completely, it will make it possible to identify ahead of time any potential bottlenecks and subsequently take corrective actions.

- **Anticipate customs clearing requirements:** From the time that the procurement plan and the technical data sheets are prepared, it should be well known which medicines included in the purchase plan require registration with, or certification by, the national drug regulatory authority and whether any specific regulation exists that dictates the conditions under which the country will accept medicines in the absence of a sanitary certificate of product registration, as well as the tax- and customs-related procedural steps that need to be taken. Actions to satisfy these requirements should be taken simultaneously with the other activities forming a part of the subsequent phases involved in making purchases through the SF.

ANNEX: STRATEGIC FUND PROCUREMENT FLOWCHART



Source: PAHO website, Strategic Fund.