

DOCUMENTO DE DISCUSIÓN

DD/08/10

“The route of expenditures and decision making in the Health Sector in Peru”

Betty Alvarado
Eduardo Morón



UNIVERSIDAD DEL PACÍFICO
CENTRO DE INVESTIGACIÓN

DOCUMENTO DE DISCUSIÓN

DD/08/10

© 2008 Centro de Investigación de la Universidad del Pacífico

DD/08/10

Documento de Discusión

“The route of expenditures and decision making in the Health Sector in Peru”

Elaborado por Betty Alvarado y Eduardo Morón

Septiembre 2008

Resumen

The Public Health Sector in Peru primarily serves the poor. Its performance, as measured by health status outcomes, has been positive in some areas such as immunization coverage, reduction of infant mortality, and increases in institutional baby deliveries. However, there are still problems that need to be addressed such as maternal mortality and cross-sectoral issues such as full equity and risk protection. But from a budgetary perspective, there is no clear correlation between the amount of money allocated and health outcomes. This is explained by the fact that there is no established causality between inputs and results and that the processes in expending public monies are cumbersome, not transparent, inefficient, and full of loopholes that have created perverse incentives.

The main objective of the study was to gain a clear understanding of the logic and sequence of budget flows and to discover bottlenecks throughout the process that can impede the adequate use of limited resources. In addition, the study reviews the relationship between flows and expenditures, on the one hand, and the flows and decision-making process on the other hand. In as much as possible, the study follows Public Expenditure Tracking Survey (PETS) Methodology and applies it to one health cluster in Metropolitan Lima.

The study was exploratory but results were promising and the implementation of a survey gave us enough information to firmly state that “it is not only a question of how much money the sector is assigned, but also of how and when the resources reach the frontline providers”. The analysis of frontline providers and intermediate-level agencies in this study identified institutional bottlenecks and possible perverse incentives that reduce positive budget incidence. Constraints and perverse incentives are present in the salary structure, the use of fee collection and petty cash management, procurement rules, and elsewhere. The current context in Peru, where a Results-Based Budget is being piloted, provides an opportunity to incorporate adjustments in the management processes.

Key words: Health sector, Peru, decision making

E-mail de los autores: alvarado_bm@up.edu.pe, moron_ea@up.edu.pe

*Las opiniones expresadas en los Documentos de Discusión son de exclusiva responsabilidad de los autores y no expresan necesariamente aquellas del Centro de Investigación de la Universidad del Pacífico. Los Documentos de Discusión difunden los resultados preliminares de las investigaciones de los autores con el propósito de recoger comentarios y generar debate en la comunidad académica.



UNIVERSIDAD DEL PACÍFICO
CENTRO DE INVESTIGACIÓN

I was chatting with a very well-known health professional and beginning to explain our research on the health sector budget and its focus on a national program. The professional immediately interrupted and commented: "they [the program] do not have budget problems — they have money from donors." Then I realized that most of us have an inadequate understanding of budgetary issues and we tend to reduce the scope of the problem to the amount of money we can get from donors or the Ministry of Economy.

It is not only a question of how much money the sector is assigned, but also of how and when the resources reach to the frontline providers.

Content

THE ROUTE OF EXPENDITURES AND DECISION MAKING IN THE HEALTH SECTOR IN PERU	¡Error! Marcador no definido.
GLOSSARY	3
ABSTRACT	5
A. INTRODUCTION	7
B. OVERVIEW	8
C. METHODOLOGY	10
1. Objective	10
2. Process of applying PETS in this study	12
D. MACRO VIEW OF THE BUDGET PROCESS	15
1. Organization	15
2. Budget cycle	15
3. Health Financing in Peru	17
4. Budget flows	18
E. MAIN FINDINGS	24
1. Benefit Incidence of Financing	24
2. Human Resources and Salaries	27
3. Goods and Services	36
4. Influence of SIS management	41
5. Management, Petty Cash and Insurance Reimbursement	43
F. CONCLUSIONS AND RECOMMENDATIONS	56
REFERENCES	59
ANNEXES	61
Annex 1 - Interviewees	61
Annex 2 - Characteristics of Health Directorate II South Lima (DSL)	62
Annex 3 - Geographical distribution of health facilities in the Barranco-Chorrillos-Surco Network	64
Annex 4 - Characteristics of a C I-3 Health Facility	65
Annex 5 - Focus of Health Strategies	66
Annex 8 - Health Directorates (DISA) EU that did not plan for anti tuberculosis drugs, 2007	72
Annex 9 - Facilities Survey Template	73
Annex 10 – Health Network Survey Template	91

GLOSSARY

BU	Budget Units (<i>Unidades Ejecutoras</i>)
CLAS	Local Health Administration Committee (<i>Comité Local de Administración de la Salud</i>)
CONSUCODE	Superior Council for State Procurement and Contracting (<i>Consejo Superior de Contrataciones y Adquisiciones del Estado</i>)
DEMID	Executive Directorate of Pharmaceuticals, Supplies, and Drugs (<i>Dirección Ejecutiva de Medicamentos, Insumos y Drogas</i>)
DGSP	General Directorate of Personal Health (<i>Dirección General de Salud de las Personas</i>)
DIGEMID	General Directorate of Pharmaceuticals, Supplies, and Drugs (<i>Dirección General de Medicamentos, Insumos y Drogas</i>)
DIRESA	Regional Health Directorate (<i>Dirección Regional de Salud</i>)
DISA	Health Directorate (<i>Dirección de Salud</i>)
DNPP	National Directorate of the Public Budget (<i>Dirección Nacional del Presupuesto Público</i>)
ENAHO	Nacional Household Survey (<i>Encuesta Nacional de Hogares</i>)
ESSalud	Social Security (<i>Seguridad Social</i>)
FFAA	Army (<i>Fuerzas Armadas</i>)
HN	Health Network (<i>Red de Salud</i>)
IDREH	Human Resources Development Institute of the Ministry of Health (<i>Instituto de Desarrollo de Recursos Humanos del Ministerio de Salud</i>)
MEF	Ministry of Economy and Finance (<i>Ministerio de Economía y Finanzas</i>)
MINSA	Ministry of Health (<i>Ministerio de Salud</i>)
MML	Metropolitan Lima
PAAG	Program for the Administration of Management Agreements (<i>Programa de Administración de Acuerdos de Gestión</i>)
PECOSA	Proof of Departure Document (<i>Pedido de Comprobante de Salida</i>)
RBB	Results-Based Budget (<i>Presupuesto por Resultados</i>)

SEACE	Electronic System for State Procurement and Contracting (<i>Sistema Electrónico de Adquisiciones y Contrataciones del Estado</i>)
SERUM	Rural and Urban Marginal Health Service (<i>Servicio Rural y Urbano Marginal de Salud</i>)
SIAF	Integrated System for Financial Information (<i>Sistema Integrado de Administración Financiera</i>)
SIS	Integral Health Insurance (<i>Seguro Integral de Salud</i>)
SISMED	Integrated System of Pharmaceutical Provisions and Supplies (<i>Sistema Integrado de Suministros e Insumos Médico-Quirúrgicos</i>)
UIT	Tax Unit (<i>Unidad Impositiva Tributaria</i>)

ABSTRACT

The Public Health Sector in Peru primarily serves the poor. Its performance, as measured by health status outcomes, has been positive in some areas such as immunization coverage, reduction of infant mortality, and increases in institutional baby deliveries. However, there are still problems that need to be addressed such as maternal mortality and cross-sectoral issues such as full equity and risk protection. But from a budgetary perspective, there is no clear correlation between the amount of money allocated and health outcomes. This is explained by the fact that there is no established causality between inputs and results and that the processes in expending public monies are cumbersome, not transparent, inefficient, and full of loopholes that have created perverse incentives.

The main objective of the study was to gain a clear understanding of the logic and sequence of budget flows and to discover bottlenecks throughout the process that can impede the adequate use of limited resources. In addition, the study reviews the relationship between flows and expenditures, on the one hand, and the flows and decision-making process on the other hand. In as much as possible, the study follows Public Expenditure Tracking Survey (PETS) Methodology and applies it to one health cluster in Metropolitan Lima.

The study was exploratory but results were promising and the implementation of a survey gave us enough information to firmly state that “it is not only a question of how much money the sector is assigned, but also of how and when the resources reach the frontline providers”. The analysis of frontline providers and intermediate-level agencies in this study identified institutional bottlenecks and possible perverse incentives that reduce positive budget incidence. Constraints and perverse incentives are present in the salary structure, the use of fee collection and petty cash management, procurement rules, and elsewhere. The current context in Peru, where a Results-Based Budget is being piloted, provides an opportunity to incorporate adjustments in the management processes.

ACKNOWLEDGEMENTS

This study was promoted and financed by the Transparency and Accountability Project (TAP) of the Brookings Institution and by the Results for Development Institute in Washington D.C. The research was carried out by the Research Center of the Universidad del Pacífico (CIUP) in Lima, Peru. The Principal Researchers were Betty M. Alvarado and Eduardo Morón P. They had the very effective support of Janet Porras, Omar Narrea and María Pía Basurto. The surveys were effectively supported by students of the Universidad del Pacífico.

The authors would like to thank Charles Griffin and David De Ferranti for providing the opportunity to carry out this type of applied research at an independent monitoring institution such as CIUP. We are also owe thanks to dozens of academics and advocacy groups worldwide. Very special recognition goes to our peer reviewers, Anna Sant'Anna and Courtney Tolmie, and the monitoring team of Ray Struyk, Chayanere Bun, and Graeme Ramshaw from TAP.

In addition, we are grateful for the guidance and excellent comments received from health specialists Doris Lituma and John Longa to our survey questionnaires and to the budget flows. This study was also improved as a result of our face-to-face interaction in workshops and subsequent communications with researchers from other 11 countries, who, on very short notice, shared their findings: Zef Preci, Fatmir Memaj (Albania), Florencia Mezzadra, Laura Malajovich (Argentina), George Ofosu, Joseph Asunka (Ghana), Jorge Lavarreda Gargollo, Mario Cuevas Méndez (Guatemala), S. Sadanand, K. V. Vadiraj (India), Chitra Retna, Dini Mentari (Indonesia), Lineth Oyugi, Andrew Riechi, Thomas Muthama, Justus Mwanje (Kenya), Igor Munteanu, Angela Munteanu (Moldova), Cynthia Brizuela, Jorge Duarte (Paraguay), Wojciech Misiag, Marcin Tomalak (Poland), Sorin Ionita, Ciprian Fartusnic (Romania). Alice Krupit from TAP provided splendid logistical coordination to keep all of us satisfied with the various processes of our sponsors.

We are grateful to the Minister of Health, Hernan Garrido Lecca, and his professional team in the Ministry's Budget Office, whose support allowed us to complete our survey of frontline providers. Last, but not least, we would like to recognize the cooperation of all the doctors, and health professionals and technicians from all the facilities and network surveyed in Lima; their spirit of openness is greatly appreciated and is what actually allowed us to carry out such challenging research.

A. INTRODUCTION

This report summarizes the findings of research carried out in Peru employing Public Expenditure Tracking Survey (PETS) methodology as much as possible. The study focuses on the Health Sector in Metropolitan Lima and was carried out from March to June 2008. The main objective of the study was to clearly understand the logic and sequence of budget flows and to discover bottlenecks in the process that may be limiting the appropriate use of limited resources. By applying this methodology, it was also possible to review the relationship between flows and expenditures and the decision-making process.

As has been noted, “primary expenditure concern that often is not systematically understood or followed by government expenditure systems is how much money actually gets to service delivery outlets, how well the service outlets function, and what can be done to improve the prevailing situation”(sic) (RFP 2007). In the case of Peru, from a budgetary perspective, there is no positive correlation between the amount of money allocated and some health outcomes. This is explained by the fact that there is no established causality between inputs and results and that the processes involved in spending public monies are cumbersome, not transparent, sometimes inefficient, and full of loopholes that have created perverse incentives in the system.

The character of this study is exploratory due to the reduced timeframe for its implementation. However the results are very promising in the sense that the methodology permitted identification of institutional bottlenecks and possible perverse incentives for frontline providers that reduce positive budget incidence. As a complementary product, two *ad hoc* surveys for future PETS studies were tested: one for health clinics and the other for Health Networks. This study was independently proposed to the public sector and conducted by the Research Center of the Universidad del Pacifico. The results are based on observations and information collected by an independent monitoring institution. The application of the study tested transparency in the sector and followed the documentary process to get final clearance at the level of health facilities. It is not easy for agents external to the sector to collect public information inside facilities unless the objectives, methodology, and instruments have been approved at all levels.

This report is organized into five sections. The first and second sections present an overview and the methodology. The third section discusses the fiscal context of the application of the study and the fourth section outlines the main findings related to constraints and incentives in the system. Finally, section five presents conclusions and recommendations.

B. OVERVIEW

Budgets represent policy makers' commitment to a set of goods and services in terms of coverage and quality as well as other standards. When a budget fails to deliver these, this can be due to many factors such as ineffective processes, leakages, or other constraints. The following section presents some issues that clarify how these failures can occur.

Public Expenditure Tracking Surveys (PETS) in Perspective

Some studies such as Musgrove 1996, Filmer and Pritchett 1999, and Filmer et al. 2000 found that analysis of public expenditures does not tell us anything about outcomes for the population served. These studies demonstrated that even when the amount of money spent in each sector increased, the results did not improve. Therefore, the researchers concluded that increases in levels of public expenditure are not a significant variable.

There are several reasons why the expenditure in a public policy initiative may not have the expected impact:

1. Expenditures are made on goods that would otherwise be purchased by households. Therefore, the policy deviates into crowding out private spending.
2. The wrong beneficiaries are identified.
3. Money does not reach the service provider.
4. There is a lack of monetary and non-monetary incentives for service providers to offer quality services. Moreover they are underpaid and not supervised.
5. People are uninformed about the services and do not use them.

In response to the claim that there is no role for public policy, and considering points 3 and 4 above, Public Expenditure Tracking Survey (PETS) methodology points out that analyzing the impact of a budgetary transfer of money at its source is insufficient to ascertain whether service providers will receive the amount of money budgeted for them (some may receive less or the monies may have been diluted). Therefore, looking for results on the basis of the complete transfer may not be accurate. PETS methodology was first applied in Uganda in 1996 in a study of the educational and health sectors in order to understand the reasons for the fact that, despite an important increase in expenditures in both sectors, there was stagnation or even a decline in outcomes. In this case and others, PETS attempts to identify possible leakages in the flow of a service provision that diminish the benefits of a particular service: "PETS examines flows of funds and materials from a central government to local service providers, via regional and local governments, in order to identify resource use and leakages" (Gauthier 2006).

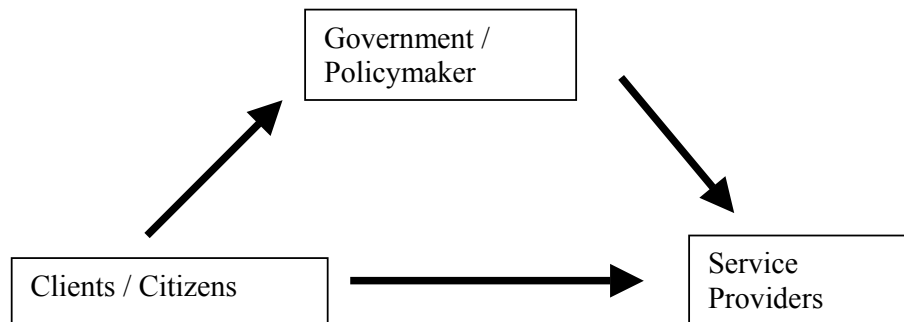
There are some levels or transactions that typically present leakages:

1. *Rule-based versus discretionary expenditures*: ruled-based expenditures suffer less from leakages in comparison to autonomous fundraising processes, the latter is associated with more bargaining power.
2. *Wage versus non-wage expenditures*: wage expenditures are normally paid for directly by the central government so leakage is not an issue. On the other hand, bureaucrats and politicians can take advantage of non-wage expenditures since they have more information than others.

3. *Levels of government*: the probability of leakage is higher whenever a flow passes through several levels of government. Nonetheless, depending on country-specific organizational structures, there may be some levels of government in which leakage is more pronounced.
4. *In-kind versus cash transfers*: leakage is more pronounced in in-kind transfers than in cash transfers since recipients usually do not know the value of the in-kind transfer they are receiving.

All these possible leakages are the result of the moral hazard problem that exists due to information asymmetry and the existence of different goals on the part of the principal (client/citizen) and the agent (service provider) as well as the diminished power that clients have in terms of regulating government management of their taxes. The Accountability Triangle Paradigm, also developed by the World Bank summarizes the relationships between agents.¹ The directions of the arrows symbolize the principal-agents relations. On the right (contract) side, service providers are accountable to the policy maker; the base of the triangle (client power) depicts the relation between service providers as agents who are accountable to clients; and finally the third side known as citizens' voice represents citizens overseeing the performance of public sector who is accountable to voters. It is in the last relationship that the use of PETS strengthens citizens' watchdog role. (Figure 1).

Figure 1. Accountability Triangle



PETS has three main goals: (i) analysis, (ii) diagnosis, and (iii) impact evaluation. PETS is a tool that can highlight not only problems in the provision of a service but also the causes of these problems. It can also be integrated into impact evaluations since it provides more information about the process of a service. All this leads to increased information about social sector spending associated to outcomes.

Accumulated experience with PETS worldwide falls into three categories: studies dealing with a high degree of accounting and numbers for triangulation of money transferred between agents, looking more deeply into leakages; a second group of studies that emphasizes institutional rules and loopholes, and a third group of studies, which has a research profile (Savedoff, 2008). The character of the present study, as judged by its researchers, falls between the second and third group.

¹ See Cotlear (2006) to follow up the paradigm of accountability in social sectors.

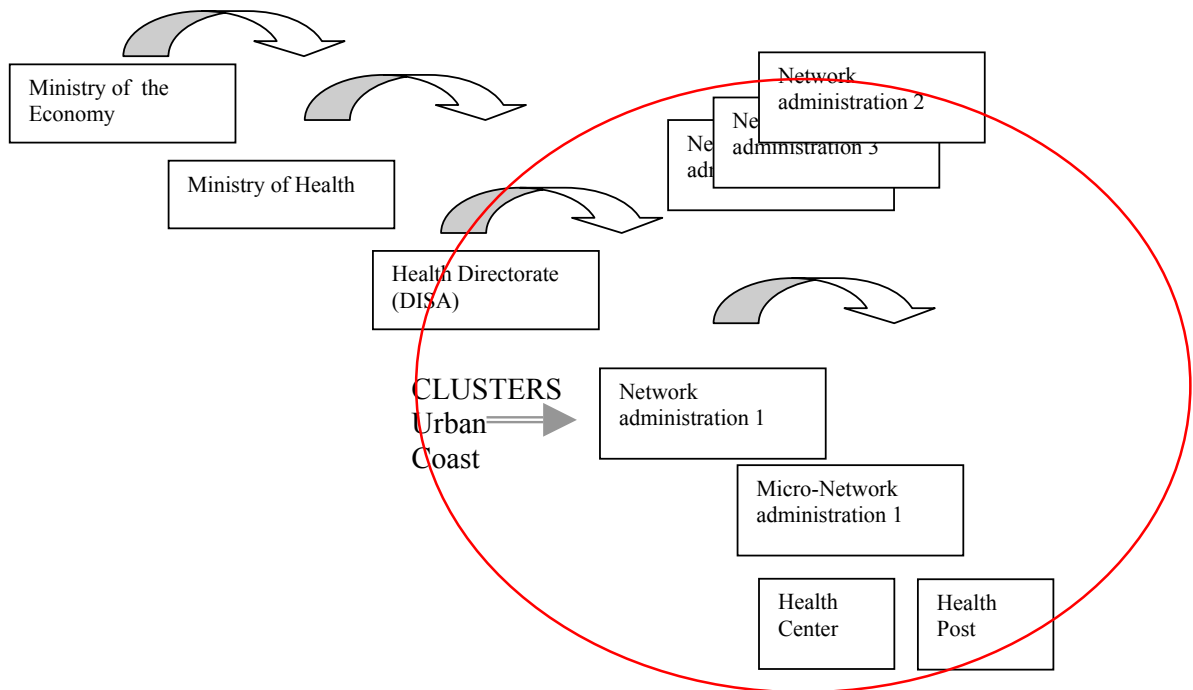
C. METHODOLOGY

1. Objective

This research follows Public Expenditure Tracking Survey (PETS) methodology in as much as possible and applies it to the health sector in Peru.

The main objective of the study is to clearly understand the logic and sequence of budget flows and to discover bottlenecks and possible leakages throughout the process that may be limiting the adequate use of limited resources. As a result of applying this methodology, this study was also able to review the relationship between flows and expenditures and the decision-making process. The results of this study reinforce the findings of a previous research study on the limitations to the full implementation of a Results-Based Budget (Alvarado et al. 2008). For the case of Peru, this study analyzes budget flows from the Ministry of Economy to the Ministry of Health and intermediate level agencies and then to frontline providers (Figure 2).

Figure 2. Application of PETS methodology to the Health Sector in Peru



The character of this study is exploratory due to the reduced timeframe. However, the results are very promising in the sense that the methodology permitted the identification of institutional bottlenecks and possible perverse incentives among frontline providers that reduce positive budget incidence.

Three factors that shaped the methodology employed should be noted:

- Sample. The units of analysis are homogeneous types of facilities. The sample consists of urban Health Centers and Health Posts (identified throughout the document as facilities or health facilities) in the metropolitan area of the Peruvian capital. Results could be extrapolated to the rest of the centralized Health Networks located in Lima.
- The study analyzes various aspects of the management of healthcare delivery and provides an in-depth analysis of the delivery process of two public health programs: Vaccination and Tuberculosis Prevention and Control.
- Variables of analysis. The process is analyzed according to timeliness, transparency, incentives, volatility, and its relationship to authority and decision-making. The requisite information was collected in health facilities and Health Networks through the administration of a survey and in interviews.

Sources of data

This study uses quantitative and qualitative data. The main sources of the quantitative data are: official public budget data published on the Internet, surveys administered in health facilities, and other administrative data from agencies:

- The Integrated Financial Management System (SIAF) database created by the Ministry of Economy and Finance (MEF).
- The Electronic Government Procurement and Contracting System (SEACE) reports managed by the Superior Council for State Procurement and Contracting (CONSUCODE).
- Administrative data and legal documents from the Ministry of Health.
- Administrative data from one Health Directorate.
- Administrative data from one Health Network.
- Tabulated data from the survey administered by CIUP in health facilities and health network.

Focus on Vaccinations and Tuberculosis Prevention and Control programs

The Health Sector has many services, products, and type of beneficiaries. There are some common problems and others issues related to the management of specific services. To understand such specific cases, the study focused on the National Strategies for Vaccination and the Tuberculosis Prevention and Control. To this end, a specific track (follow-up) was done regarding inputs and petty cash for these two programs. These two programs were selected on the basis of information obtained during interviews with health sector personnel.

- The Vaccination National Strategy has been identified as a “program with problems.” by the interviewed professionals. Its beneficiaries are primarily children and the Peruvian government has identified this target population group as its main priority for all public policies (health, education, and nutrition). The purpose of focusing on this program was to determine if it was administered in accordance with established national policies or if the final providers experienced any constraint.

- The National Strategy for Tuberculosis Prevention and Control received donations from the Global Fund of Fight AIDS, Tuberculosis and Malaria which augmented its budget. Tuberculosis is a disease that primarily affects the urban poor. The program has had positive outcomes but has also received criticism because there has been a rise in multidrug resistant tuberculosis in Peru. This study sought out factors limiting the budget flow of funds earmarked for this program.

Detailed information on these programs can be found in Annex 5.

2. Process of applying PETS in this study

The designed process had three steps. It is important to keep in mind that even though PETS uses secondary data, its main input is primary data from surveys. These surveys cannot be designed in exactly the same way in each country due to multiple factors including: each survey must be tailored to the objective of the study and surveys must be designed keeping in mind that each health system is organized differently and has a greater or lesser number of agents, levels, and budget units. Consequently, the researchers decided to start by getting better acquainted with the functioning of the system and carried out interviews in order to be able to construct flows. The survey was then designed in accordance with the information collected.

a. From interviews to budget flows

It was crucial to understand the flows before constructing the surveys (questions and structure). However, a curious circular loop developed in this research: authorities and professionals wanted to see the survey before committing to interviews while the research team needed to carry out the interviews in order to design the survey.

PETS can not be applied in a mechanical manner. Instruments have to be adjusted according to each country, taking into consideration the country's context and the organization and size of its health system. In addition, the specific objective of the study is also important. In this case, the study is specifically focused on institutional constraints and bottlenecks and therefore a good grasp and knowledge of flows was necessary.

Taking these factors into consideration, three actions were carried out: (i) administration of open interviews of key informants and specialists in budgetary issues; (ii) analysis of the legal framework to understand standard institutional processes; (iii) a review of the Peruvian government's Integrated Financial Management System (SIAF) on the internet.

As a result, three models of main budgets flows were constructed: cash or monetary flow, in-kind flows (mainly pharmaceuticals), and salary-related flows. An additional flow of information was added to fully understand the SIS process. More arrows symbolizing the transfer of information can be done to evaluate the monitoring system; in this case we only included the ones related to SIS. The construction of flows required the identification of agencies and actors that intervene in the process from central agencies to frontline providers. Some "hot points" were selected from each flow for further analysis on the basis of information obtained from the initial interviews. These hot points (that revealed some bottlenecks), together with the identified variables, were included in the survey.

b. Budget records analysis

Budget records obtained on the internet (SIAF) were also analyzed to crosscheck information gathered from the interviews. For this purpose, the team identified the accounts of the Regional Directorate and the Health Network selected as part of our sample cluster. All expenditures were identified: human resources, goods and services, and investment.

c. Survey design, validation, and administration

The survey was designed taking into consideration: the objective of the study, analysis variables, the Peruvian Health System's characteristics and budget flows. The variables were: timeliness, transparency, incentives, volatility, autonomy of the frontline providers.

The survey was administered to health facility and Health Network staff who are in charge of stock management, pharmacies, laboratories, cashier services, petty cash, insurance claims, human resources and service provision related to vaccinations and tuberculosis. Two types of surveys were developed, one for the health facilities and one for the Health Network (see annexes 9 and 10).²

In the case of the health facilities, depending on the level of openness of the interviewee organizational issues, and availability of personnel (free time to answer the questionnaire), the administration of the survey lasted two complete workdays (9 am to 2 pm) on average. In some cases, the interviewers had to return three or four times to complete the information or had to make follow-up calls.

Main areas covered by the survey include:

1. Characteristics of the facility and the Head Doctor
2. Number and type personnel and contracts
3. Goods, stocks, timelines
4. Equipment, procurement
5. Pharmaceuticals, stocks, procurement
6. Monitoring and supervision
7. Public Health Insurance, claims
8. Vaccination services, inputs
9. Tuberculosis control, inputs
10. Management of fees and petty cash

d. Sampling

The universe is made up of five Health Directorates (DISAS) in the city of Metropolitan Lima (MML). The universe corresponds to a centralized model, where the funds are transferred from the Ministry of Economy to the Ministry of Health, from the Ministry to

² It is interesting to note that the process of getting clearance to apply PETS methodology by an external entity from civil society took almost three months, in the best of the cases, to get clearance from the Ministry, Health Directorate, Health network, Health Micro network. Health facilities courteously accepted to be surveyed once the clearance was obtained through formal channels.

the Health Directorates, from the Directorates to the Health Networks and, finally, from the Networks to the frontline providers.

MML has a population of approximately 8 million and is Peru's biggest urban center. There are four Directorates:

Health Directorate I Callao
Health Directorate II South Lima (DSL)S)
Health Directorate IV East Lima (DISA IV LE)
Health Directorate V Central or City Lima (DISA V LC)

Each Health Directorate (DISA) has several Health Networks. For our purposes, each network is a cluster.

A larger sample would have permitted the extrapolation of results to a bigger universe, but due to time constraints, the study focused on one cluster: the Barranco-Chorrillos-Surco Network of the South Lima Directorate. Health facilities from this network were selected from the primary healthcare facilities. In order to reduce the provider's diversity, the target population was a group of Health Centers with similar characteristics. Some Health Posts with the same dimensions as a Health Center were also included. Altogether, all Health Centers classified as level C I-3, C I-4 were surveyed—a total of 14 facilities—with more than 100 staff members surveyed with an average of 8 professionals and technicians per facility. The geographical distribution of the facilities is shown on Map 1. See Annex 2 for detailed characteristics of the South Lima Directorate.

D. MACRO VIEW OF THE BUDGET PROCESS

1. Organization

Peru's Budget is organized into Budget Units or *Pliegos* (BU) and Expenditure Units or *Unidades Ejecutoras* (EU). Normally line ministries and special independent institutions are Budget Units. In the Health Sector, the Budget Units are the Ministry of Health and the public insurer "Integral Health Insurance" (SIS). Under most of the Budget Units – in this case the Ministry of Health – there are Expenditure Units. Even though the insurer SIS is a Budget Unit and has relative independence in managing its budget, the head of SIS is appointed by the Ministry of Health and depends entirely on the sector's policies.

The Health Directorates (DISA)³ and the Health Networks (HN) in Metropolitan Lima and Callao⁴ are Expenditure Units and are the level that is authorized to spend and manage a budget, which includes the ability to hire and contract human resources. Health Networks depend functionally on the Health Directorates. Health facilities are not EU—they are only authorized to spend very small amounts through petty cash for emergencies and unbudgeted small items.

Main sources of financing are ordinary resources (from national taxes) and own source revenues (which include fee collection from non-insured patients and SIS reimbursements). The Ministry of Economy and Finance (MEF) prepares its budgets taking into consideration not only ordinary sources (*recursos ordinarios*) but also fee collection earnings (*recursos directamente recaudados*) from non-insured patients based on historical records.

There is also another type of financing source that consists of budgetary grants and transfers (*donaciones y transferencias*) from international technical cooperation that is primarily used for training and operational travel costs for the staff of Health Directorates, Health Networks or facilities.⁵ In addition, some offices of the Ministry of Health send cash and goods directly to the Health Directorates.

SIS reimbursement receives special treatment. First, it is classified as ordinary resources when it goes from the MEF to SIS and then is classified as own collected resources in the Health Networks when it is sent from SIS as a reimbursement.

2. Budget cycle

Traditionally, the budget in Peru has been rigid. Currently, only 5 percent of the budget is being piloted to introduce a Results-Based Budget in five strategic programs, mostly related to the social sector.

Public resources are governed according to the General Law of the National Budget System (Law No. 28411) and the laws of the Public Sector Budget each fiscal year. These laws cover the three levels of government (central, regional, and local) as well as the Business Treatment

³ Called Regional Health Directorates (DIRESA) outside of Lima.

⁴ Metropolitan Lima and Callao include 42 districts in the Province of Lima and 6 districts in Province of Callao. Together these provinces form one continuous urban area.

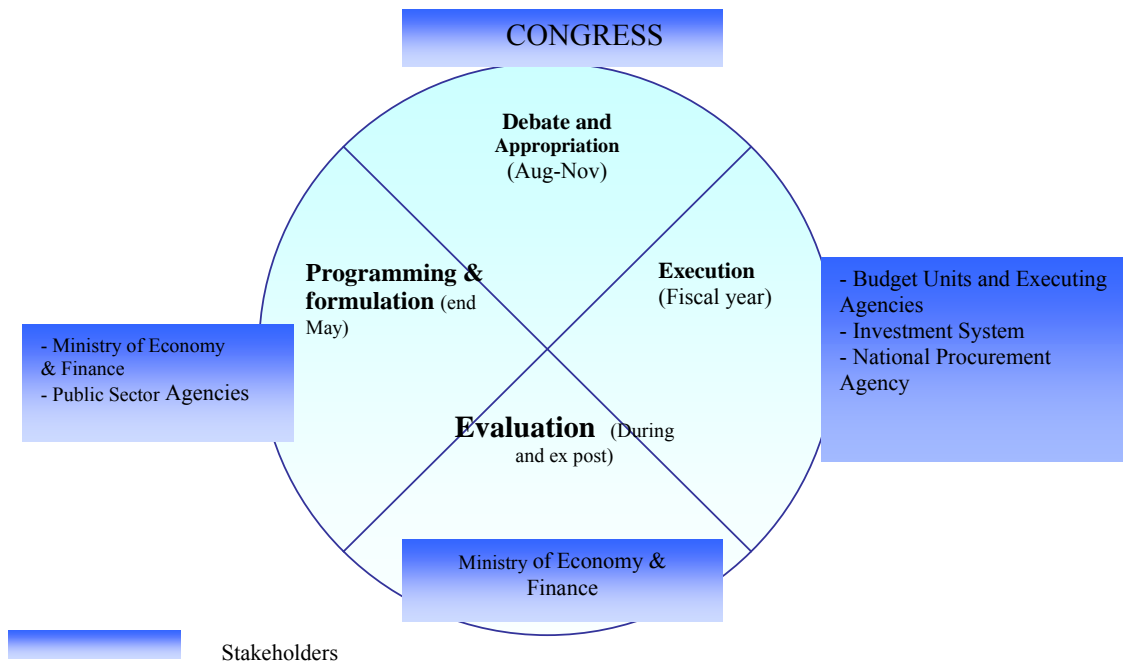
⁵ Altobelli, Laura C., Ana U. Sovero and Ricardo Diaz R. (2004). Cost-efficiency study of CLAS associations. Altobelli, Laura C., Ana U. Sovero and Ricardo Diaz R. Future Generations - Peru.

Entities-ESDP (*Entidades de Tratamiento Empresarial - ETE*) and determine budget appropriations for each budget statement (*pliego presupuestario*).

In the budget system, the National Directorate of the Public Budget (DNPP) in the Ministry of Economy and Finance (MEF), is responsible for scheduling, directing, coordinating, and evaluating the management of the budget process. In order to do this, the DNPP summarizes the requirements of public entities and structures the proposal for THE ANNUAL Budget Law.

There are four basic steps in the budget process (Figure 3): programming and formulation; debate and appropriation; execution; and, finally, evaluation. Due to the great number of fixed expenditures, the process has been converted into a rigid and bureaucratic exercise.⁶

Figure 3. The budget cycle and stakeholders in Peru



Source: Alvarado et al. (2008)

During the programming phase, maximum amounts of expenditures are approved for each agency. Theoretically, each agency tries to cover all the expected results with the allowed financing. However, budget items related to salaries and fringe benefits and pensions make most of the budget. So every year, the same structure is more or less set, depending on previous commitments.

This budget prepared by the Ministry of Economy is sent to the Congress whose members discuss and approve it and appropriate the funds by passing the Budget Law.

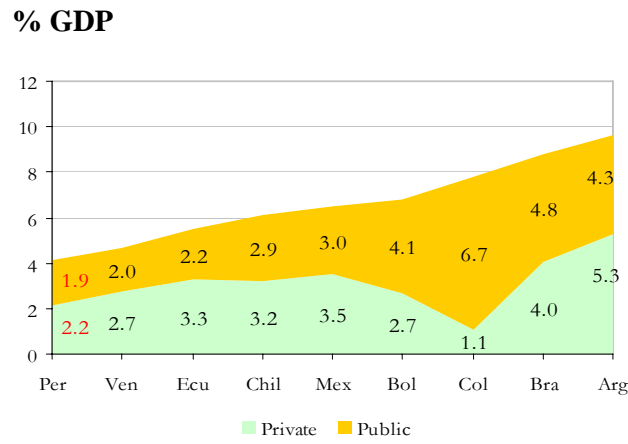
Finally, during the evaluation phase, actual expenses are compared with the approved budget. Since there is an incentive “to spend,” agencies just execute without taking into consideration products, results or impact.

⁶ More information can be found in Alvarado et al. 2008.

3. Health Financing in Peru

Peru has the lowest level of health expenditures as a percentage of GDP in Latin America. In 2004 (most recent comparable international data), Peru only spent 4 percent of GDP⁷ on health and only half of this was public money. In a context of informality, with low ratios of insurance by the social security system⁸ and a growing public insurer (SIS), the high level of out-of-pocket expenses clearly reflects the problems of inequality and low coverage in some health services (Figure 4).

Figure 4. Health expenditure in Latin America as percentage of GDP, 2004



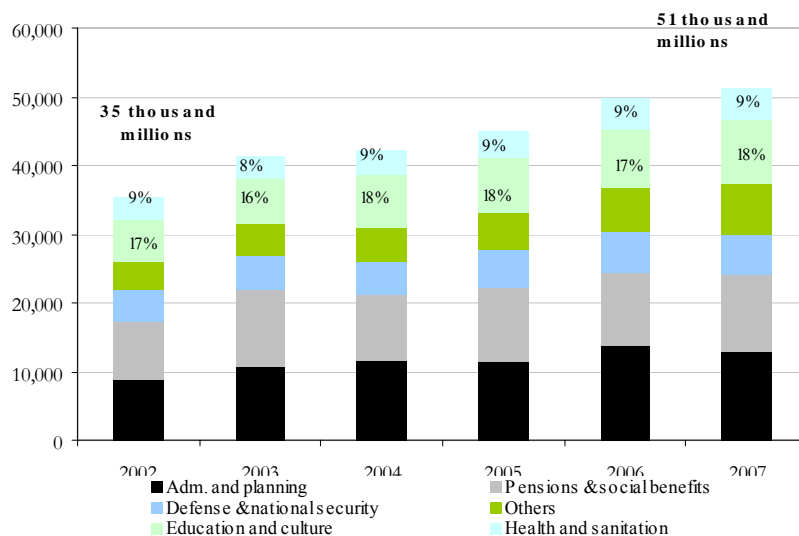
Source: Alvarado et al. 2008.

In nominal terms, out of the 51 million soles in the national budget initially approved in 2007, 4.8 million soles were allocated to health and sanitation functions, representing 9 percent of the total budget. As is the case with the education function, the allocation of resources for health expenditures has been stagnant in real terms for years, even though the country is experiencing economic growth (Figure 5).

⁷ The 2005 National Health Accounts estimated 4.5 percent of GDP for Peru.

⁸ Social Security or Essalud is an independent public body with its own board and management and is financed basically by private sector and public employees payrolls. Essalud reports to the Ministry of Labor and not to the Ministry of Health.

Figure 5. Budget allocation according to public function: 2002-2007
(millions de soles)



Source: SIAF-MEF

Prepared by CIUP, Universidad del Pacífico.

*Percentage shows the share of health and education respectively.
 *Approved and appropriated Budget for 2007.
 *Local governments are not included because they do not all report to SIAF yet and it is not available yet.

4. Budget flows

As noted above, the implementation of PETS methodology has varied depending on the country where it has been applied. In this study, it was decided to first map budget flows following the money. The flows provide an overview of how and where the money goes. The organization of budget flows is inspired by the scheme developed by Gauthiers (2006).⁹ All the flows interact, but the team separated cash or monetary flow, in-kind flow (pharmaceutical and non-pharmaceutical), salary-financing flow, and information flow. Interviews with professionals involved in budget management and sector logistics made it possible to construct what we call a “spaghetti budget flow”¹⁰ to represent the multiple existing channels for the provision of funds in cash and in-kind for health providers. Following the money and the multiple flows not only depicts a complex system that reduces transparency but also reveals constraints that make the public budget less effective.

To facilitate the presentation of results, figures 6, 7, and 8 include some dots¹¹ next to the process arrows that indicate that an issue or problem was detected and is discussed in the findings as “hot points”. It should be noted that the flows presented correspond to the

⁹ Gauthier, Bernard. PETS-QSDS in Sub-Saharan Africa: A stocktaking Study. HEC Montreal, September 7, 2006.

¹⁰ This term was used in Argentina during the 1990s to describe the flow of the intergovernmental fiscal transfer’s model.

¹¹ 

centralized portion of the system, located in the city of Lima, the main urban center in Peru. This urban region, which is the main health market in per capita terms, is still managed by the Ministry of Health. In the rest of the country, health facilities are dependencies of the Regional Governments.

In terms of the cash flow (Figure 6), there are not many surprises at the beginning of the process. The Ministry of Economy appropriates the funds and they are registered in the Integrated Financial Administration System (SIAF). Actual expenditures have to be registered and cleared (each time a check is issued)—this method makes it very difficult to procure without a pipeline of funds. These funds reach the intermediate agencies that are budgetary executing units (Health Directorates, Health Networks and Hospitals). These units are authorized to hire and pay personnel and make the main purchases of goods and services. Facilities for primary health care are not supposed to buy goods and services unless there is an emergency or the amount involved is very small and paid for only from petty cash.

Two hot points have been found that are of concern:

- Insurance claims rejected by the system during the process for different reasons.
- The way that fees and petty cash are managed. The latter may be causing inequitable cross subsidies in the sector and perverse incentives to personnel.

The next flow in Figure 7 refers to in-kind flows related mostly to pharmaceuticals. There are two main entities responsible for purchases of drugs and sanitary inputs: the Ministry of Health and the Health Directorates. One of the main concerns expressed during the first field observations were that some products were out of stock in the facilities' pharmacies, which forced the staff to make non-optimal decisions. As will be explained below, there are problems in programming (facilities) and purchases (Directorates). In addition, Health Networks are responsible for the procurement of office supplies and cleaning goods, and furniture. Procurement and public purchases management in intermediate bodies appeared to be the most fragile points in sector operations. A description of the whole process is provided in Annex 6. In summary, the problems identified by the staff initially interviewed were:

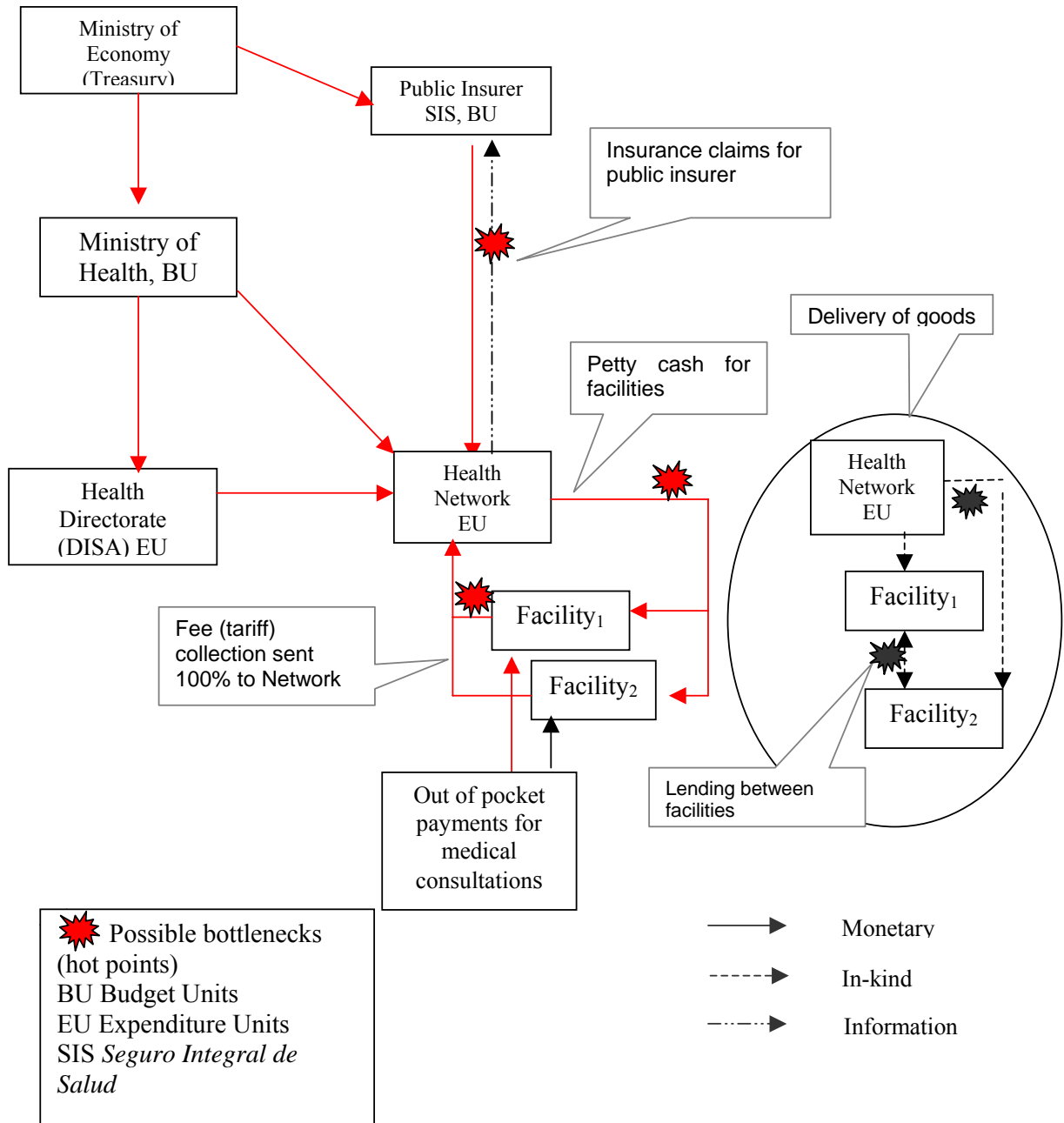
- Programming at the level of health facilities
- Distribution at Health Directorate warehouses (SIS and non-SIS)
- Distribution of office and cleaning supplies from Health Networks to health facilities

The third flow depicted in Figure 8 is related to human resources salaries, fringe benefits and bonuses and is one of the most important in terms of burden on the cost structure. Most personnel are paid directly by Health Directorates and/or Health Networks and a few are paid by SIS. Salaries are deposited in individual bank accounts and are registered in the SIAF system. Totals are clearly identified in the system. However, one issue stands out: some monetary payment incentives are decided upon in the Networks and are paid by each Network with resources from fees collected in the facilities to compensate for production incentives. The issue has to do with:

- Policies, payment stability related to sources of funds, and incentives for personnel affecting equity and sector efficiency.

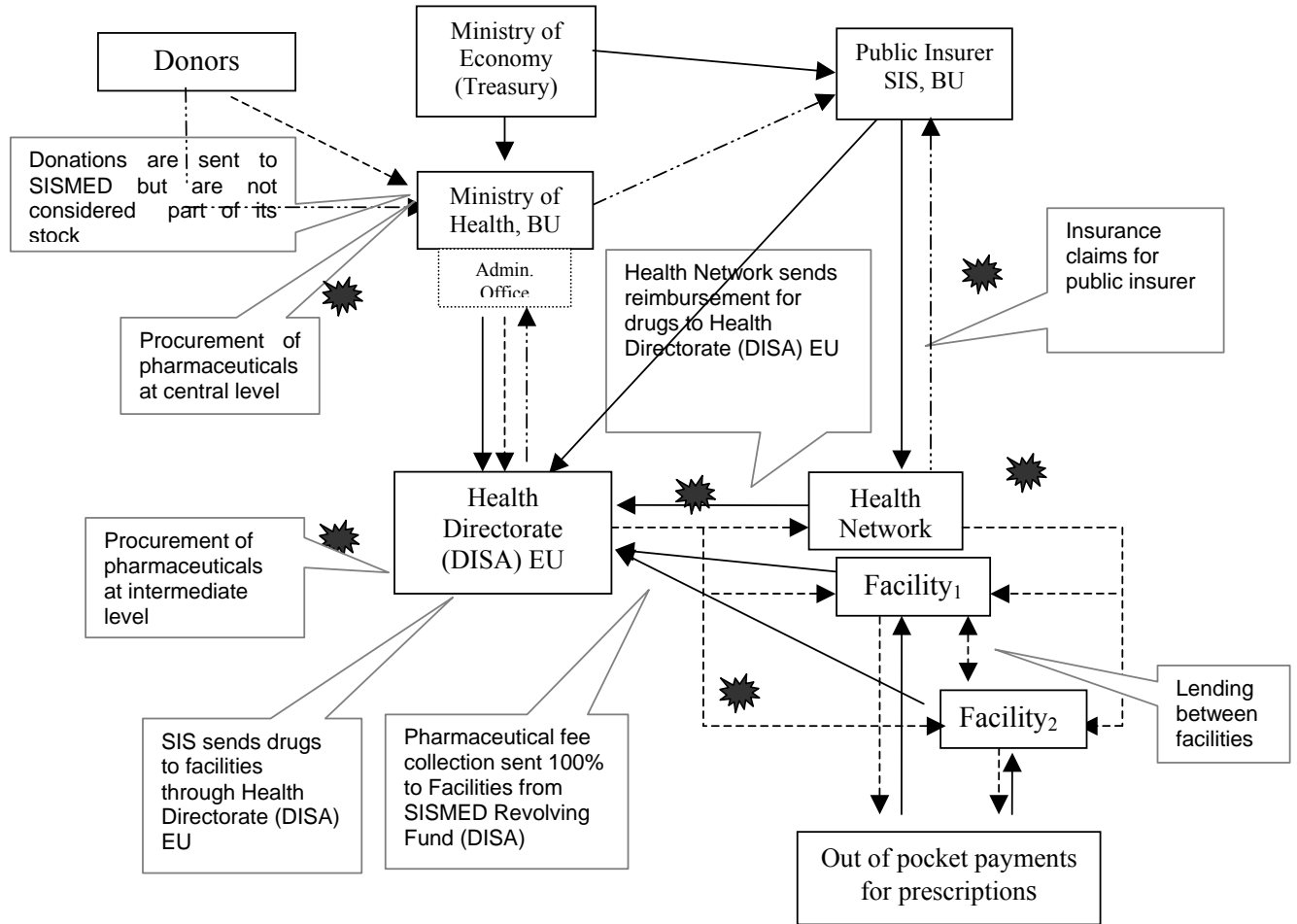
Finally, an analysis of the three flows depicted in Figure 9 (plus the information flow) indicates that transparency is reduced as a result of so many flows. These and other findings are discussed in the next section.

Figure 6. Cash flow¹²



¹² This section follows Gauthier's (2006) suggestions on how to construct flows.

Figure 7. In-kind (pharmaceutical) flows



SISMED Integrated Pharmaceutical System
 PAAG Office for Management Agreements
 * Possible bottlenecks (hot points)
 BU Budget Units
 EU Expenditure Units
 SIS Seguro Integral de Salud

- ▶ Monetary
- - -▶ In-kind (drugs)
- · - · -▶ Information

Figure 8. Human Resources flow

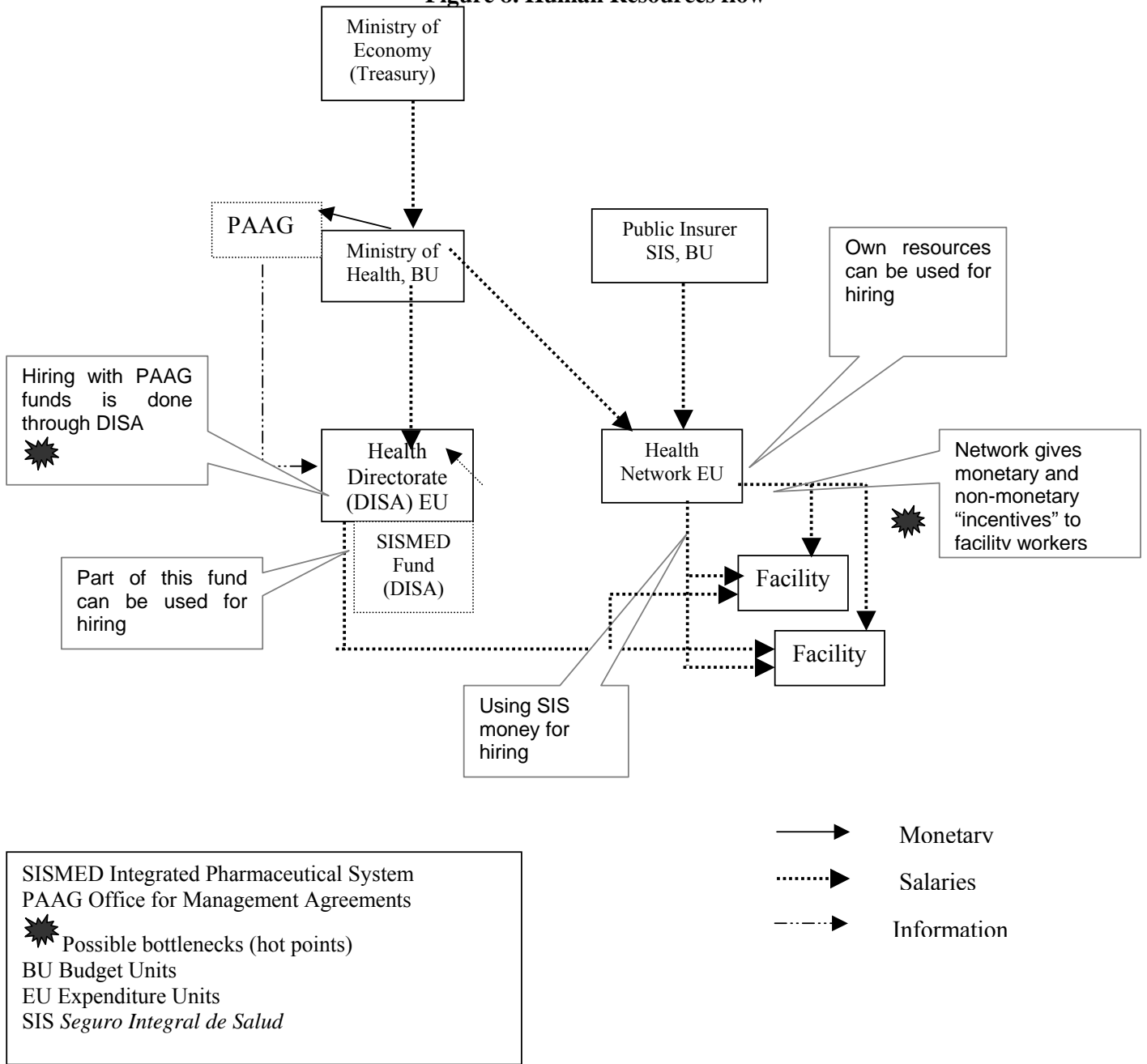
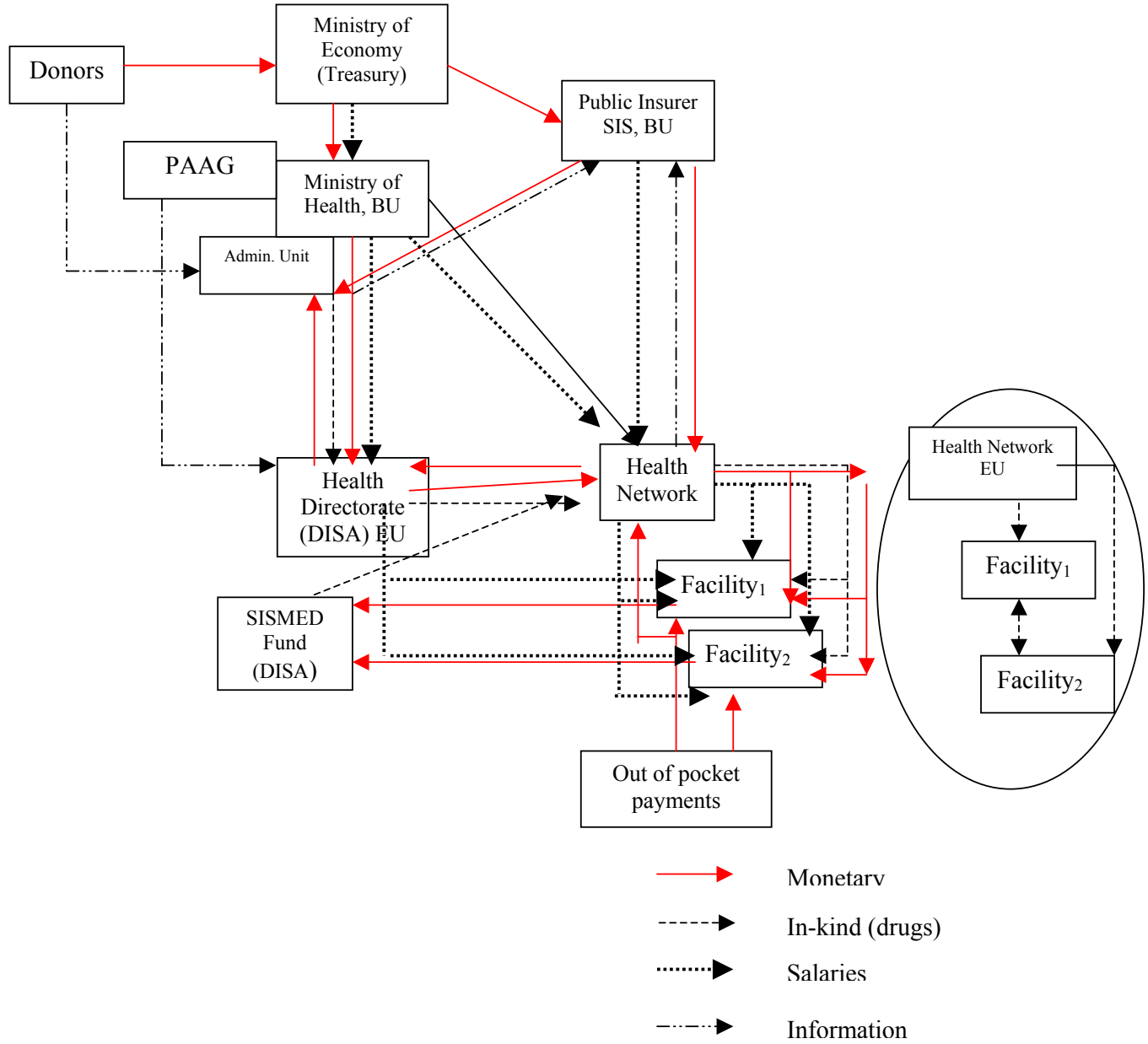


Figure 9. Interactions of flows

**IS THIS A SPAGHETTI BUDGET FLOW? YES? NO?
COMPLEXITY DOES REDUCE TRANSPARENCY**



E. MAIN FINDINGS

1. Benefit Incidence of Financing

Most of the resources that finance the health sector come from “ordinary resources” from the tax system. Of the total collected taxes, 44 percent comes from income tax (6.7 percent of GDP) and another 48 percent (7.4 percent of GDP) from the Value Added Tax. This tax structure, with a small tendency to be regressive, pays human resources payrolls, which in fact represent 70 percent of the cost structure in a public service that serves the poor. But taxes are not the only source of financing for human resources. As indicated above, according to Peru’s National Health Accounts,¹³ out of pocket financing represents 40 percent of the resources, and these payments for medical consultations cover the lack of ordinary resources to complete the needed resources for staff salary and non-salary rewards. Part of this structure is due to the absence of a comprehensive risk protection system—the indicator of financial protection (insurance to cover catastrophic health costs) is low in Peru. Table 1 compiles information on budget accounts located in Lima. Collected resources or fees can represent up to 17 percent of total resources.

Table 1: Structure of financing sources according to SIAF (2007)

	Resources by source of financing (millions of soles)			Participation by source of financing (%)		
	Ordinary resources	Collected resources	Grants and transfers	Ordinary resources	Collected resources	Grants and transfers
SIS	289,7	3	27,8	90%	1%	9%
Institutes	241,9	48,9	16	79%	16%	5%
Health Directorates	145	23,8	13,7	79%	13%	8%
Health Networks	158,4	13,3	6,5	89%	7%	4%
Hospitals	769,1	163,9	36,6	79%	17%	4%
Central Administration MINSAs	545,2	85,9	36,2	82%	13%	5%
Total MINSAs	1,928.8	268,1	122,3	83%	12%	5%
Participation of MINSAs's Expenditure Units in overall MINSAs expenditure (%)	28%	32%	30%			

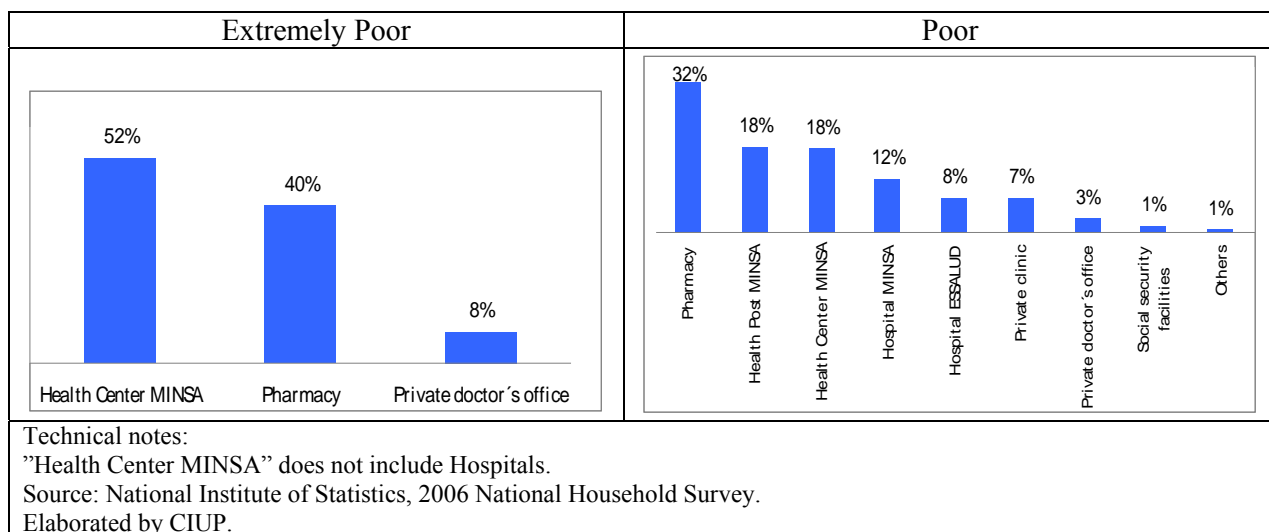
Technical Note: MINSAs Central Administration includes PARSALUD. Health Institutes include: National Institute of Mental Health, National Institute of Neurological Sciences, National Institute of Ophthalmology, National Institute of Rehabilitation, National Institute of Child Health, National Institute of Mothers’ Health. Hospitals include: Daniel Alcides Carrion, San José, Hipolito Unanue, Herminilio Valdizan, Huacho-Huaura-Oyo, Sergio Bernales, Cayetano Heredia, de Apoyo Rezola, María Auxiliadora, Arzobispo Loayza, Dos de Mayo, Santa Rosa, Casimiro Ulloa, Larco Herrera, Docente Madre-Niño, San Bartolome, Puente Piedra, Barranca-Cajatambo, Chancay, Huaral, José Agurto Tello de Chosica, San Juan de Lurigancho, Vitarte.

Most of the users of the public sector—Ministry of Health—are quintiles 2 and 1: those living in poverty and extreme poverty. Some of them qualify for the public insurer SIS prioritized plan, others do not because of gender, age or sickness or temporary poverty. The people who

¹³ The last National Health Accounts were prepared in 2006.

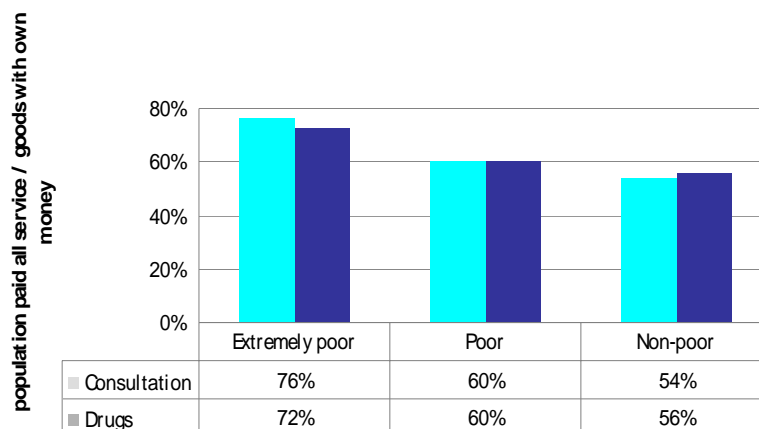
are not covered by SIS have to pay a fee which reduces the availability of family funds for food and other needed services.

Figure 10. Health care delivery place for the poor and extremely poor 2006 in Metropolitan Lima



According to information from the 2006 National Household Survey, the extremely poor in Metropolitan Lima seek healthcare from the public sector or go directly to a pharmacy (52 percent and 49 percent respectively). The poor first go to a pharmacy and then to a public facility (48 percent) (see Figure 10). Information for the non-poor appears in Annex 6.

Figure 11. Population who fully paid consultation fees or drugs costs in Metropolitan Lima (percentage)

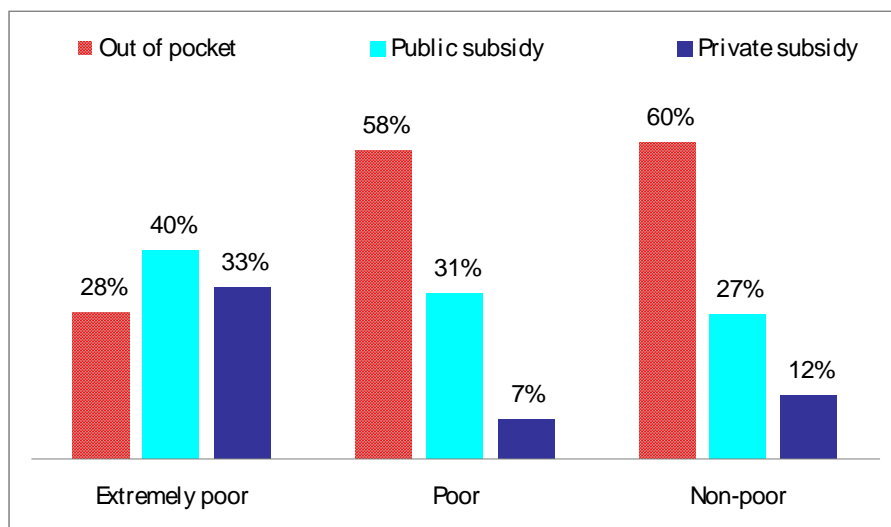


Source: National Household Survey
 Elaborated: CIUP

The incidence of out-of-pocket payments on the economy of the poor is evident, even in Metropolitan Lima. The National Household Survey reports that 76 percent and 60 percent of the extremely poor and poor respectively affirmed that they paid all the fee costs of

consultations in ML¹⁴ (Figure 11). The same pattern is repeated for drugs. This situation reflects the undercoverage and lack of risk protection through health insurance. Likewise, public subsidies still have leakages, especially in urban hospitals in Lima. This may explain the public subsidies received by the non-poor (Figure 12).

Figure 12. Sources of health financing: subsidies and out of pocket by level of income in Metropolitan Lima



The public sector subsidizes health services which benefits all income brackets in ML; the latter clearly reflect the leakages in the system. However, more critical is the share of the out-of-pocket payment of the extremely poor and poor. Calculations made by the National Institute of Statistics, out of the total costs of health, the extremely poor paid 28 percent of the total costs, while the poor paid 58 percent of the total costs. All the above information provides enough evidence to stress that financing the sector through fees accentuates the inequities in the financing of the system.

Technical notes:

Figures 11: Answer to the question How did you pay?

Figure 12: In the Summary Module of the National Household Survey, the National Institute of Statistics has calculated the finance structure of each individual depending on income bracket. The answer options are: i) cash out of pocket; ii) self consumption; iii) in-kind payment; iv) public donations (subsidy); vi) private donations, vii) others, options ii), iii) and vi) were the most significant.

Elaborated by CIUP.

¹⁴ For those who actually seek medical consultations. However, 74 percent of the extremely poor that did not seek treatment was due to lack of resources.

Box 1. Characteristics of Metropolitan Lima (ML)

Metropolitan Lima is an urban conglomerate made up of two provinces Lima and Callao. ML has a population of approximately 8.5 million people (51.1 % women and 48.9 % men). The age distribution is from 0-14 years old (25.2 %), 15-64 years old (68.1%), 65 years old and more (6.7 %).

In 2007, 18.5% of the population in ML is considered poor and a 0.5% extremely poor. In national terms, over 13.6% of the country's poverty is concentrated in Metropolitan Lima (about 1.5 million people).

About 42.3% of the population in Metropolitan Lima has some type of health insurance (3.6 million people); within this group, 28% is between 0-14 years old; notwithstanding, 57.7% of the population is still unprotected.

Lima contributes 48% of the national GDP, thus reflecting this region's weight nationwide. It concentrates a broad range of economic activities from manufacturing through commerce, financial and other services, to tourism and agriculture.

2. Human Resources and Salaries

In the health sector, the budget structure is highly concentrated in payments for human resources. It can be unbundled into several types of contracts classified according to tenure and source of financing (ordinary resources and own source revenues from fee collection and SIS reimbursement).¹⁵

Types of contracts

1. *Nombrados*, part of the permanent civil service, paid with ordinary resources (taxes) regulated by Decree Law No. 276.¹⁶ There are also other specific laws and mandates for doctors (Decree Law No. 559), nurses (Law No. 27669), midwives (Law No. 27853), odontologists (Law No. 27878), and medical technicians (Law No. 28456). There can only be a new *nombramiento* if there is a vacancy open and it is included in the budget, but this *nombramiento* has to fit the requirements of the General Law of the National Budget System applied to the Expenditure Unit to which the facility belongs. People with this type of contract have other bonuses and special treatment in comparison with the other categories of human resources. More detail on bonuses can be found in Box 2.
2. *Contratados* have long-term contracts with a maximum length of three years paid for by ordinary resources and regulated by Decree Law No. 276 and Law No. 24041 which recognize job security for this type of contract. If a contract is not renewed, the individual can sue the government for his/her reinstatement.

¹⁵ An excellent systematization of human resources issues can be found in Jaramillo et al.. (2006), a report prepared for the PARSALUD project. Concerns regarding salaries expressed by the report coincide with the findings in this study.

¹⁶ Legislative Decree No. 276, Law on the Terms and Conditions for Administrative Careers in the Public Sector (*Ley de base de la carrera administrativa del sector público*).

3. *Non-personal services*, a type of short-term contract related to products or specific services paid for (in theory) by:

- Public Treasury funds.
- The facilities' own source revenues
- SIS revenues: contracts from the Integral Health Insurance (SIS).
- Local government funds
- Ordinary resources channeled through PAAG: contracts from the *Programa de Administración de Acuerdos de Gestión* for targeted facilities, with less benefits than the above contracts
- SISMED resources collected from the sale of pharmacy stock: used primarily to replace drugs but also can be used to hire and pay personnel to perform duties related to this function.

In this kind of contract there is no formal relationship between the employer and the employee and thus those employed do not receive vacations, job security or rights such as the maximum working hours. However, in practice they sometimes have the same duties as *nombrados*.

4. *SERUMS Professionals*, are health professionals who work for Rural and Marginal Urban Services. This is one channel for young professionals to begin a career in the Public Sector system.

Box 2. Structure of personnel in the sample

The structure of human resources by types of contracts and professional groups in the sample indicates that the majority are hired under the first type of contract which means that they are primarily paid with ordinary resources.

Table 2: Human Resources by types of contracts and professional groups

Professional Groups	Nombrados		Contratados		Total	
	Nº	%	Nº	%	Nº	%
Professionals (doctors, nurses, and midwives)	123	81%	28	19%	151	100%
Other Professional Groups (odontologists, psychologists, etc.)	35	60%	23	40%	58	100%
Health Technicians	122	69%	56	31%	178	100%
Administrative Technicians	81	63%	47	37%	128	100%
SERUMS Professionals					57	100%
PAAG contract holders					3	100%

Complementing the financing of the personnel budget with fees

The resources collected are registered as part of the the balance of each facility and all the monies collected by a facility have to be deposited on daily basis in a bank account¹⁷ designated by the Health Network. The Health Network returns a portion of the deposited amount as petty cash for each facility (according to the survey, this amounts, on average, to 12.3 per cent of monies deposited). The rest of the deposited amount is earmarked for goods and services and for human resources benefits. The part corresponding to human resources (38 percent) and is redistributed to the facilities according to the number and type of personnel contracts and the bonuses to which they have become entitled on the basis of agreements and pacts; most of these are the result of negotiations between the unions and the central administration at MINSA.

Each Health Network negotiates with the central administration regarding the percentage of bonuses that will be financed by the central government financing and the percentage to be financed from own collected resources. Since there is no one rule for all the Health Networks, the management skills of each Health Network are of great importance (see Box 3 for a sample case).

Box 3. Personnel bonuses

Health Networks are responsible for cash management in order to pay the extra monies workers have become entitled to as a result of negotiations for salary improvements. Currently they are entitled to the following payments per month:

Productivity (also known as the <i>special assignment by labor assistance</i> or AETA):	30 soles (AETA) x 22 days = 660
Lunch:	7 soles x 22 days = 158
Food basket:	= 300
<u>TOTAL IN SOLES</u>	<u>1,118</u>

In some cases, bonuses were initially paid from collected resources but later managers were able to cover this additional cost from ordinary resources, such as the case of the sample in the study. The management skills of the executive unit (Health Directorate or Health Network) are critical in obtaining ordinary resources to cover these payments.

Note that the Chorillos-Barranco-Surco Health Network and the decentralized Arequipa Network have "work shift" and Social Welfare Subvention-CAFAE as regular extra income financed mainly by ordinary resources. In addition, ordinary resources are the only source for financing expenditures on "Education and Christmas and other bonuses." For details, see the following chart:

¹⁷ All resources generated in the health public sector are deposited in the *Banco de la Nacion (BN)*, a state-owned bank.

Expenditure	Resources (S/.)	Expenditure classification	Months	Source
I. Chorillos-Barranco-Surco Health Network				
Education/Christmas bonuses/other bonuses	361,933	Human resources	Feb/Jul/Dec	OR
Education/Christmas bonuses/other bonuses	1,500	Pensions, fringe benefits	Feb/Jul/Dec	OR
Work shifts (<i>guardias</i>)	838,857	Human resources	12	OR
Social Welfare Subvention-CAFAE	1,014,640	Human resources	12	OR (91%) -CR (9%)
II. South Lima Health Directorate				
Education/Christmas bonuses/other bonuses	79,867	Human resources	Feb/Jul/Dec	OR
Education/Christmas bonuses/other bonuses	613,265	Pensions, fringe benefits	6 months	OR
Social Welfare Subvention-CAFAE	1,977,193	Human resources	12	OR
III. Arequipa Health Directorate				
Education/Christmas bonuses/other bonuses	165,864	Human resources	Feb/Jul/Dec	OR
Education/Christmas bonuses/other bonuses	425,393	Pensions, fringe benefits	Feb/Jul/Dec	OR
Night shifts	122,932	Human resources	12	OR
Social Welfare Subvention-CAFAE	2,035,597	Human resources	12	OR (97%) -CR (3%)

OR: Ordinary resources / CR: Collected resources

*All professionals (doctors, nurses, midwives, technicians, etc.) receive equal amounts of AETA (30 soles); the variation is on the number of AETAs that are recognized. In the Region of Lima, doctors receive up to 22 AETAs per month; in other regions, they receive up to 9 AETAs per month. In the case of nurses in regions other than Lima, the central government assures the transfer of resources to finance at least 4 AETAs per month.

The Health Network under study offers an “improved basket” from its own collected resources (fees):

School expenses, soles	250
Mother’s Day Bonus, soles	150
Father’s Day Bonus, soles	150
Independence Day Bonus, soles	500
Christmas Bonus, soles	652.5

*All workers.

* Non-personal services do not receive a “productivity bonus” nor an incentive via an “improved basket” (*canasta mejorada*). This personnel may receive a financial incentive at Christmas but this is not guaranteed due to a lack of resources in the sector.

Sources: Interviews with Health Network staff and Jaramillo et al. 2006.

Considering the sources of health financing in Metropolitan Lima, the non-insured poor and the extremely poor end up paying for personnel bonuses not covered by ordinary resources. Moreover, the bonuses do not correspond to any established merit system as will be discussed below.

Single fund collection and cross-subsidizing between facilities

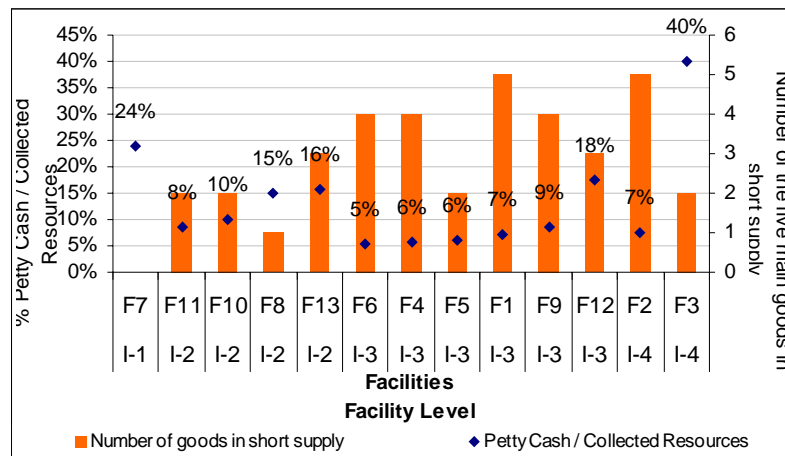
Money collected from fees from all facilities in a Health Network are put into a single fund at the Network. This fund is used to pay human resources (including bonus payments) and to purchase goods, services, and other minor capital expenditures (see Table 3). This model assumes that the more active facilities with higher collections will contribute more resources to the joint fund. No explicit formula exists for the redistribution of funds among facilities. Despite the fact that this sometimes leads to discontent, this distribution is generally accepted

and the facilities that receive less (even though they contribute more) maintain the status quo because this allows them to keep at least part of the money for their personnel.

Health staff confronted with the wrong incentives: salaries competing against goods and services for the facilities

As explained above, only a percentage of own collected resources are returned to facilities as petty cash to purchase small goods in the case of emergencies. However, an observational analysis during visits to the facilities immediately revealed the facilities lacked many goods. The question arises as to why personnel do not protest in order to recover the rest of the funds collected that currently remain at the Network. Moreover, why don't they ask to receive money from fees in accordance with performance? The answer apparently lies in the existence of the wrong incentives: the salaries of professionals and technicians compete against the goods and services that the facilities need.

Figure 14: Relationship between average collected resources and the level of stockout



It would be expected that those facilities that contribute more to the **single fund** receive more support from the Health Network in terms of goods. However, there is no clear relationship between the weight of petty cash in relation to collected resources and the number of main goods that presented stockout.

Table 3. South Lima Health Directorate: sources of funds and expenditures, 2007

South Lima Health Directorate 19 million soles			
	Ordinary Sources (80%)	Collected Sources (13%)	Budgetary Grants and Transfers (7%)
	15.2 Million soles	2.4 Million soles	1.3 Million soles
	9.3 Million (61%)	0 soles (0%)	0 soles (0%)
	Main elements:		
	- Retirement pension (91%): 8.5 MLN		
	- Schools, rewards (7%): 0.6 MLN		
Pensions, fringe benefits 9.3 MLN (49%)			
	1.4 Million (10%)	2.4 Million (99%)	1.3 Million (99.6%)
	Main elements:	Main elements:	Main elements:
	- Non-Personal Services (37%): 0.5 MLN	- Medicine (70%): 1.7 MLN	- Medicine (87%): 1.1 mill
	- Third party services (13%): 0.2 mill	- Non-personnel Services (13%): 0.307 mill	- Consumer goods (11%): 0.1 MLN
	- Telephone, water & electricity services (12%): 0.17 MLN	- Consumer goods (11%): 0.258 MLN	
Good and services 5.2 MLN (28%)			
	4.2 Million (28%)	0 soles (0%)	0 soles (0%)
	Main elements:		
	- Social Welfare Subvention (47%): 1.97 MLN		
	- Complementary payments – Administrative Civil Service Law (23%): 0.98 MLN		
	- Extraordinary allocation for social services (<i>servicios asistenciales</i>) (20%): 0.85 MLN		
Human resources and employee benefits 4.2 MLN (22%)			
	0.1 Million (1%)		
	Main elements:		
	- Equipment and durable goods (73%): 101 MLN		
	- Consultancy services (13%): 18 MLN		
Investments 0.1 MLN (1%)			

Source: SIAF.

Table 4. Barranco-Chorrillos-Surco Health Network: sources and expenditure, 2007

Barranco-Chorrillos-Surco 22.6 million soles de soles			
	Ordinary Sources (90%)	Collected Sources (7%)	Budgetary Grants and Transfers (3%)
	20.2 Million soles	1.6 Million soles	0.7 Million soles
	16.8 Million (83%)	0.6 Million (38%)	0 soles
	Main elements:	Main elements:	(0%)
<div style="background-color: #ADD8E6; padding: 10px; border: 1px solid black; width: 150px; margin: 0 auto;"> Human resources and employee: 17 Mill. </div>	- Extraordinary allocation for welfare services (36%): 6.1 MLN	- Extraordinary allocation for social services (<i>servicios asistenciales</i>) (89%): 0.56 MLN	
	- Complementary payments –Medical civil service (30%): 5 MLN	- Social Welfare Subvention (11%): 71 mil soles.	
	- Complementary payments - Administrative Civil service. (16%): 2.7 MLN		
	- Social Welfare Subvention (6%): 0.943 MLN		
	- Hospital shifts (5%): 0.8 MLN		
<div style="background-color: #ADD8E6; padding: 10px; border: 1px solid black; width: 150px; margin: 0 auto;"> Good and services 3.9 Mill. (18%) </div>	2.5 Million (13%)	0.84 Million (51%)	0.56 Million (79%)
	Main elements:	Main elements:	Main elements:
	- Non-Personal Services (46%): 1.1 MLN	- Travel expenses and per diem allowances (25%): 0.2 MLN	- Non-Personal Services (41%): 0.23 MLN
	- Third party services (15%): 0.4 MLN	- Third party services (18%): 0.15 MLN	- Third party services (22%): 0.12 MLN
	- Consumer goods (13%): 0.33 MLN	- Consumers goods (16%): 0.13 MLN	
- Telephone, water & electricity service (10%): 0.25 MLN	- Clothes (12%): 0.1 MLN		
<div style="background-color: #ADD8E6; padding: 10px; border: 1px solid black; width: 150px; margin: 0 auto;"> Other capital expenditure </div>	0.7 Million (4%)	0.1 Million (11%)	0.14 Million (21%)
	Main elements:	Main elements:	Main elements:
	- Equipment and durable goods (100%): 0.7 MLN	- Equipment and durable goods (100%): 0.7 MLN	- Equipment and durable goods (100%): 0.14 MLN

Source: SIAF.

Table 5: Arequipa Health Directorate: sources and expenditures, 2007

	Ordinary Sources (88%)	Collected Sources (10%)	Budgetary Grants and Transfers (2%)
	32.3 Million soles	3.8 Million soles	0.7 Million soles
Pensions, fringe benefits 7.7 mill. (21%)	<p style="text-align: center;">7.7 Million (24%) Main elements:</p> <ul style="list-style-type: none"> - Retirement pension (89%): 6.8 MLN - Schools, rewards (6%): 0.4 mill 	<p>86 thousand soles (2%)</p>	<p>0 soles (0%)</p>
Good and services 4.9 mill. (13%)	<p style="text-align: center;">0.9 Million (3%) Main elements:</p> <ul style="list-style-type: none"> - Third party services (19%): 0.17 mill - Non-Personal Services (17%): 0.15 MLN - Telephone, water & electricity service (11%): 0.1 MLN 	<p style="text-align: center;">3.6 Million (96%) Main elements:</p> <ul style="list-style-type: none"> - Medicine (73%): 2.6 MLN - Consumer goods (13%): 0.46 MLN - Non-Personal Services (7%): 0.26 mill 	<p style="text-align: center;">0.3 Million (31%) Main elements:</p> <ul style="list-style-type: none"> - Medicine (87%): 1.1 mill - Third party services (11%): 0.1 MLN
Human resources and employee benefits 4.9 mill. (13%)	<p style="text-align: center;">7.4 Million (23%) Main elements:</p> <ul style="list-style-type: none"> - Social Welfare Subvention (26%): 1.97 MLN - Long term contract –public and private. (19%): 1.3 MLN - Complementary payments - Administrative Civil Service Law (19%): 1.3 MLN - Extraordinary allocation for social services (<i>servicios asistenciales</i>) (17%): 1.2 MLN 		<p>0 soles (0%)</p>
Investments 7.7 mill. (21%)	<p style="text-align: center;">7.7 Million (24%) Main elements:</p> <ul style="list-style-type: none"> - Equipment and durable goods (100%): 7.7 MLN. 		<p>0 soles (0%)</p>
Other current expenses 8.9 mill. (24%)	<p style="text-align: center;">8.6 Million (26%) Main elements:</p> <p>Social Welfare Subvention - Consultancy services (99%): 8.5 MLN</p> <p>Source: SIAF</p>		<p style="text-align: center;">0.41 Million (69%) Main elements:</p> <ul style="list-style-type: none"> - Social Welfare Subvention - Consultancy services (100%): 0.41 MLN

A difference in collected fees leads to different incentives for personnel

Besides the above issues of negative incidence on poor patients, differences in collected fees create an unequal distribution of funds among facilities and varying incentives regimes. What happens to facilities located in poorer and the poorest areas? The situation of dynamic health units in urban areas cannot be applied to rural areas where human resources actually should be paid more because of the working conditions and high risks involved.

Differences in salaries, bonuses, and working conditions have led to a concentration of SERUMS in urban areas (the research team found an important number of SERUMS in some facilities in the Health Network studied, see Table 4). In contrast, the Minister of Health has just announced that there are about 5 thousand vacancies for health professionals that would need to be covered to reach the Latin America average for the number of health professionals.¹⁸

The way contracts are registered does not contribute to transparency. Payment of salaries and bonuses of contracted personnel are registered under “goods and services”

The absence of a merit system, a civil service career path, and budgetary fiscal control in hiring new long-term personnel have created an incentive to hire, pay, and register part of the salaries and benefits of human resources under “goods and services.” Some of the contracts are registered as services while some in-kind bonuses are registered as goods, all of which leads to diminished transparency.

These practices are supported by the legal framework at the level of the Regional Directorates and at the level of the Health Networks (see tables 3 and 4). However, recently the central government promulgated Legislative Decree No. 1057 whose purpose is to regulate what are classified as “*non-personal services*” in public administration¹⁹.

The public information available on Health Care Sector expenditures makes it difficult to estimate total expenditures related to human resources since these expenditures are included in the budget lines not only as “personnel” but also as “goods and services.” This does not facilitate transparency.

Note that Tables 3 and 4 provide information on “goods and services” accounts of non-personal services and third party services, paid with ordinary and collected resources. Table 4 provides information on the Health Network studied: 61% of the resources from goods and services were used for the payment for human resources with contracts initiated with ordinary resources.

An additional issue arises because not all personnel receive bonuses, which are provided only to staff that are part of the civil service or have long-term contracts.

¹⁸ Speech of the Minister of Health during a working lunch with the American Chamber of Commerce, Lima, May 17, 2008.

¹⁹ Legislative Decree No. 1057 which regulates the special scheme for the recruitment of Administrative Services. The DL recognizes the status of Non Personal Services workers; these workers will be enrolled in Social Security to have health benefits and it will establish a cap of 48 hours per week of work.

Information from interviews was triangulated with information from budget records in SIAF. The example presented in Table 4 shows that this particular Health Network allocates 38 percent of collected fees and 42 percent of ordinary resources to pay for staff bonuses under the line item “human resources.” It is important to note that the amount financed with ordinary resources is almost twelve times the amount financed with collected fees.

In the case of other EUs outside of Lima, the situation is quite different. Table 5 describes the case of the Region of Arequipa: first, the Health Directorate in Arequipa allocates 7% of collected fees to pay for contracted personnel under services accounts (less than the South Lima Health Directorate). In addition, the Health Directorate in Arequipa uses about 2 percent of collected resources to pay pensions and fringe benefits though this item is generally financed with ordinary resources.

3. Goods and Services

Delays in the distribution of goods, including office supply and cleaning products

Facilities are not expenditure units so the Health Network has to purchase the goods and contract services for the facilities.²⁰

Delays and cuts in requests for goods and services are common occurrences (see Table 6). In addition, sometimes unneeded goods are received. At least one anecdotal case was repeated in the Health Network and facilities: they received red wax for floors, a type of wax recommended for wooden floors or red tiles, but most of the facilities have rustic or cement floors.

Table 6: Average shortage of most used goods in facilities

Good	Number of facilities	Average shortage period (days)	Maximum shortage period (days)	Minimum shortage period (days)
Bleach	7 (50%)	88	180	7
Gloves	4 (29%)	70	99	30
Cotton	3 (21%)	52	90	7
Office supplies	2 (14%)	75	90	60
Alcohol	2 (14%)	9	10	7
Gauze	2 (14%)	34	60	7
Tongue depressors	2 (14%)	30	30	30
Disinfectant	2 (14%)	49	90	7

Health Networks also pay for utilities, including telephone service. In the Health Network studied, no important incident of non-payment has occurred.

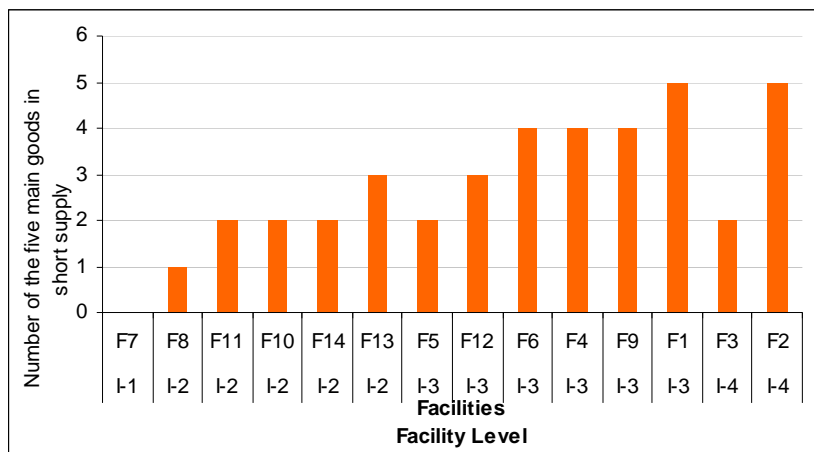
Shortage of five main goods

In the survey, facilities listed their five most-used goods and indicated whether shortages of any of these had occurred in the preceding twelve months. The results indicate that almost all

²⁰ In situations where procurement takes more time than anticipated, facilities lend each other goods.

facilities had at least one input stockout. There is no pattern to stockouts within facilities but facility level C I-3 had more goods in stockout.

Figure 15: Number of five main goods in short supply



Difficulties in the provision of drugs

The provision of drugs is organized under a system called SISMED (Integrated System of Pharmaceutical Provisions and Supplies) which involves different units within the Ministry of Health, Health Directorates, Health Networks, and facilities. SISMED sets the rules and responsibilities of each type of unit according to seven steps: selection, programming, procurement, storage, distribution, use, and reporting.

Difficulties can be found at every step of the process but this study focuses on four: programming, procurement, storage, and distribution. For more detailed information on the entire process of provision of pharmaceuticals see Annex 5.

Programming at the national level is affected by delays on the level of intermediate units: Health Directorates and Health Networks.

Difficulties throughout the whole process of procurement of pharmaceuticals cause scarcity in facilities.

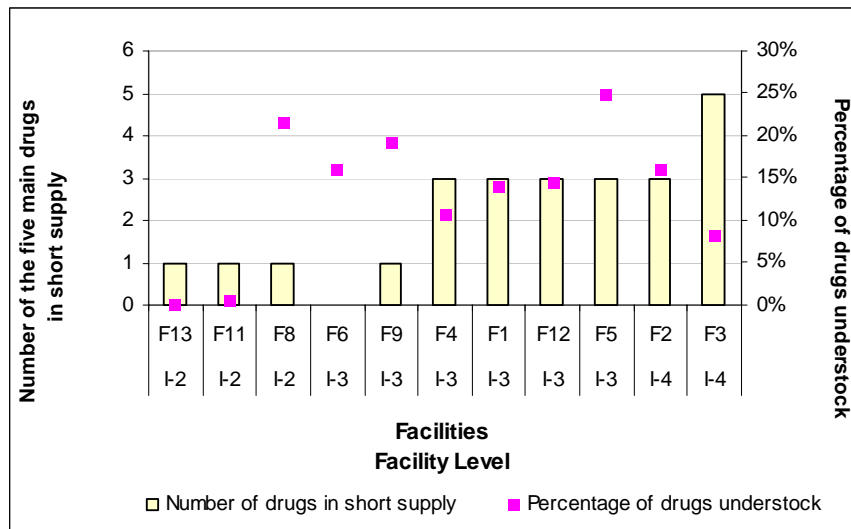
- DIGEMID is the central unit of the Ministry of Health in charge of consolidating purchase requests from all the Health Directorates and advising them on these matters. Programming the needed level of inputs can take several weeks. Final purchases are carried out by the procurement unit of the Ministry of Health.
- Health Directorates are responsible for the purchase of “support” pharmaceuticals (*medicamentos de soporte*). The lack of capacities in programming at the facilities and at the Health Directorates themselves is one of the reasons for delays in the purchase and delivery of pharmaceutical inputs.

Table 7: Average shortage period of most-used drugs in facilities

Drugs	Number of facilities	Average shortage period (days)	Maximum shortage period (days)	Minimum shortage period (days)
Amoxicillin 500ml	5 (36%)	42	60	30
Amoxicillin	4 (29%)	60	90	30
Dicloxacillin 500ml	3 (21%)	50	60	30
Paracetamol 500 ml tablet	2 (14%)	45	60	30
Ibuprofen 400 ml Tab	2 (14%)	45	45	45
Amoxicillin 250 ml	2 (14%)	37.5	45	30

Another way to illustrate the same problem is through the level of drugs in understock. According to SISMED's *Availability of drugs* indicator, there is a state of critical availability when the drugs in stock cover demand for less than one month.²¹ Within the sample, the facilities that have the largest proportion of drugs in critical availability are C I-3 facilities (see Figure 16). In addition, facilities listed their five most-in-demand drugs and whether any of them have presented shortages during the last twelve months. Facilities level C I-3 presented the most drugs in stockout.

Figure 16: Number of five principal drugs in short supply and percentage of drugs in understock



²¹ Considering the average monthly consumption of drugs.

Poor coordination among operations, finance, and pharmaceutical departments inside the Health Directorates has caused procurement processes to fail²²

In the SISMED system, there are regulations regarding the use of pharmaceutical fee collections:

<p>The entire pharmaceutical fee collection is sent to facilities' SISMED Revolving Fund (DISA). The pharmaceutical fee is called the "operation price."²³</p>	<p>80% of the operation price is to be earmarked to cover expenses for future procurement of drugs and medical inputs. The Health Directorate is responsible for guaranteeing that facilities receive adequate pharmaceutical supplies.</p>
<p>A maximum of 20% of the pharmaceutical fee collected can be used to cover the specific operational expenses of facilities and the Health Directorate.</p>	<p>10% of the operation price is to be earmarked to cover the expenses of the facilities according to SISMED regulations, i.e., personnel. The remaining 10% is to be earmarked to cover the expenses of the Health Directorate according to SISMED expenses items.</p>

So far, the regulations seem clear; however, there are some situations that occur in the Health Directorates that can affect the stock availability of drugs.

- The Finance Department may not have informed the Pharmaceutical Department of the total budget available. The Pharmaceutical Department, in turn, may not have adequately forecast the required level of inputs. .
- There is a lack of knowledge regarding the standardized rule: 80% for the procurement process and 20% for administrative expenses. This can have two effects:
 - i) Purchase requests sent to the Procurement Unit of the Health Directorate may not specify the exact amounts needed. According to SISMED estimates, almost half of the Health Directorates assigned less than the 80% (standard rule) of the total collected in pharmaceutical sales and SIS reimbursements to the next procurement process.
 - ii) Delays in the emission of purchase orders and of payments to providers.

Difficulties in pharmaceutical programming by the National Health Strategy for Tuberculosis Prevention and Control

There are many problems and delays in the programming process of the National Health Strategy for Tuberculosis Prevention and Control,. Many facilities do not program all the drugs and medical inputs required by the Strategy (see Annex 7).

Opportunity for precocious diagnoses are lost when there is an insufficient supply of spit glasses or pharmaceutical goods. This leads to sources of contagion being preserved

²² In addition, interviews with DIGEMID staff revealed problems in accurate programming on the part of the facilities.
²³ The operation price is the price the pharmacy charges users for drugs or other medical inputs. The operation price is the sum of the acquisition price and operative expenses. Operative expenses are calculated as 25% of the acquisition price.

unknowingly or inadequately treated. As a result, the health of workers at facilities and the public at large is put at risk.

Delays in the arrival of drugs required by the National Health Strategy for Tuberculosis Prevention and Control reduce efficacy

The National Health Strategy for Tuberculosis Prevention and Control includes two plans (Primary and MDR). Their implementation reveals problems at the lowest level of the Health System. For example, according to the Health Network studied, the facilities have previous knowledge of the pick-up dates; however, a significant percentage (42% for the Primary Plan and 58% for MDR) of the facilities report that they were not informed of these dates. In the case of delays and shortages, the same contradictory information issues exist.²⁴ This study identifies this problem as a bottleneck in this Strategy. It should be noted that in the case of MDR treatment, delays in the delivery of pharmaceuticals were so common that even the Health Network had to admit they existed.

Table 8: Triangulation of responses from the Health Network and the facilities regarding pharmaceutical deliveries for the National Health Strategy for Tuberculosis Prevention and Control

Questions	Health Network's responses		Facilities' responses		
	Primary Plan	MDR		Primary Plan	MDR
Did the facilities have previous knowledge of pick-up dates?	Yes	Yes	Yes	7 (58%)	5 (42%)
			No	5 (42%)	7 (58%)
Was there a delay in the arrival of drugs during the last 12 months?		Yes	Yes	4 (33%)	8 (67%)
	No		No	8 (67%)	4 (33%)
Was there a shortage of tuberculosis drugs during the last 12 months?		Yes	Yes	8 (67%)	7 (58%)
	No		No	4 (33%)	5 (42%)

Delays in the arrival of vaccines and medical inputs required for the Vaccination Program reduce efficacy

In contrast to the information provided regarding the National Health Strategy for Tuberculosis Prevention and Control, in the case of the Vaccination Program, both the Health Network and 7 of 14 facilities reported that there was at least one delay in the arrival of vaccines during the previous twelve months.

Still, while the Health Network asserted that facilities have information in advance about pick-up dates for vaccines and medical inputs (needles, syringes, etc.), survey results indicate that a number of facilities were not aware of the pick-up dates for vaccines and medical inputs required for the program. Regardless of who is right and who is wrong, there is obviously a communication problem.

The survey also found that the role of micro-networks in facilitating the flow of information is unclear:

²⁴ The findings of this study include sections where the results from the facilities survey are contrasted with the results from the Health Network survey.

“I have to keep calling the Health Network myself several times to see if the drugs have arrived yet because the Micro-Network does not notify us” (notes from survey administered to a pharmacist).

Table 9: Triangulation of responses from the Health Network and the facilities regarding pharmaceutical deliveries for the Vaccination Program

Questions	Health Network’s responses		Facilities’ responses		
	Vaccines	Needles, syringes, and other inputs		Vaccines	Needles, syringes, and other inputs
Did the Facilities have previous knowledge of the pick-up date?	Yes	Yes	Yes	11 (79%)	10 (71%)
			No	3 (21%)	4 (29%)
Was there a delay in the arrival of drugs during the last 12 months?	Yes		Yes	7 (50%)	4 (29%)
		No	No	7 (50%)	10 (71%)

Because of the importance of the Vaccination Program, SISMED’s indicators valuation methodology requires a standard of zero delays. This is far from having been achieved, even in Metropolitan Lima.

4. Influence of SIS management

Delays in SIS reimbursements to facilities (through the Health Directorate or the Health Network) for pharmaceuticals also causes delays in purchases as well as shortage.

The main sources of financing for SISMED are the own collected resources of the facilities, SIS reimbursements, and the Public Treasury through ordinary resources. With the increase in SIS coverage as a result of a national policy to increase coverage, the system needs more free drugs for insured patients and, since reimbursement can take two months, there is a delay in receiving funds to buy more drugs. Since SISMED funds should be financed completely to proceed with purchases, the delay in SIS reimbursements also affects the provision of medication required for uninsured patients.

There are delays in SIS reimbursements for drugs from the Health Network to the Health Directorate

There are two kinds of reimbursement processes: one from SIS to the Health Directorate and the other, from SIS to the Health Network. In the latter case, the Health Network sends reimbursements for drugs to the Health Directorate because Health Networks are not allowed to buy drugs.

There are two administrative directives that regulate the reimbursement process:

- Fund transfers from Health Networks Executing Units to Health Directorates and Regional Health Directorates, R.M. No, 887-2007/MINSA
- The payment process for SIS consultations and reimbursement for drugs delivered to SIS beneficiaries, R.M. No. 422-2007/MINSA

However, the supervisions of the Health Directorates that are regularly carried out by DIGEMID indicate that some Health Networks take more time to send reimbursements than others. In the case of the Loreto Health Directorate, for example, one of its Health Networks has not sent reimbursements for drugs for a total of 435,000 soles. Furthermore, there is one case in which the Health Network sent medication reimbursements after a year.²⁵

Such delays lead to the underfinancing of the SISMED fund and this is aggravated as a result of increases in SIS consumption due to the expansion of insurance coverage.

Non-insured patients and facilities bear the cost of understocks in pharmacies due to distortions caused by SIS rules

Facilities employ two strategies to cope with the lack of sufficient stock in pharmacies. In order to retain SIS financing, they cut down on supplies for prescriptions for uninsured patients, favoring SIS patients and participants in the National Health Strategies. Services provided to insured patients who are not given medications in accordance with established protocols results in the rejection of claims by the insurer (see the following section on management). In addition, pharmacists not only spend a good deal of time coordinating with the Health Micro-Network but they also have to coordinate with other facilities to borrow what they need. The latter practice is not sanctioned by existing regulations but is an intelligent response to the problems faced.

Table 10: Restrictions on sales of drugs in order to protect stock for SIS patients

In the last twelve months, did the facility restrict the sale of drugs to protect the stock of drugs for SIS patients?	Number/percent of facilities
Yes, one time.	3 (21.43%)
Yes, twice or more times	8 (57.14%)
No, there was no need	3 (21.43%)

Even though facilities try to guarantee stocks of drugs for insured patients, pharmaceutical delays can cause understocks in pharmacies which results in the provision of inadequate services and, consequently, a loss of reimbursements. The facilities and the Health Directorates then have to cover this loss with part of their own collected resources.

A vicious circle is created: delays in reimbursement lead to understocks of drugs and the lack of drugs causes the rejection of requests for reimbursement.

²⁵ Information from an interview with a DIGEMID staff member.

5. Management, Petty Cash and Insurance Reimbursement

Head Doctors' heterogeneous perceptions of autonomy

The Health Networks and Health Directorates manage all contracts. The facilities' Head Doctors have only a relative level of authority over personnel. The Head Doctor does not decide on schedules or the vacation calendar. Since a management-by-results scheme has not yet been implemented, when an emergency occurs, the Head Doctor has to obtain the voluntary agreement of staff or negotiate with the *nombrados* to work extra hours.²⁶ If an administrative fault is committed, neither the Head Doctor nor the Health Network can fire the professional; at most they can move the person to another facility. Nonetheless, 9 out of 14 facilities claim that they have medium autonomy in managing human resources inside their facility. However, during the interviews, comments made indicate a perception of a lack of autonomy in managing human resources because, in some facilities, the person in charge of human resources only controls attendance and does not manage the paperwork related to hiring nor does he/she know if the personnel received their salaries on time (because they are paid directly by the Network).

Despite the fact that legislation stipulates that facilities do not purchase pharmaceuticals or equipment, it was surprising to find that 7 out of 14 facilities in the sample claim to have medium autonomy in this regard and one claims full autonomy in drug procurement. A similar situation occurs with equipment procurement—5 facilities claim to have medium autonomy and 2 say they have full autonomy. There seems to be a heterogeneous perception regarding managerial autonomy among the facilities which could indicate that there are unwritten rules (Table 11). For example, some facilities stated that they purchase equipment and report the purchase afterwards. Another facility said that they use petty cash “*because it is made for spending.*” Finally, another facility reported that it divided a purchase into two different receipts so that they would not have reporting problems since there are set limits on expenditures per item.

Table 11: Facility managers' perceptions of autonomy

Category	Reduced autonomy		Medium autonomy		Full autonomy	
	Nº	%	Nº	%	Nº	%
Setting the amount of petty cash	10	71%	4	29%	0	0%
Setting the level of fees	8	57%	5	36%	1	7%
In-kind purchases	8	57%	5	36%	1	7%
Equipment procurement	7	50%	5	36%	2	14%
Pharmaceutical procurement	6	43%	7	50%	1	7%
Quantity of goods received by the facility	5	36%	9	64%	0	0%
Quantity of pharmaceuticals received by the	2	14%	12	86%	0	0%

²⁶ After this report was finished, the Ministry of Health increased the number of doctors' hours for consultations from four to six per day. Before doctors worked four hours in consultations and two hours in other related medical tasks. The total number of hours has not changed.

facility						
Human resources and schedule arrangements inside the facility	1	7%	9	64%	4	29%
Use of petty cash	0	0%	9	64%	5	36%
Use of equipment	0	0%	5	36%	9	64%

Other examples of lack of authority over personnel were found. For example, workers contracted by PAAG, a central unit of the Ministry of Health, are assigned to Health Posts in low income areas. These workers are not subject to the human resources regulations of the Network but, rather, to PAAG/MINSA. Cases of absenteeism and ghost workers were found during inspections of current central administration. Indeed, the Ministry of Health has just decided to transfer the responsibility for hiring and supervision to the Health Directorates in order to improve control.

In addition, workers hired to input data by SIS, the public insurer and a budget unit separate from the Ministry, also are not subject to facility regulations. In fact, the facility may have its own personnel for data input to handle the facility's statistics and clinical histories.

Large administrative tasks burden in facilities C I-1 to C I-4 lead to a need for specialized administrative personnel

As indicated in Table 12, the relationship between the administrative burden and the main categories of professionals (doctors, nurses, and midwives) per facility is, on average, 3 to 5 when all health professional categories are included. According to these findings, administrative personnel are very important in the management of the facilities. It can be concluded that investment in administrative training that includes a healthcare sector specialization would provide an important return in terms of efficiency in the provision of health services. The lack of such specialization results in health professionals spending time on administrative tasks instead of caring for patients or engaging in other healthcare related tasks: seeing patients, laboratory and pharmacy work.

Procurement and stocking (at least in urban settings) is so demanding that pharmacists have to neglect outpatient services in order to take care of logistical arrangements themselves (e.g.. following-up on Health Directorate deposits through repeated phone calls). The role of Health Micro- Network is unclear.

Table 12: Ratio of administrative burden to health professionals

Ratio	Max	Min	Median
Principal categories of professionals ¹	5:3	1:3	3.5:4
All categories of professionals ²	1:1	1:4	3:5

1/ Doctors, nurses, and midwives.

2 All health professionals

There is a gap between the number of personnel required by facilities and the number of personnel assigned

One of the most frequent problems reported by facilities is the insufficient number of professionals. According to the facilities survey, all facilities require at least one more doctor and 69% require at least one more nurse; however, 38% of the facilities did not receive the doctors requested and 56% did not receive the nurses requested.

Table 13: Comparison of the number of personnel required by facilities and the number assigned by professional category

Professional category	Requests from facilities for additional HR		Facilities that received 100% of HR requested		Facilities that received part of HR requested		Facilities that did not receive any additional HR	
	No.	%	No.	%	No.	%	No.	%
Doctors	13	100%	7	54%	1	8%	5	38%
Nurses	9	69%	4	44%	0	0%	5	56%
Midwives	4	31%	3	75%	0	0%	1	25%
Odontologists	3	23%	1	33%	0	0%	2	67%
Social workers	8	62%	3	38%	0	0%	5	63%
Psychologists	3	23%	1	33%	0	0%	2	67%
Other professionals or health technicians	8	62%	3	38%	1	13%	4	50%
Other administrative professionals or technicians	6	46%	1	17%	3	50%	2	33%

Supervision and lack of understanding the problem

Survey results indicate that there is no clear policy on the objectives of supervision visits. Normally, facilities do not receive important or meaningful advice after inspections are carried out. Supervision does not lead to or provide solutions to detected problems. This statement illustrates the problem:

“They [the supervisors] only check the cleaning ...of course, the bathrooms are dirty at 9:30 in the morning—the only cleaning lady we have has been cleaning the blood in the emergency room accumulated during the night...they [the supervisors] do not look or ask about our needs...only the dust” (recreated notes from survey).

Another issue detected during the interviews is that, in some cases, the supervisor did not seem to be aware of the responsibilities of the facility because he/she made recommendations related to areas in which the facilities do not have any autonomy. For example, supervisors suggested less personnel rotation and extending the hours the facility is open. As noted above, it is the Health Network is responsible for such personnel matters and the facilities do not have the authority to directly hire or fire personnel or transfer them easily. Moreover, in two facilities, the person in charge of personnel stated that she/he did not know if there were delays in the payment of personnel because these are direct transactions between the Health Network and the worker.

In other cases, supervisors were not aware of requests made by facilities. In one case, the supervisor from the Health Network suggested infrastructural improvements unaware that the facility already had submitted a request for such improvements to the Health Network. Furthermore, this is an area that lies within the responsibilities of the Health Networks.

Administration, procurement, and storerooms can generate leakage

The fact that there could be more than one channel for the receipt of goods and pharmaceuticals in the Health Centers creates the possibility for leakages. Five out of fourteen facilities state that they have more than one place to store goods. According to regulations, a receipt document (*PECOSA: Pedido de Comprobante de Salida*) registers every item received at a facility, and in principle, one person should be responsible for doing the registration. There could be cases, however, in which some services within facilities receive goods directly from the Health Network. This promotes incomplete registration of stocks, making it difficult to track the final destination of goods. The administrative coordinator of one facility stated that:

“I receive most of the items but there are two services— lab and dentistry— they coordinate directly with the Network and bring their supplies to the facility, but once I received a PECOSA with a large list and I was requested to sign... I waited for the doctor and saw that he had brought a lesser quantity than registered. I did not want to sign. ...Since then, I go to the Health Network and ask them to give the items to me...” (notes from interview).

In fact, a level 3 Health Center (included in our sample) is not supposed to have administrative personnel in charge of goods and services and, in addition, a storeroom should not exist. However our observations and visits told a different story: all the facilities reported have a storeroom for goods. In some cases, the pharmacy takes on the responsibility for the PECOSAs.

In response to the survey, 10 of 14 facilities reported that they have a storeroom for drugs and only one reported that it did not have a storeroom for vaccines.

Table 14: Number of facilities with storerooms for drugs and vaccines

	Answer	Number of facilities
Drugs	Yes	10 (71%)
	No	4 (29%)
Vaccines	Yes	13 (93%)
	No	1 (7%)

Amounts of petty cash sent back to the facilities by the Health Network are volatile, making planning difficult and creating disincentives

Each facility collects fees from non-insured patients to cover part of operations costs and drugs. The payments are collected separately: the pharmacy charges and receives money only for the items it sells and the central cashier charges for all other services, consultation, x-rays, and lab tests.

As explained above, the resources collected by the central cashier are deposited every day in the bank account of the Health Network. A part of these are sent back as petty cash to the facility to cover small purchases of goods and services. Furthermore, part of SIS reimbursements are also returned to the facilities as petty cash which is used for small urgent and non-programmable expenses such as photocopies, transportation, etc.

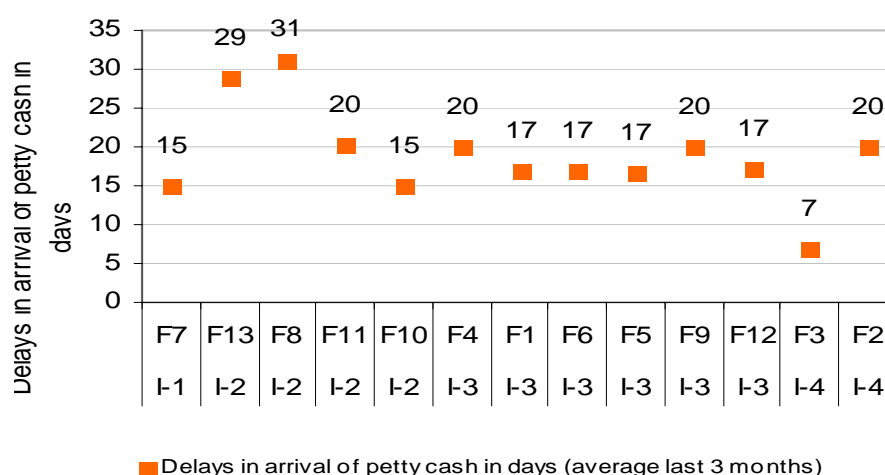
Even though the survey has only compiled information of three months of petty cash remittances, most of the facilities have experienced changes in the level transferred in the third month. Out of twelve facilities, three have double or almost triple the petty cash, and another three have increased up to 40 percent. Moreover, SIS petty cash volatility is greater since it partly depends on the number of consultations per month, which appears to be variable every month. This study found one noteworthy case in which the Head Doctor complained to the Health Network about the low level of petty cash transfers and as a result of her persistence and determination, the request was approved and doubled. This is another example of the importance of Head Doctors' management and negotiation skills.

“I had to complain because the amount was not enough and they duplicated the petty cash amount” (notes from surveys).

Delay in the arrival of petty cash from own collected resources and SIS reimbursements

All facilities reported delays²⁷ in the arrival of petty cash. Figure 17 shows that the arrival of petty cash has a delay range from one week to one month. Variations are even evident comparing facilities of the same level. This may indicate discretionary allocation of resources by the Health Network.

Figure 17: Delays in the arrival of petty cash at the Facility Level



Normally, the resources arrive two weeks after the expenditures are made and, according to the results of the survey, the facility has one week (on average) to provide proof of expenses

²⁷ For purposes of the study, the time delay is considered as the time span between the arrival of petty cash and the first day of the month to which it corresponds.

(receipts, vouchers, affidavits). Most of the expenses are for transportation, preventive health and campaigns, maintenance, and photocopies.

Table 15: Delays in the arrival of petty cash and time span for accountability

Average Delay	No. of Facilities (delay in petty cash)	No. of Facilities (time span for accountability)
One week or less	2 (15%)	13 (100%)
Two weeks	5 (39%)	0
Three weeks	4 (31%)	0
Four weeks or more	2 (15%)	0

Technical note: Delays were calculated taking as reference the standard date set as the first day of the month.

In the case of petty cash from SIS reimbursements, the situation is more unstable. The resources arrived on average four weeks after the expenditures were made and, according to the results of the survey, the facility has one week (on average) to provide proof of expenses (receipts, vouchers, affidavits).

Table 16: Delays in the arrival of petty cash from SIS reimbursements and timespan for accountability

Average Delay	No. of Facilities (delay in petty cash)	No. of Facilities (timespan for accountability)
One week or less	0	6
Between one and two weeks	1	4
Between two and three weeks	1	1
Between three and four weeks	0	0
Between four weeks and two months	2	1
Two months or more	6	0

Technical note: Delays were calculated taking as reference the standard date set as the first day of the month. In the case of SIS, personnel did not have any expectation or idea of when the resources were going to arrive.
Note: 4 out of 14 facilities did not provide information.

Given this situation, the question arises: how does a facility pay for services before receiving the money? Facilities cope with this in various ways: by getting credit from providers, by having personnel perform needed services, or by paying for goods with their own money. We found two cases in which the person in charge of petty cash was absent from the facility for several days or even on vacation and there was no one else to provide information, not even the Head Doctor. During such absences, if expenditures had to be made, the staff sometimes

paid out of their own pockets and waited to be reimbursed when the person in charge returned.

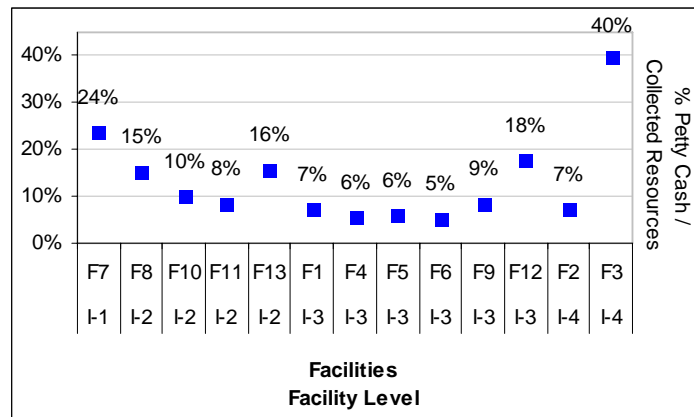
Petty cash from own collected resources no distributed according to an explicit formula

Head Doctors from the facilities reported that they were not sure if there is a regulation or formula regarding the redistribution of the funds through the petty cash allocation process. However, according to Health Network staff, the Health Network establishes a fixed amount of petty cash for each facility taking into consideration two factors:

- Historical data on the average amounts of petty cash spent taking into consideration facility size.
- The facility’s capacity to spend petty cash.

Furthermore, the survey results indicate that the Health Network reimburses only the amount that was spent by the facilities.

Figure 18: Weight of petty cash in relation to own collected resources by facility level (January-March 2008, monthly average)



As the information in Figure 18 demonstrates, the weight of petty cash in relation to own collected resources varies between facilities. This can be explained by a facility’s capacity to collect resources. However, inside each facility level, the situation varies. In the case of C I-3 facilities, the weight of petty cash in relation to own collected resources is more stable while in C I-2 and C I-4 facilities, the range is very wide.

Petty cash from SIS reimbursements also are not subject to an explicit formula

According to available information, SIS reimburses the Health Network for consultations and drugs. The Health Network sends the fraction related to drugs to the Health Directorate, and keeps the money for the purchase of goods, services, and contractual services. Out of this second tranche, a percentage is returned to facilities as petty cash to pay for small expenses such as transportation, photocopies, and other urgent expenses.

However, the situation in the case of reimbursements through petty cash to facilities is more or less similar to that of petty cash from own collected resources, specifically in terms of delays and volatility. Table 17 demonstrates that SIS petty cash for a period of two months

could be in the range of 18% to 11%. This variation could be the result of the difficulties to calculate the exact reimbursement amount on time.

Table 17: Weight of petty cash in relation to SIS reimbursements in soles (according to the Health Network)

Facilities	SIS reimbursements		SIS petty cash for Jan. & Feb.	Weight of Petty Cash in relation to SIS reimbursements
	January	February		
Facility 9	6,727	3,788	1,985	18.88%
Facility 1	1,784	1,738	594	16.87%
Facility 5	3,832	3,762	1,035	13.63%
Facility 4	6,165	9,478	2,020	12.91%
Facility 12	9,151	9,125	2,046	11.20%

Note: Health Network information was used since information from facilities was not available.

Even though the weight of SIS petty cash in relation to SIS reimbursements is not as variable as the weight of petty cash in relation to own collected resources, SIS reimbursements depends on the insurance claims that are approved during the month, something that takes a long time. In this case, the petty cash from the two first months arrived all together at the end of February.

Restrictions on the use of petty cash

Independently of the small amounts they receive, facilities cannot spend each amount received on more than one item (purchases must respond to immediate needs and efficient operations). They can only spend 10 percent of the received amount. To cope with this rigid requirement, facilities may split the payment into two or more receipts to comply with regulations.

“I had to purchase the cabinet with two receipts (the amount was divided into two parts so as not to pass the threshold allowed for the use of petty cash)” (notes from surveys).

At the Networks, according to the relevant legislation, the maximum amount that can be spent in cash for the purchase of a good or service shall be one Tax Revenue Unit (1 UIT).²⁸ The value of the UIT for the year 2008 is 3,500 soles.

The insurance fund cannot be fully used due to problems in the claims submission process

Insurance claims are rejected by the system for different reasons throughout the process: from the facility to the Health Network and from the Health Network to the insurance fund. Since the service has already been provided, someone has to be bearing the costs.

Affiliation of the poor could be improved, but the interviews revealed that a large number of SIS claims are not sent to the central office due to problems related to incorrect or incomplete data or the failure to follow protocols.

²⁸ Ministerial Resolution No. 434-2006/MINSA.

According to SIS affiliation regulations, each beneficiary should be registered in a specific facility where he/she must go to receive treatment. SIS insurance will not accept claims of SIS patients who receive treatment in a facility other than the one where he/she is already registered. The only exception to this rule is when a patient enters a facility through the emergency room.

Keeping these rules in mind, let's imagine a SIS patient who is registered in the facility A. This person goes to facility B to receive medical services because he/she believes that this facility has better medical equipment or doctors. This can result in two situations:

- Situation 1: Facility B refuses to see the patient and sends him/her back to facility A.
- Situation 2: Facility B sees the patient and the SIS central office rejects the claim. In this case, the service is financed by the Facility B because the service was already provided.

In situation 2, Facility B absorbs the variable cost of services, including medication and consultation.

This loss generates two different effects. In the case of the drugs that were provided to the patient but will not be replaced with SIS financing, the facility has to make an accounting arrangement to account for the decrease in the stock of drugs. This has a direct impact on the availability of drugs for all patients because the quantity of drugs that the Health Directorate buys and sends to each facility depends on the reports received from the facilities. In the case of consultations, the facility receives no reimbursement for goods (gloves, cotton, alcohol, etc.) that were used in providing this service.²⁹

Delay in the arrival of remittances for the Vaccination Program campaign

The central administration (MINSA) provides small resources for facilities in order to finance transportation, lunches, payments for campaign personnel, and promotion activities. These resources are sent to the Health Directorate which is responsible for sending them on to each Health Network and these Networks, in turn, distribute them to the facilities. However, in most of the cases studied, the remittances arrived at facilities during or at the end of the campaign and sometimes they never arrived at all. Triangulation of responses between the Health Network and the facilities shows that there is no clear control of the timing of remittances. As can be seen in Table 19, only one facility received its remittance at the beginning of the campaign during the period interviews were carried out.

Table 18: Comparison of responses from the Health Network and the facilities about remittances for the Vaccination Program campaign

Did the facility receive remittances during the last campaign?		
Health Network's response	Facilities' responses	
Yes	Yes	1 (7%)
	No	13 (93%)

²⁹ We consider salary as a fixed cost because it is not a function of the number of consultations.

Table 19: Triangulation of responses from the Health Network and the facilities about the timing of remittance deliveries for the vaccination program campaign

When was the remittance delivered during the last campaign?		
Health Network's response	Facilities' responses	
	Before or at the beginning of the campaign	1 (11%)
30 days after the start of the campaign.	During the campaign	2 (14%)
	At the end or after the campaign	11 (79%)

Table 20: Triangulation of responses between the Health Network and the facilities regarding ways of covering the lack of remittances for the Vaccination Program campaign

Health Network's response	Facilities' responses	
	Options	Number of Facilities
Health Network's Petty Cash	Facilities' petty Cash	5 (38%)
Program coordinator's and/or health personnel's own resources	Facility manager's and/or health personnel's own resources	5 (38%)
	Other	3 (23%)

Do the poor pay for preventive health?

As noted above, the petty cash that is returned to the facility is used, among other things, for transportation for home visits and for preventive health. The poor are the ones who pay fees in facilities.

Difficulties in the admission process of new patients for MDR-TB treatment within the National Health Strategy for Tuberculosis Prevention and Control

According to two facilities in the sample, the most important delay in the arrival of drugs for this strategy is due to the time required for the approval of new patients in the MDR program. The relevance of this finding is that if tuberculosis is not treated at the right time, treatment becomes more expensive and less effective. Thus, delays in the approval of treatment for new patients can lead to a lower quality of life for the patients and more costs to society and governments. The information gathered indicates that these delays are due to scheduling at the Health Directorate because this institution has only one meeting a month during which the inclusion of new patients can be approved.

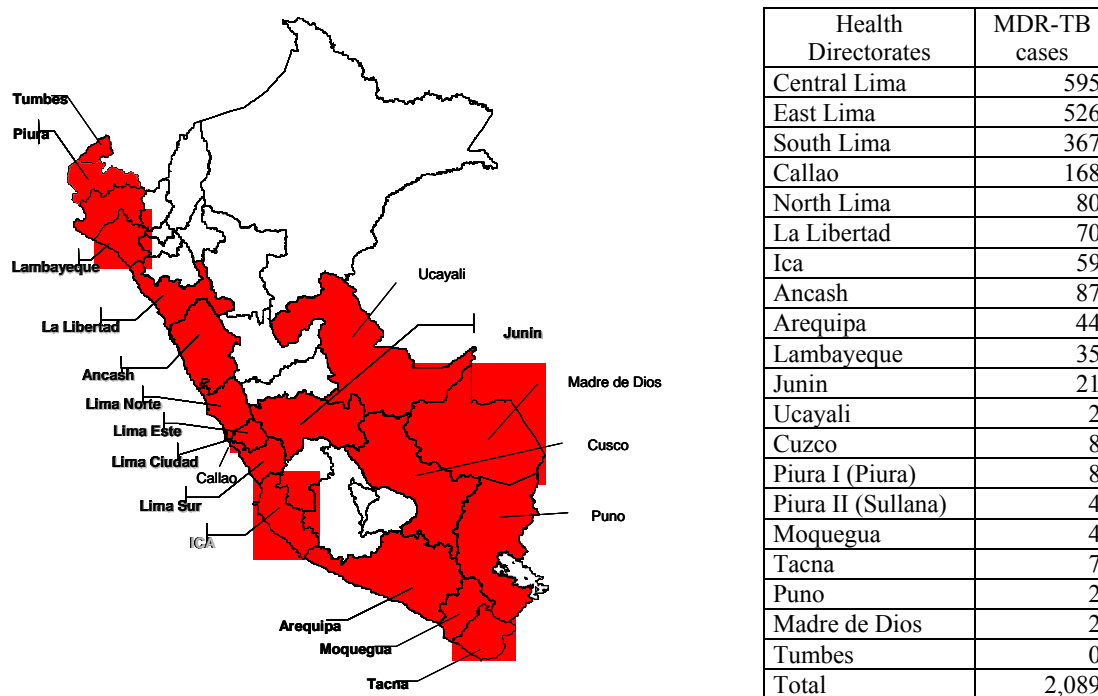
The presence of MDR-TB is the result of numerous failures in the healthcare system over time:

- Use of ineffective treatment regimes for MDR-TB during the 1980s and 1990s amplified resistance.
- Persistent MDR-TB cases in communities without timely access to adequate treatment increased sources of infection with MDR bacilli among contacts.

- Poorly-defined therapeutic policies regarding new MDR-TB cases among contacts of documented MDR-TB cases.
- Underestimation of the magnitude of MDR-TB prevented adequate diagnosis and treatment interventions.

An earlier study on the Vigía Project measured the costs of tuberculosis in Peru. The overall cost, including drugs, deaths, and disabilities, was nearly US\$ 95 million in 1999. Furthermore, the study identified other non-monetary costs originating in the loss of opportunity as a result of the time lag between the onset of the illness and medical check-ups. This makes public intervention less effective. The total budget of the Tuberculosis Prevention and Control Program during the time period covered by this study only represented 4.2% of tuberculosis total costs, taking into consideration all types of costs (monetary and non-monetary).

Figure 19: Distribution of MDR-TB cases per region (2007)



Lima & Callao: 83% of Total National MDR-TB cases

MDR-TB cases per year

2005: 2,799

2006: 2,090

2007: 2,089* (preliminary data)

Source: Ministry of Health - National Health Strategy for Tuberculosis Prevention and Control

Poor biosecurity conditions diminishes TB strategy efficacy

In some facilities, poor infrastructure and difficult conditions impede the provision of appropriate treatment for TB patients. For instance, in facilities with a scarcity of protective equipment (gloves, face masks), health personnel may suspend the provision of services. Furthermore, these adverse conditions reduce medical coverage or even the number of professionals interested in implementing the TB strategy because of fear of infection.

Differences between the information reported by the Health Network and the facilities

When the information collected from a group of facilities was triangulated with information from the Health Network, some cases were found in which the numbers reported were not the same. For this analysis, researchers took into consideration information reported by five facilities in three variables: the amount of petty cash from own collected resources forwarded, the amount of own collected resources, and the amount of petty cash from SIS reimbursements. The results show that the information recorded in different levels of the health system shows discrepancies.

In the case of petty cash from own collected resources (Table 20), 4 of 5 facilities underreported information for two months. On the other hand, in the case of the amount of own collected resources (Table 21), there were discrepancies in the information reported by both the Health Network and the facilities. Finally, in the case of petty cash from SIS reimbursements (Table 22), 2 of 5 facilities underreported, something that can be explained primarily by delays in the arrival of reimbursements to facilities.

Table 20: Triangulation of responses from the Health Network and the facilities regarding the amount of petty cash from own collected resources (in soles)

	According to the Health Network			According to the facilities		
	January	February	March	January	February	March
Facility 12	1,500	1,500	1,500	1,500	1,500	1,500
Facility 1	800	800	700	500	500	700
Facility 5	1,000	1,000	1,000	500	500	1,000
Facility 9	1,700	1,700	1,500	1,300	1,300	1,500
Facility 4	1,600	1,600	1,200	900	900	1,200

Table 21: Triangulation of responses from the Health Network and the facilities regarding the amount of own collected resources (in soles)

	According to the Health Network			According to the facilities		
	January	February	March	January	February	March
Facility 12	12,860	11,837	10,118	9,550	11,054	6,348
Facility 1	8,295	8,815	7,662	8,295	8,815	7,204
Facility 5	9,910	13,521	9,843	10,000	13,613	11,086
Facility 9	18,374	17,997	13,566	18,666	18,194	13,074
Facility 4	12,607	12,799	12,541	19,402	20,750	14,883

Table 22: Triangulation of responses from the Health Network and the facilities regarding petty cash from SIS reimbursements, February 2008 (in soles)

	According to the Health Network	According to the facilities
Facility 12	2,046	-
Facility 1	594	122
Facility 5	1,035	1,035
Facility 9	1,985	1,985
Facility 4	2,020	2,020

F. CONCLUSIONS AND RECOMMENDATIONS

1. This study followed the money with PETS methodology and found constraints and perverse incentives in the salary structure, the use of fee collection and petty cash management, procurement rules, and elsewhere. The current context in Peru, where a Results-Based Budget (RBB) is being piloted, provides an opportunity to incorporate adjustments in the management processes linked with the issues mentioned in order to obtain meaningful health outcomes.
2. The development of the study also found the need to assure more transparency in the health sector. It is interesting to notice the long process carried out in this study to get clearance to apply PETS methodology; but, while the issue of transparency is important, of equal importance is the need to understand the complexity of the budget flows that this study has depicted as “spaghetti budget flows”.
3. Linked to the previous issue is the urgent need to share knowledge of rules and best practices at all levels of the system in order to have a better sense of how the system works and who is responsible for what. Responsibility is fragmented, and an issue can be the responsibility of more than one agent. The levels of responsibility have to be clear in order to construct a single line towards RBB.
4. Fiscal constraints on hiring personnel with tenure and improving salaries using ordinary resources as well as pressures from unions have pushed the health system into finding alternatives such as charging and institutionalizing a list of fees to cover part of personnel bonuses. The information obtained from the National Household Survey in Metropolitan Lima indicates that the poor and the extremely poor who seek treatment go to the public sector, moreover, about 76 percent and 60 per cent of the extremely poor and poor respectively pay for consultation. This arrangement has caused the transfer of system costs to the uninsured poor who pay for services. The human resources bonus has become dependent on a fragile source of income that might disappear as public insurance coverage increases.
5. A related issue is the inequities created in the distribution of fee collections. First, there is not an explicit formula for redistribution of funds from the Health Network to the facilities, except that this Network pursues equalization. Second, the more active clinics are affected by a negative incentive, since they are cross subsidizing other facilities. In the urban setting, cross subsidies to the poor clinics is not the problem, an issue for consideration is the existence of the probability that poor patients in active clinics might be cross subsidizing the poor in poorer areas. Third, clinics located in rural areas have fewer benefits than those located in urban areas.
6. The collected fees have ended up not only paying the bonuses but also paying for part of the health facility’s goods and services. The purchase of additional goods needed with petty cash has been competing with the personal welfare of healthcare personnel.
7. In a time of prosperity and growth, the existence of fiscal space creates an opportunity to move from dependence on out of pocket payments to tax-based financing. This change will put an end to perverse incentives in the initial phase and, later, would provide increased funding. Since resources are scarce, and currently the government is proposing to slow down public expenditures, a more

rigorous process of prioritization would have to be instituted. However, the benefits of assuring a better financing base could be enhanced by a human resources merit system.

8. There is a weakness at the intermediate level of management. The absence of assertive and capable administrative teams results in losses that are translated into high opportunity costs. The latter could be measured considering the time health professionals take to carry out administrative and procurement tasks instead of working in consultations. For example, due to deficiencies in the procurement of goods and drugs, pharmacy staff and National Strategy coordinators constantly have to travel back and forth to the Networks and Directorates to verify the existence of stock. In cases when facilities do not obtain drugs and run into shortages or delays, personnel have to stop consultations for hours while their personnel complain to the unit responsible for the provision of these drugs in order to accelerate their delivery and resolve the issue. There is a need to strengthen this level of management and its procedures. In this respect, a review of the regulations of the National System of Investment has to be carried out to allow for investment in human resources. Every investment project in the sector should include an institutional development component.
9. Cases of scarcity and delay in supplying medical goods and drugs can jeopardize the health of the population. This study detected problems of procurement of pharmaceuticals, health inputs, and other goods. These problems exist at the level of frontline providers in terms of programming supplies and at the level of intermediate bodies—such as the Health Networks and the Health Directorates and Ministry of Health—in terms of bidding and purchasing. These problems also affected the National Strategies of Vaccination and Tuberculosis Prevention and Control; health professionals in order to protect these programs, prefer attending to the Strategies and leave other services unattended in terms of goods; or simply not controlling TBC patients. A detailed analysis of costs resulting from failures in procurement processes should be carried out. Information on these problems has not been sufficiently disseminated. Several factors contribute to this scarcity scenario, including SIS reimbursements. There is a need for investment in adequate storage rooms and related equipment, including tools such as stock control mechanisms.
10. The functioning of SIS public insurance may be causing perverse incentives for health personnel. In addition, problems in the management of claims result in some costs being absorbed or paid for by non-insured patients. There are no common objectives (principal-agent) between SIS and the providers. Since SIS only covers variable costs and not salaries for doctors and nurses, health personnel may be pushed into accepting more non-SIS patients in order to collect fees, especially when, as this study indicates, fees represent additional benefits for the staff. On the other hand, since drugs are sometimes close to under stocked, pharmacists prefer SIS patients so that they can maintain regular levels of insurance claim reimbursals related to variable costs; as a result, the needs of non-insured patients are sacrificed. Moreover, since reimbursements are done ex post and are paid two months later, this can cause delays in the purchase of drugs. Many of these problems could be solved if SIS adopted a prospective payment system and provided explicit positive incentives to healthcare personnel to work more with SIS insurance.

11. Petty cash, even though it is not a large amount of money, represents an interesting facilitating vehicle that some head doctors have used to overcome some institutional budget constraints. These resources have been mostly used in transportation for promotional activities, and since we are arguing that the poor are paying fees, it could be stated that the poor are paying the promotional and preventive health services for the poor.
12. Remittances to cover the vaccination campaigns at the level of facilities different from petty cash, also experienced delay problems; 11 out of 14 facilities indicated that the funds arrived at the end of the campaign.
13. In terms of autonomy, doctors have different perceptions regarding their actual level of responsibility and authority. This study found that Head Doctors have limited autonomy and authority in terms of human resources management, petty cash, and other matters. Likewise, health professionals indicate that supervision visits from intermediate agencies do not provide positive guidance to overcome any identified limitation. Throughout this research, the lack of communication was noticeable between agencies and even among health professionals from the same level of administration.

REFERENCES

Alvarado, Betty and Eduardo Morón (2008). Towards a Result Based Budget: Strengthening Transparency and Accountability. Lima, Universidad del Pacifico. Processed. Supported by Transparency and Accountability Project, The Brookings Institution.

Alvarado, Betty M. and Rony Lenz (2006). Health Service for the Poor. In Cotlear, Daniel. A New Social Contract for Perú. In The World Bank, Washington, DC. January.

Altobelli, Laura C., Ana U. Sovero and Ricardo Diaz R (2004). Cost-efficiency study of CLAS associations. Altobelli, Laura C., Ana U. Sovero and Ricardo Diaz R. Future Generations - Peru. Peru.

Consortio AIS – Universidad Peruana Cayetano Heredia (2006). Estudio sobre Medicamentos: Acceso y calidad de medicamentos e insumos médicos. Informe Final al Ministerio de Salud. Processed.

Cotlear, Daniel (2006). A New Social Contract in Peru, The World Bank.

Gauthier, Bernard (2006). PETS-QSDS In Sub-Saharan Africa: A Stocktaking Study. HEC, Montreal, September.

Preker, Alexander S. and April Harding. (editors) (2003). Innovations in Health Service Delivery : The Corporatization of Public Hospitals – Washington, D.C. : The World Bank.– (Health, Nutrition, and Population Series).

Instituto APOYO (2002). Public Expenditure Tracking Survey. The Education Sector in Peru.

Jaramillo, Miguel and Giovanni Escalante, Pierina Pollarolo, Arturo Rubio. (2006). Estudio sobre los Recursos Humanos en Salud en Perú: Gestión, Distribución, Normatividad, regulación, Condiciones laborales y Salariales y Formación. Grupo de Análisis para el Desarrollo, GRADE, Lima, Julio. Processed.

Milgrom, Paul Robert and John Roberts. Bargaining Costs, Influence Costs and the Organization of Economic Activity, Perspectives on Positive Political Economy, edited by James E. Alt and Kenneth A. Shepsle, Cambridge: Cambridge University Press. (1990).

Ministry of Economy and Finance. Integrated Financial System (SIAF). www.mef.gob.pe

National Institute of Statistics and Informatics (2007). National Household Survey of 2006. Lima.

Ministry of Health. Reports on Tuberculosis Prevention and Control and Vaccination programs. www.minsa.gob.pe

Ministry of Health. Health Diagnosis and Analysis. ASIS South Lima.

Minister of Health (1999). The Economic Impact of Tuberculosis in Peru. Lima: National Institute of Health/Vigia Project.

Government Procurement Superior Council (CONSUCODE). www.consucode.gob.pe

Savedoff, William (2007). Transparency and Corruption in the Health Sector: A Conceptual Framework and Ideas for Action in Latin American and the Caribbean. Inter-American Development Bank. Washington D.C., May.

Uganda Ministry of Health and World Bank (2003). Uganda District Health Questionnaire.

UNESCO-IIE (2006). Public Expenditure Tracking Surveys in Education. International Course. Processed.

ANNEXES

Annex 1 - Interviewees

Open – ended interviews

1. Advisor for Decentralization, Ministry of Health, Vice Minister's Office
2. Budget Specialist, Strategic Resources Office ORE, Ministry of Health
3. Chief of Facility, San Genaro Facility, Chorrillos, Lima
4. Chief of Planning, Health Directorates, South Lima , Chorrillos Network, Lima
5. Chief of Research, Statistics General Office, Ministry of Health
6. Chief of Strategy, National Health Strategy for TBC, Ministry of Health
7. Chief of Strategy, National Strategy for Sexual and Reproductive Health Care, Health Directorate, Central Lima
8. Coordinator of the National Health Strategy for TBC -Tuberculosis Strategic Resources Office ORE, Ministry of Health
9. Coordinator of the National Health Strategy for Vaccination, Strategic Resources Office ORE, Ministry of Health
10. Coordinator of the National Health Strategy of TBC – Tuberculosis, General Division of Pharmaceuticals, DIGEMID, Ministry of Health
11. Executive Director, Budgetary Office, Ministry of Health
12. Head of the Research Committee, Health Directorate, Central Lima
13. Remittances Coordinator, Strategic Resources Office, ORE Ministry of Health
14. Technician, National Health Strategy for Vaccination, Ministry of Health

Closed- ended interviews / surveys: 14 health facilities

Typical team interviewed/survey in each facility

1. Head Doctor
2. Pharmacists
3. National Strategy Responsible in Tuberculosis and Vaccinations (could be one or two persons)
4. Lab Specialist
5. Store Room Administrator
6. Human Resources Coordinators (could be nurses or administrative assistants)
7. Petty Cash, Goods and Services (*Logística*) Coordinator (could be one or two persons, in most of the cases were administrative technicians)
8. General Cashier
9. Pharmacy Cashier
10. SIS Administrative Assistants (data input management)

Annex 2 - Characteristics of Health Directorate II South Lima (DSL)S)

Health Directorate	Health Networks	Health Micro-Network
II South Lima (DSL)S)	Barranco – Chorrillos – Surco	Surco
		Urbana
		Villa
	San Juan de Miraflores – Villa María del Triunfo	Manuel Barreto
		Leonor Saavedra - Villa San Luis
		Trebol Azul - San Juan
		Ollantay
		Jose Galvez - Nueva Esperanza
		Villa Maria - Jose Carlos Mariategui
		Daniel Alcides Carrión - Tablada de Lurin
	Villa El Salvador – Lurin – Pachacamac – Pucusana	San José
		Juan Pablo II
		Cesar Lopez Silva
		San Martin de Porres
		Lurin
		Pachacamac
		San Bartolo
		Portada de Manchay

Demographics - Health Directorate II South Lima: Distribution of population in districts by age, 2007

Districts	Total	Children (0 to 9)	Adolescents (10 to 19)	Adults (20 to 59)	Older Adults (over 60)
Total	1,877,983	328,232	336,560	1,036,386	176,805
Barranco	35,026	6,122	6,277	19,329	3,298
Chorrillos	274,827	48,035	49,253	151,666	25,873
Santiago de Surco	290,671	50,804	52,091	160,410	27,366
Lurin	61,396	10,731	11,002	33,883	5,780
Pachacamac	65,276	11,410	11,698	36,022	6,146
Pucusana	10,608	1,855	1,901	5,855	997
Punta Hermosa	5,022	877	902	2,770	473
Punta Negra	5,021	877	901	2,770	473
San Bartolo	6,355	1,110	1,139	3,507	599
San Juan de Miraflores	349,573	61,098	62,650	192,916	32,909
Santa Maria del Mar	80	10	11	50	9
Villa El Salvador	395,340	69,098	70,851	218,172	37,219
Villa Maria del Triunfo	378,788	66,205	67,884	209,036	35,663

Source: National Population Census 2005. National Institute of Statistics (INEI).

Prepared by: the Technical Office for Demography of INEI and the General Office for Statistics and Information (OGEI) of the Ministry of Health.

Health Profile – Health Directorate II South Lima. Principal causes of general morbidity in outpatient consultations by sex, 2006.

Causes	Total	%	Women	%	Men	%
	1,149,444	100.0	672,812	100.0	476,632	100.0
Acute infections of the upper respiratory system	337,845	29.4	172,822	25.7	165,023	34.6
Mouth, salivary glands and maxillary ailments.	133,542	11.6	86,101	12.8	47,441	10.0
Infectious intestinal diseases	98,376	8.6	48,815	7.3	49,561	10.4
Chronic respiratory diseases	54,523	4.7	26,211	3.9	28,312	5.9
Other urinary system ailments	26,770	2.3	22,596	3.4	4,174	0.9
Ailments of the esophagus, stomach, and duodenum	20,837	1.8	13,996	2.1	6,841	1.4
Dermatitis and eczema	19,786	1.7	10,721	1.6	9,065	1.9
Mycosis	17,838	1.6	11,041	1.6	6,797	1.4
Inflammatory ailments of organs	17,224	1.5	17,224	2.6		0.0
Helminthiasis (b65 - b83)	16,586	1.4	9,340	1.4	7,246	1.5
Other ailments	406,117	35.3	253,945	37.7	152,172	31.9

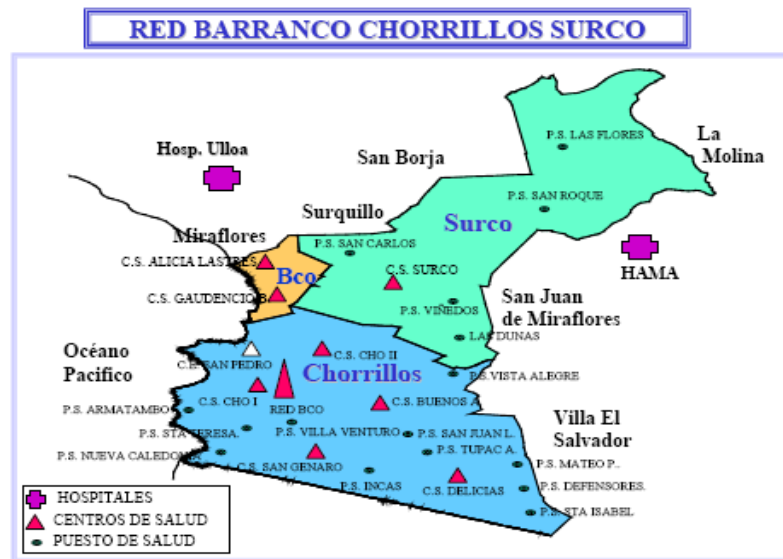
Source: OGEI/MINSA.

Production - Health Directorate II South Lima. Patients treated and outpatient consultations by life stages - 2006

Life Stages	Total		Men		Women	
	Patients treated	Consultations	Patients treated	Consultations	Patients treated	Consultations
Total	752,041	2,531,824	272,760	812,783	479,281	1,719,041
Children (0 to 9 years old)	259,167	902,933	133,660	460,810	125,507	442,123
Adolescents (10 to 19 years old)	128,324	349,351	49,133	113,071	79,191	236,280
Adults (20 to 59 years old)	334,102	1,170,581	77,503	196,282	256,599	974,299
Older Adults (over 60 years old)	30,448	108,959	12,464	42,620	17,984	66,339

Source: Statistics from Health Directorate II South Lima.

Annex 3 - Geographical distribution of health facilities in the Barranco-Chorrillos-Surco Network



Annex 4 - Characteristics of a C I-3 Health Facility

Standard characteristics that a C I-3 facility should have:

Characteristics:	Should have at least one: Doctor Nurse Midwife Nurse Technician or Auxiliary Nurse Odontologist Laboratory Technician Pharmacy Technician Statistics Technician or Statistics Auxiliary
Production units and their respective functions:	<i>Pharmacy:</i> Human Resources Infrastructure Equipment Organization Resolution capacity
	<i>Clinic laboratory:</i> Human Resources Infrastructure Equipment Organization Resolution capacity
	<i>External service</i>
	<i>Community and environmental health</i>

Annex 5 - Focus of Health Strategies

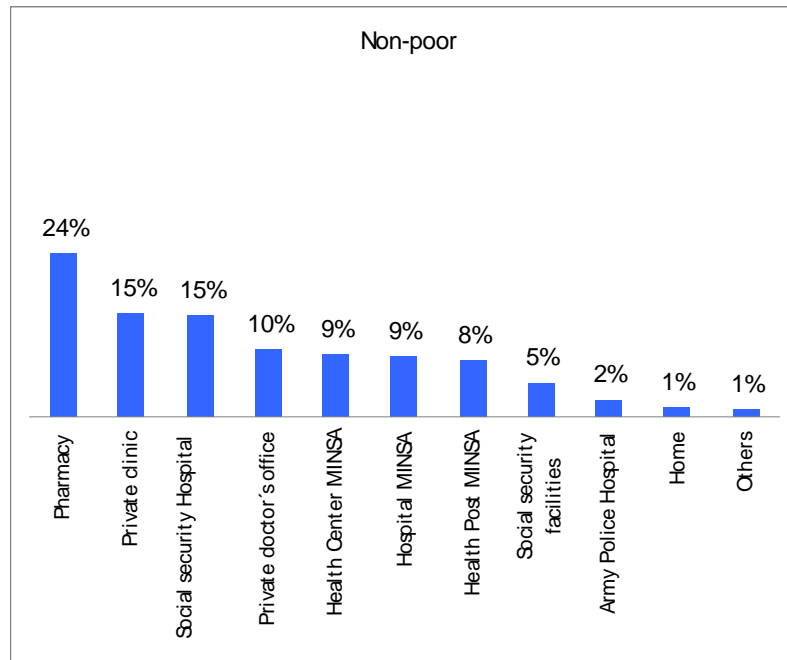
National Health Strategy for Vaccinations (ESN INMUNIZACIONES)

- The actions related to this strategy are implemented on the first, second, and third level of healthcare. ESN IMMUNIZACIONES activities are included in the package of basic services (Integral Care by Life Stages) and include prevention and promotion actions.
- Includes a “Vaccination Plan” approved in 2005 that was framed in accordance with Ministry of Health policy guidelines, national health priorities, and the Millennium Development Objectives.
- ESN IMMUNIZACIONES has various financing sources. The Public Treasury provides 70 percent of the budget and additional resources come from donations, external reimbursable resources or loans. The remaining 15 percent comes from other sources including the private sector. Currently, regional and local governments provide diverse resources (human, economic, material, etc.) to entities implementing ESN IMMUNIZACIONES.

The National Health Strategy for Tuberculosis Prevention and Control (ESN-PCT)

- The National Health Strategy for Tuberculosis Prevention and Control (ESN-PCT) is part of General Directorate for the Health of Individuals (DGSP) of the Ministry of Health (MINSA).
- The ESN-PCT is charged with establishing the principles, standards, and procedures for the control of tuberculosis (TB) in Peru. It also guarantees detection, diagnosis, and free-of-charge treatment to all patients with TB and MDR-TB in all facilities.
- TB is a curable disease that affects the economically active population. The most vulnerable group is those from 15 to 54 years of age; teenagers and older adults constitute one third of the cases.
- Currently, approximately 60 percent of cases of all types of tuberculosis and 82 percent of MDR-TB cases are concentrated in Lima and Callao. In the interior, the regions with the highest levels of tuberculosis are Madre de Dios, Ucayali, Tacna, Loreto, and Ica.

Annex 6 – Location of healthcare delivery for the non-poor (Metropolitan Lima, 2006)



Annex 7 - Detailed description of in-kind flows (pharmaceuticals)

The provision of pharmaceuticals is organized through SISMED (Integrated System for Pharmaceutical Provisions and Supplies) which includes various within the Ministry of Health, the Health Directorates, the Health Networks, and the facilities and delineates the regulations and responsibilities of each unit according to seven steps: selection, programming, procurement, storage, distribution, use, and reporting.

Even though difficulties can be found in each these steps, this study focuses on four steps: programming, procurement, storage, and distribution.

SISMED regulations are contained in two documents:

- Ministerial Resolution No. 1753-2002-SA/DM. Approves the directives for the Integrated System for Pharmaceutical Provisions and Supplies - SISMED (November 10, 2002).
- Ministerial Resolution No. 367-2005/MINSA. Modifies the directives for the Integrated System for Pharmaceutical Provisions and Supplies - SISMED (May 19, 2005).

SISMED PARTICIPANTS

Ministry of Health

The following areas:

- **General Directorate for Pharmaceuticals, Supplies, and Drugs (Dirección General de Medicamentos Insumos y Drogas - DIGEMID)**
Responsible for regulating, articulating, monitoring, supervising, providing technical assistance, and for implementing the processes and functions of the SISMED system.
- **General Directorate for the Health of Individuals (Dirección General de Salud de las Personas - DGSP)**
Responsible for regulating, monitoring, and reviewing healthcare guidelines and protocols of Health Networks as well as ensuring the quality of healthcare delivery to users with an emphasis on the use of pharmaceuticals in healthcare interventions.
- **General Office for Administration (Oficina General de Administración - OGA)**
Responsible for preparing directives and instructions and providing technical assistance on administrative functions related to logistics, accounting, and budget execution in the SISMED system.
- **Integrated Health Insurance (Seguro Integral de Salud - SIS)**
Responsible for ensuring financing and timely reimbursement for services provided to patients covered by the Insurance Fund.
- **Health Directorates / Regional Health Directorates**
Responsible for providing leadership, management, monitoring, control, supervision and evaluating the performance of the SISMED system as well as consolidating, analyzing and submitting the information generated in the facilities under its jurisdiction and providing feedback.
- **Facilities**
Responsible for programming, requesting, storing, and dispensing pharmaceuticals and medical-surgical supplies as well as maintaining the information generated by the SISMED updated.

SOURCES OF FINANCING

- Resources obtained from the sale of pharmaceuticals.
- Financial resources allocated by SIS from reimbursements for pharmaceuticals.
- Financial allocations from the National Treasury for the procurement of pharmaceuticals.

- International Cooperation resources and other sources for procurement of pharmaceuticals when there is the clear intention to permit the sale of pharmaceuticals.
- Financial resources from donations received for the procurement of pharmaceuticals, only if the donor explicitly agrees that these products be sold.
- Financial resources obtained through repayments from the General Office of National Defense through the OGA for the delivery of pharmaceuticals and medical supplies to patients affected by emergencies or disasters.

PROCUREMENT OF PHARMACEUTICALS

Procurements can be carried out on the following levels:

- a.- National level: National purchases.
- b.- Regional level: Regional purchases.
- c.- Institutional level: Institutional purchases.³⁰

National purchases

Purchases of pharmaceuticals and medical supplies used in large quantities in facilities and whose purchase has an impact on the national budget. The OGA is in charge of these purchases.

Regional purchases

Purchases of all pharmaceuticals and medical supplies not included in national purchases. Health Directorates or Regional Health Directorates are in charge of these purchases.

EXPENSES

The resources of the SISMED Revolving Fund can only be used for:

- a. Procurement of pharmaceuticals and medical supplies.
- b. Hiring of professionals and pharmacy technicians associated with the SISMED system.
- c. Information technology.
- d. Drugs for poor patients not covered by any insurance or health interventions.
- e. Transfers to other public institutions when there is a risk of expiration. (sic) [as it is understood, it should be in-kind transfers].
- f. Equipment, improvements, expansion, construction and/or upgrading of storage and information networks and distribution in the SISMED system and implementation of the Storage and Dispensing Good Practices.
- g. Implementation of cost containment strategies and improving the quality of pharmaceuticals.
- h. Promotion of the rational use of pharmaceuticals, drug monitoring, and the Pharmaceutical Unit Dose Care System.
- i. Implementation of pharmaceutical information centers.
- j. Development of the skills of human resources in concordance with IDREH.
- k. Other expenditures on goods and services strictly linked to the SISMED system.

It is forbidden to spend resources from the SISMED Revolving Fund on food baskets, uniforms, and other items delivered directly to workers in the form of job benefits and which are not directly related to the activities of the SISMED system.

Ten percent of the operation price is intended to cover the costs of health facilities, specified in items (b-k above). The remaining 10 percent is to be used to cover the costs of the Executive Directorate for Pharmaceuticals, Supplies, and Drugs (DEMID), specified in items (b-k above).

Administrative costs directly related to the SISMED system for funds earmarked for the purchase of pharmaceuticals which SIS reimburses to the Health Directorates or the Regional Health Directorates are financed.

³⁰ This is the purchase of pharmaceuticals and medical supplies not included in national or regional purchases but rather purchased by hospitals, which are executing units, and by specialized institutes. This study only examines national and regional purchases.

DEPOSITS

From the sale of pharmaceuticals:

100 percent of the funds from the sale of pharmaceuticals and medical supplies to patients not covered by SIS and from health interventions by all primary care level facilities are deposited in the bank account of the SISMED Fund.

SIS reimbursements:

Financial resources constituting SIS reimbursements for that part of the pharmaceuticals that were provided to patients are sent directly from SIS to the accounts of the Health Directorates/Regional Health Directorates and are equivalent to the pharmaceuticals and medical supplies consumed (valued at the cost of operation).³¹

Reimbursements and remittances from the OGA:

The OGA sends the Health Directorates/Regional Health Directorates reimbursement funds equivalent to the pharmaceuticals and medical supplies designated as *medicamentos de soporte* consumed in health interventions, valued at the cost of operation. The Health Directorate purchased *medicamentos de soporte*.

Once the national purchases are done (*medicamentos estratégicos*), pharmaceuticals and medical supplies are sent in-kind to the Health Directorates/Regional Health Directorates, which is depicted in the flows shown in Figure 7 as in-kind transfers.

DISTRIBUTION

The Executive Directorate for Pharmaceuticals, Supplies, and Drugs (DEMID) is responsible for filling, in a timely manner, orders for pharmaceuticals and medical supplies from health facilities that are not executing units³² under its jurisdiction.

EVALUATION INDICATORS OF THE SISMED SYSTEM

The provision of essential drugs in a timely manner and in the quantities necessary to meet the health needs of the population is one of the critical factors relating to access to drugs and are indicators of the level of efficiency in the management of the supply system. For this reason, the SISMED system monitors the management of DISA/DIRESA employing the following set of indicators:

Indicator	Description	Sub-indicators
Drugs Availability	Measures the level of drug supplies in health facilities.	<ul style="list-style-type: none">• Percentage of drugs with <u>acceptable availability</u> (there is sufficient stock in optimum conditions to meet demand for 1 to 6 months of regular consumption).• Percentage of drugs with <u>unacceptable availability</u> (there is an overstock of drugs in optimum conditions for 6 months average consumption or drugs not consumed in the months evaluated, without rotation).• Percentage of drugs with <u>critical availability</u> (there is insufficient stock to meet one month's average consumption or no stock at all.)

The availability of drugs in Health Directorates and Regional Health Directorates for the year 2007 varied considerably—the national average of drugs whose availability was at a critically low level is 20 percent.

	Health Directorates / Regional	Indicators of Availability 2007	Availability
--	--------------------------------	---------------------------------	--------------

³¹ The cost of operation is the sales price.

³² Executing Units such as Health Directorates are the only units permitted to buy drugs.

	Health Directorates	Acceptable (A)	Not Acceptable (B)	Critical (C)	2007 (A) + (B)
1°	AYACUCHO	38.81%	49.45%	11.74%	88.26%
2°	JUNIN	39.25%	48.79%	11.96%	88.04%
3°	AREQUIPA	44.76%	43.09%	12.15%	87.85%
4°	TACNA	52.06%	34.40%	13.54%	86.46%
5°	CUSCO	50.62%	35.63%	13.76%	86.24%
6°	SAN MARTIN	44.45%	40.54%	15.01%	84.99%
7°	CUTERVO-CAJAMARCA III	37.07%	47.31%	15.61%	84.39%
8°	CHANKA-ANDAHUAYLAS- APURIMAC II	31.18%	52.88%	15.93%	84.07%
9°	LIMA SUR (Lima II)	60.25%	23.72%	16.04%	83.96%
10°	PUNO	32.14%	51.06%	16.80%	83.20%
11°	MADRE DE DIOS	32.32%	50.52%	17.17%	82.83%
12°	PIURA I	39.24%	43.46%	17.30%	82.70%
13°	HUANCAVELICA	44.04%	38.58%	17.38%	82.62%
14°	TUMBES	45.95%	35.55%	18.50%	81.50%
15°	JAEN	45.48%	36.00%	18.52%	81.48%
16°	LA LIBERTAD	38.76%	42.19%	19.05%	80.95%
17°	APURIMAC I	33.05%	47.66%	19.29%	80.71%
18°	PASCO	39.35%	41.21%	19.44%	80.56%
19°	LIMA NORTE (Lima III)	40.59%	38.84%	20.56%	79.44%
20°	LIMA ESTE (Lima IV)	60.25%	19.02%	20.73%	79.27%
21°	LIMA CIUDAD (Lima V)	51.83%	26.80%	21.37%	78.63%
22°	CALLAO (Lima I)	39.71%	38.90%	21.39%	78.61%
23°	HUANUCO	44.76%	33.83%	21.41%	78.59%
24°	UCAYALI	35.56%	42.43%	22.01%	77.99%
25°	AMAZONAS	32.62%	45.36%	22.03%	77.97%
26°	CAJAMARCA I	38.78%	38.49%	22.73%	77.27%
27°	SULLANA - PIURA II	37.78%	39.24%	22.98%	77.02%
28°	ANCASH	31.49%	43.03%	25.48%	74.52%
29°	CHOTA-CAJAMARCA II	34.91%	39.38%	25.71%	74.29%
30°	ICA	36.16%	35.18%	28.66%	71.34%
31°	LAMBAYEQUE	30.68%	38.20%	31.12%	68.88%
32°	LORETO	30.63%	36.52%	32.85%	67.15%
33°	MOQUEGUA	27.32%	35.81%	36.86%	63.14%
	National Average	40.07%	39.80%	20.13%	79.87%

Source: DIGEMID/MINSA,

Annex 8 - Health Directorates (DISA) EU that did not plan for anti tuberculosis drugs, 2007

Dirección de Salud	Pirazinamida	Etambutol	Rifampicina	Isoniacida	Estreptomina
Amazonas					X
Arequipa	X	X	▼	X	
Ancash	X		X		
Apurimac II					X
Bagua		X			
Cajamarca	X				
Cajamarca II					X
Cajamarca III					X
Callao		X		X	
Cusco		X		X	
Ica	X	X	X	X	
La Libertad	X	X			
Lima Norte			X		
Pasco	X	X	X		X
Piura II	X	X	X		X
Puno	X		X		
San Martín	X	X	X		
Ucayali					X

Source: National Health Strategy for Tuberculosis Prevention and Control.

Annex 9 - Facilities Survey Template

FACILITIES SURVEY

a) No. of Survey	b) Interview Date
c) Name of the person conducting survey 1:	d) Name of the person conducting survey 2:

Identification of the Facility

1. Facility Name	1b. Type of Facility 1: CLAS 0: NO CLAS	
2. Department	3. Province	
4. District		
5. Facility Code	6. Facility Location (INEI, location code UBIGEO)	
7. Name of Network the facility is a part of :	8. Name the Micro-Network the facility is part of :	
9. Is the Facility the head of the Micro Network?	1 = Yes 2 = No	

FACILITY HEAD DOCTOR SURVEY

Information on the Head Doctor

10. Name of Facility Head Doctor:			
11. Sex:	1 = Female 2 = Male	12. Type of contract:	1 = Permanent employee 2 = Contract worker
13. Working experience as Head Doctor in this Facility:	i. Years		
	ii. Months		
14. Working experience as Head Doctor in any facility or as the Director of any DISA/ DIRESA:	i. Years		
	ii. Months		

DIRECTOR EJECUTIVO DE LA RED

HEAD DOCTOR

HEAD DOCTOR

HEAD DOCTOR

HEAD DOCTOR

HEAD DOCTOR

HEAD DOCTOR

Detail of the services:

General attention in services:	15. Do you have this service? 1 = Yes 2 = No	16. Number of days per week that the service operates	17. Fee (Soles)	18. Attention shift 1 = 6 hours (8 a.m. – 2 p.m.) 2 = 12 hours (8 a.m. – 2 p.m. / 2 p.m. – 8 p.m.) 3 = 24 hours
i. General Medicine				
ii. Obstetrics				
iii. Odontology				
iv. Psychology				
v. Pharmacy				
vi. Pediatrics				
vii. Emergency				
viii. Laboratory				
ix.				
x.				

19. Do you have a 24 hours shifts for assisting in births?	1 = Yes 2 = No	
--	-------------------	--

20. Comments:

21. Who approves the price list?	1 = DISA 2 = Network 3 = Micro Network 4 = Facility	
----------------------------------	--	--

22. Do you have approval for you current price list?	1 = Yes 2 = No	
--	-------------------	--

23. During the time you have been in charge, did you request any adjustments to your price list?	1 = Yes 2 = No		24. If you requested an adjustment, were you able to modify the price list?	1 = Yes 2 = No	

25. Comments:

26. Survey administrator: mark if you were shown the price list in the facility	1 = Yes 2 = No	
---	-------------------	--

HEAD DOCTOR HEAD DOCTOR HEAD DOCTOR HEAD DOCTOR HEAD DOCTOR HEAD DOCTOR HEAD DOCTOR

Autonomy:

Issues	27. Do you consider that you have autonomy regarding the following issues?				
	From 1 to 5, when 1 is zero autonomy and 5 is great autonomy, rate your level of autonomy in each of the following:				
	1	2	3	4	5
i. Human resources and schedules allocation					
ii. Establishment of the price list					
iii. In-kind purchases					
iv. Quantity of in-kind received by the facility					
v. Equipment purchase					
vi. Use of equipment					
vii. Drug purchases					
viii. Quantity of drugs received by the facility					
ix. Establishment of the amount of petty cash					
x. Use of petty cash					

Diagnosis

28. Which of the following do you consider the two most important problems that the facility faces in relation to human resources?	1 = Lack of personnel 2 = High personnel rotation 3 = Personnel with insufficient qualifications 4 = Lack of monetary and non-monetary incentives 5 = Others (specify) 6 = No problems	Example: 1,4
29. Which of the following do you consider the two most important problems that the facility faces in relation to drugs?	1 = Non-fulfillment / Ignorance of proper storage practices 2 = Inadequate infrastructure 3 = Delay in notification about drugs ready for pick up the medicine from DISA 4 = Lack of availability in DISA 5 = Others (specify) 6 = No problem	
30. Which of the following do you consider the two most important problems that the facility faces in relation to in-kind supplies?	1 = Delays receiving of in-kind 2 = Reductions in the amount of in-kind received 3 = Deliveries of unrequested in-kind 4 = Others (specify) 5 = No problem	
31. Which of the following do you consider the two most important problems that the facility faces in relation to the National Health Strategy for Tuberculosis Prevention and Control?	1 = Lack of equipment 2 = Delays or reductions in the amount of drugs received by the facility 3 = Biosecurity 4 = Others (specify) 5 = No problem	
32. Which of the following do you consider the two most important problems that the facility faces in relation to the Vaccination Program?	1 = Lack of equipment 2 = Delays in the arrival of remittances 3 = Delays or reduction in the amount of vaccines received by the facility 4 = Others (specify) 5 = No problem	

PERSON IN CHARGE OF PERSONNEL, IN-KIND AND PETTY CASH

INDIVIDUALS IN CHARGE OF PERSONNEL, IN-KIND, AND PETTY CASH

Personnel

33. Availability of human resources by professional group or technicians from all sources (number)	2008		
	A. Permanent employees	B. Contract workers	C. Total
Total working at the facility:			
a. Doctors			
b. Nurses			
c. Midwives			
d. Dentists			
e. Social work assistants			
f. Psychologists			
g. Others health professionals			
h. X-rays technicians			
i. Laboratory technicians			
j. Nursing technicians			
k. Pharmacy technicians			
l. Sanitary Inspectors			
m. Administrative technicians			
n. Statistics technicians			
o. Transportation technicians			
p. Statistics assistants			
q. Service workers			
r. Craftsman			
s. Health service assistants			
t. Cleaning personnel			
u. Other technician or assistants			
34. SERUMS (rural or marginal urban health services)			
a. PAAG (Program for the Admin. of Management Agreements)			
b.			
c.			

Total - professionals	(from i to iii)	
Total - other professionals	(from iv to vii)	
Total - sanitary technicians	(from viii to xii)	
Total - other technicians or assistants	(from xiii from xxii)	

35. Are all the personnel paid through Multired, Banco de la Nación?	1 = Yes 2 = No	
36. Are payments for productivity also paid through the Banco de la Nación?	1 = Yes 2 = No	
37. Explain:		

For the last twelve months:	38. Was there a delay in payment of personnel? 1 = Yes 2 = No	39. How often did delays take place? 1 = Never 2 = Once 3 = Between 2 and 3 times 4 = Between 4 and 6 times	If there were delays, on average how long were they in days?
a. Permanent employees			
b. Contract workers			

40. If there were delays, why did they occur?

From the beginning of 2007 to date:	41. Did you submit an official request for more personnel in the following categories of professionals or technicians? 1 = Yes 2 = No	42. How many personnel did you request in to each category? (number)	43. How many personnel were assigned to you in each category? (number)	44. How much time passed from submission of the official request and its approval? (months)
a. Doctors				
b. Nurses				
c. Midwives				
d. Dentists				
e. Social workers				
f. Psychologists				
g. Other professionals or health technicians				
h. Other professionals or administrative technicians				

45. In general, if there was a delay in the approval of personnel requests and/or in the arrival personnel at the facility, why do you think this happened?

46. ¿Which system do you use for controlling personnel attendance?	1 = Book with signatures 2 = Timecard	
--	--	--

NEL, IN-KIND AND

47. Do you think your control system for attendance allows you to supervise properly?

48. From the beginning of the year to date, has the facility received visits from the following institutions to supervise personnel?	49. ¿How many visits?	50. Was the purpose of the visit to verify personnel attendance?	51. Was the purpose of the visit to evaluate insecurity conditions, number of personnel, work conditions, etc?
	1 = Yes 2 = No	number	1 = Yes 2 = No
a. DISA			
b. NETWORK			
c. MICRORED			

52. What were the recommendations after the visits?

Utilities

		a. Water and sewage	b. Electricity	c. Telephone
53. During the last 12 months, were your utilities cut or did you receive a warning of a cut due to delays in payment	1 = Never 2 = Once 3 = Between two and three times 4 = More than three times			

Petty Cash – Own collected resources

Cash period	54. When did you receive petty cash corresponding to the following periods? Month / day (0 if no cash was received)	55. How much was received (in soles)?	56. After receiving the petty cash, how many days were left for presenting receipts of expenses? (accountability) Month / day
a. January 2008			
b. February 2008			
c. March 2008			

57. How did you spend the petty cash?	
a.	b.
c.	d.

Petty cash - Integral Health Insurance (Seguro Integral de Salud)

Cash period	58. When did you receive the petty cash corresponding to the following periods? Month / day (0 if no cash received)	59. How much it was received (soles)?	60. After receiving the petty cash, how many days were left for presenting receipts of expenses? (accountability) Month / day
a January 2008			
b. February 2008			
c. March 2008			

61. How did you spend the petty cash? (Goods, medical salaries etc.)	
a.	b.
c.	d.

62. What are the five most frequent expenditures that you would have like to make that are currently not permitted by current legislation regarding petty cash?	
a.	
b.	
c.	
d.	
e.	

	63. Since the beginning of the year to date, has the facility received visits from the following institutions to collect information about the use of petty cash?	64. How many visits?
	1 = Yes 2 = No	Number
a. NETWORK		
b. OCI – NETWORK (Institutional Control Office)		
c. Micro-Network		

65. What recommendations were made after the visits?

Goods for consumption

66. What are the five goods most consumed in the facility?	67. Did you know in advance when goods were going to arrive to the facility? 1 = Yes 2 = No	68. During the last twelve months, did you have shortages of any of the following goods? 1 = Yes 2 = No	69. How long did the shortages last? (days)	70. If there were shortages, why did they occur? 1 = reduced amount received 2 = delay in arrival 3 = other
a.				
b.				
c.				
d.				
e.				

71. Comments (only in case that delays occurred due to other issues)
72. How did you solve your shortage problems?

PERSON IN CHARGE OF PERSONNEL , IN-KIND AND PETTY CASH PERSON IN CHARGE OF PERSONNEL , IN-KIND AND

73. During the last twelve months, did you receive any good that you did not request or need?	1 = Yes 2 = No		Specify:
74. Do any of your medical services pick up their goods directly from the Network or the Micro-Network?	1 = Yes 2 = No		
75. Did you sign the PECOSA (record of payment and arrival of goods) for all the goods that arrived at the facility?	1 = Yes 2 = No		
76. Are all the goods stored in the same room?	1 = Yes 2 = No		

76.b Comments:

Equipment

77. Under your management, did the facility officially submit requests additional equipment and/or furniture?	1 = Yes 2 = No	
---	-------------------	--

78. Type of equipment and/or furniture requested	79. When did you submit the request?	80. Have you received a response to the request?	81. If the request was approved, when did you receive items requested?
(name)	month/year	1 = Yes 2 = No	month/year
a.			
b.			
c.			

82. Have you ever purchased equipment or furniture with petty cash?	1 = Yes 2 = No	
---	-------------------	--

83. Comments:

84. Have you ever received equipment or furniture that you did not request or need?	1 = Yes 2 = No	
---	-------------------	--

85. Comments:

INTEGRAL HEALTH INSURANCE (SIS) DATA-INPUT STAFF MEMBER AT THE FACILITY

Public insurance reimbursement for attention of SIS patients

SIS OFFICE

	a. January	b. February	c. March
86. During each of these months, how many forms were generated?			
87. How many forms were approved by the facility? (preventive quality control)			
88. How many forms were approved by the Network?			
89. How many forms did SIS approve?			
90. How much was reimbursed by SIS? (soles)	soles	soles	soles
91. When was reimbursement received? (Record the number of installments in which it arrived)	Example: February and April		

SIS OFFICE

PERSON IN CHARGE OF GENERAL CASH

Collection in pharmacy for medical services and drug expenditures

PERSON IN CHARGE OF GENERAL CASH

	92. How much was collected in general cash for medical services (soles)?	93. How much was collected in general cash for drug expenditures in the pharmacy (soles)?
a. January 2008		
b. February 2008		
c. March 2008		

94. How frequently is money collected money for medical services deposited in the account of the Network?	1 = Daily 2 = Weekly 3 = Other (specify)	
95. How frequently is the money collected for drug expenditures deposited in the drug fund account (SISMED Revolving Fund)?	1 = Daily 2 = Weekly 3 = Other (specify)	

PERSON IN CHARGE OF PHARMACY

Drugs and vaccines storage

96. Does the facility have a storeroom or space assigned for the drugs received from DISA / the Network or other sources?	1 = Yes 2 = No	
97. Does the facility have a storeroom or space assigned for the vaccines received from the DISA / Network or by other sources?	1 = Yes 2 = No	
98. Who registers the vaccines that there are in the storeroom? (Fill in the control stock card)	1 = Pharmacy 2 = PTC National Program coordinators 3 = Both	
99. Have you had (or do you have) any objections or limitations regarding storage/management of the drugs or vaccines stock?		

Drugs

		a. January	b. February	c. March
100. a. What percentage of drugs is in OVERSTOCK (over 6 months supply)?	%			
b. What percentage of the drugs are in NORMAL STOCK (between 4 and 6 months' Supply)?	%			
c. What percentage of drugs is in SUB STOCK (between 1 and 4 months' supply)?	%			
d. What percentage of drugs is in UNDERSTOCK (less than 1 month's supply)?	%			
a+b+c+d= 100%				

101. Comments

102. In relation to deliveries of drugs, choose the most frequently occurring situation from the following list:	DEMID or DISA: 1 = Delivers the complete order at the expected date 2 = Delivers the complete order with a delay 3 = Delivers an incomplete order at the expected date 4 = Delivers an incomplete order with a delay	
103. In the last 12 months, have you ever restricted the sale of drugs to protect the stock for SIS patients?	1 = Yes, once 2 = Yes, two or more times 3 = No	
104. What are the five drugs required most frequently at the pharmacy?	105. In the last 12 months, have the drugs mentioned been affected by shortages?	106. If the answer is yes, how many days did the shortage last? Take into account all occurrences.
Name	1 = Yes 2 = No	days
a.		
b.		
c.		
d.		
e.		

107. Why did the shortage occur? (more than one option can be selected)	1 = Delay in the requirement from the Micro-Network to the DEMID 2 = Communication problems between the Micro-Network and the facility. 3 = Lack of stock in DISA/DEMID storage 4 = Others	
108. Comments		

Medicine consumed by SIS patients (patient supply)

	109. Value of drugs consumed by the SIS patients (soles)
a. January 2008	
b. February 2008	
c. March 2008	

PERSONNEL IN CHARGE OF ESN-PCT

PERSONNEL IN CHARGE OF ESN-PCT

PERSONNEL IN CHARGE OF ESN-PCT

110. During this year, has the facility received visits from the following institutions to collect information about drugs?	1 = Yes 2 = No	111. How many visits did you receive in the last three months? Number	112. What were the reasons for the visit? 1 = To verify the use of the price list 2 = To verify that the facility does not have expired drugs in storage 3 = To verify the stock of drugs
a. MINSA			
b. DISA (DEMID)			
c. Network			
d. Micro-Network			

PERSON IN CHARGE OF THE NATIONAL HEALTH STRATEGY FOR TUBERCULOSIS PREVENTION AND CONTROL (ESN-PCT)

113. Number of cases diagnosed in 2007	
114. Profession of the person in charge of ESN-PCT in the facility	

	115. Average number of days between order submission and the arrival of drugs from the DEMID/ the hospital (MDR)	116. Previous knowledge of pick up date 1 = Yes 2 = No	117. Delays in the arrival of drugs during the last 12 months. 1 = Yes 2 = No	118. Shortages of any of Tuberculosis drugs during the last 12 months 1 = Yes 2 = No
a. Primary Plan (EP)				
b. Multidrug-resistant (MDR)				

119. If your facility had delay or drug availability problems, why did this occur?	1 = Delay in submission of coordinator's order to the Health Directorate (DEMID) 2 = Communication problems between the ESN-PCT coordinator and the facility. 3 = Lack of stock in the Health Directorate (DEMID) storage 4 = Others	(more than one option can be selected)
--	---	--

120. Comments:

121. Have you had (or do you have) any objections or limitation related to the execution of the promotion component?	1 = Yes 2 = No	
--	-------------------	--

122. Comments:

PERSONNEL IN CHARGE OF LABORATORY

PERSONNEL IN CHARGE OF

PERSONNEL IN CHARGE OF LABORATORY

PERSONNEL IN CHARGE OF LABORATORY

	123. Average days between the order and receivable of the following materials/in-kind to the facility: days	124. Previous knowledge of pick up date 1 = Yes 2 = No	125. Delays in receivable of materials/in-kind necessary to execute the strategy (during the last 12 months). 1 = Yes 2 = No	126. Shortages of any of the following materials/in-kind (during the last 12 months) 1 = Yes 2 = No
a. Basic fuchsin reagents				
b. Immersion oil				
c. Microscope slides				
d. Methylene blue				
d. Acid-alcohol				

127. If your facility had shortages, how did you solve the problem?

128. In your opinion, why did the shortages occur?

	129. Does your facility have the following equipment? 1 = Yes 2 = No	130. If you do not have the following equipment, how do you handle the situation? 1 = Borrow it from a nearby facility 2 = Buy it with petty cash 3 = Transfer the patient to another facility 4 = Other	131. If you do not have the equipment, which institution should give it to you? 1 = MINSA 2 = DISA 3 = Network 4 = Micro-Network
a. 100x Binocular microscope			
b. Bunsen burner			
c. Propane tank			

PERSON IN CHARGE OF THE NATIONAL HEALTH STRATEGY FOR VACCINATIONS (ESN-INMUNIZACIONES)

PERSONNEL IN CHARGE OF ESN-PCT

132. Number of protected persons in 2007	
133. Profession of the person in charge of the strategy in the facility	

	134. Previous knowledge of delivery date 1 = Yes 2 = No	135. Was there a delay in the arrival of vaccines/medical inputs to execute the strategy once the campaign started (last 12 months). 1 = Yes 2 = No	If there was a delay how long was it (in days)
a. Vaccines			
b. Medical inputs (needles, syringes and others)			

136. If your facility experienced delays or vaccine availability problems, what was the reason?	1 = Delay in the submission of Network coordinator's order to DISA/DEMID. 2 = Communication problems between DISA/MINSA and the facility. 3 = Lack of stock in DISA/MINSA storage 4 = Other	(more than one option can be selected)
---	--	--

137. Comments	

138. Have you had (or do you have) any objection or limitations related to the execution of the promotion component?	1 = Yes 2 = No	
--	-------------------	--

139. Comments	

Monetary remittances for the strategy

140. Did you receive remittances for the most recent campaign?	1 = Yes 2 = No	
141. If you received remittances, when did they arrive?	1 = At the end or after the campaign 2 = During the campaign 3 = Before or at the beginning of the campaign	
142. If you received remittances late, how many days after the start of the campaign did you receive remittances?	days	
143. Did you receive remittances for the previous campaign?	1 = Yes 2 = No	
144. If you received remittances, when did they arrive?	1 = At the end or after the campaign 2 = During the campaign 3 = Before or at the beginning of the campaign	

PERSONNEL IN CHARGE OF ESN-PCT

145. When you do not receive remittances, how do you cover the lack of money?	1 = Petty Cash 2 = Facility manager's and/or healthcare personnel own money 3= Suppliers' credit 4 = Others 5 = It was not covered	
---	--	--

Annex 10 – Health Network Survey Template

e) No. of Survey:		f) Interview Date:	
g) Name of the person conducting survey 1:		h) Name of the person conducting survey 2:	

A. Identification of the Facility

1. Network Name:			
2. Department:		3. Province:	
4. District:			
5. Network code:		6. Network Location (INEI, location code):	
7. Name of the DISA/DIRESA the Network is part of:		8. Number of Facilities (1-3) that are under this Network:	

B. Services description

Information on the Network's Executive Director

9. Name of the Executive Director:			
10. Sex:	1 = Female 2 = Male	11. Type of contract:	1 = Permanent employee 2 = Contract worker
12. Working experience as Executive Director in this Network	Years		
	Months		
13. Working experience as Executive Director in any Network and/or as Head Doctor in any facility:	Years		
	Months		

C. Attention hours in Facilities (1 – 3) that depend from the Network

14. Which agency establishes the facilities' hours of attention?	1 = DISA 2 = Network 3 = Micro-Network 4 = Others	
15. Do you have any directive that regulates the hours of attention for childbirth?	1 = Yes 2 = No	
16. Comments:		

D. Collection at the Facility

17. Does every facility have a price list for attentions?	1 = Yes 2 = No 3 = Don't know / not sure	
18. Who approves the facilities price list?	1 = DISA 2 = Network 3 = Micro Network 4 = Facility	
19. Can the Head Doctors modify the price list?	1 = Yes 2 = No 3 = Don't know / not sure	
20. What is the main reason that adjustments to the price list are requested?		

E. Population attended by the network

21. Population assigned to the Network according to stages of life (2007)	Children	
	Teens	
	Adults	
	Elder Adult	
22. Population attended by the Network according to target groups (2007)	Children	
	Pregnant women	

	23. No. of patients (2007)	24. No. of attentions (2007)
General Medicine		
Obstetrics		
Odontology		

	25. No. de insured (2007)	26. No. of attentions (2007)
Integral Health Insurance (SIS)		

F. Autonomy of Network's Executive Director

Issues	27. Do you consider that you have autonomy in relation to these issues?				
	From 1 to 5, when 1 is zero autonomy and 5 is great autonomy, rate your level of autonomy in each of the following:				
	1	2	3	4	5
xi. Human resources and schedule allocation within the facilities					
xii. Establishment of the price list for the facilities					
xiii. In-kind purchases					
xiv. In-kind allocation within the facilities					
xv. Equipment purchases					
xvi. Equipment allocation within the facilities					
xvii. Drug allocation within the facilities					

viii. Establishment of the amount of petty cash and delivery to the facilities					
xix. Use and control of facilities petty cash					

G. Network diagnosis (considering facilities)

28. Which of the following do you consider the two most important problems that the facilities within the Network face in relation to human resources?	1 = Lack of personnel 2 = High personnel rotation 3 = Personnel with insufficient qualifications 4 = Lack of monetary and non-monetary incentives 5 = Others (specify) 6 = No problems	Example: 1,4
29. Which of the following do you consider the two most important problems that the facilities within the Network face in relation to drugs?	1 = Non-fulfillment/ignorance of proper storage practices 2 = Inadequate infrastructure 3 = Delays in notification about drugs ready for pick up from DISA 4 = Lack of availability in DISA 5 = Others (specify) 6 = No problem	
30. Which of the following do you consider the two most important problems that the facilities within the Network face in relation to in-kind supplies?	1 = Delays in the receipt of in-kind 2 = Reductions in the amount of in-kind received 3 = Deliveries of unrequested in-kind 4 = Others (specify) 5 = No problem	
31. Which of the following do you consider the two most important problems that the facilities in the Network face in relation to the National Health Strategy for Tuberculosis Prevention and Control?	1 = Lack of equipment 2 = Delays or reductions in the amount of drugs in facilities 3 = Biosecurity 4 = Others (specify) 5 = No problem	
32. Which of the following do you consider the two most important problems that the facilities in the Network face in relation to the Network regarding the Vaccination Program	1 = Lack of equipment 2 = Delays in the arrival of remittances 3 = Delays or reductions in the amount of vaccines 4 = Others (specify) 5 = No problem	

33. In relation to the topics from above. What do you think are the limitations that the Network has in terms of solving these problems?

PERSON IN CHARGE OF PERSONNEL OR IN-KIND

H. Network personnel (who work in Network administration and in facilities I - 3)

34. Availability of human resources by professional group or technicians 2008 (number)	Network Administrative Personnel			Network Personnel (que labora en los Centros de Salud)		
	(1) Permanent employees	(2) Contract workers	Total (use only in case information on the number of personnel is not broken down by type of contract , column 1 or 2)	(1) Permanent employees	(2) Contract worker	Total (use only in case information on the number of personnel is not broken down by type of contract)
Total that work at the facility:						
i.Doctors						
ii.Nurses						
iii.Midwives						
iv.Dentists						
v.Social work assistants						
vi.Psychologists						
vii.Others health professionals						
viii.X-rays technicians						
ix.Laboratory technicians						
x.Nursing technicians						
xi.Pharmacy technicians						
xii.Sanitary Inspectors						
xiii.Administrative technicians						
xiv.Statistics technicians						
xv.Transportation technicians						
xvi.Statistics assistants						
xvii.Service workers						
xviii.Craftsmen						
xix.Health service assistants						
xx.Cleaning personnel						
xxi.Other technicians or assistants						
xxii.SERUMS (rural or marginal urban)						

health service)						
xxiii. PAAG (Program for the Admin. of Managements Agreements)						
xxiv.						
xxv.						

PERSON IN CHARGE OF PERSONNEL OR IN-KIND

I. Payment to Network personnel (who work in Network administration and in facilities I – 3, CMI)

35. Are all the personnel paid through Multired, Banco de la Nación?	1 = Yes 2 = No	
36. Are payments for productivity are also paid through Banco de la Nación?	1 = Yes 2 = No	
37. Explain:		

For the last twelve months:	38. Was there a delay in payment of personnel? 1 = Yes 2 = No	39. How often did delays take place? 1 = Never 2 = Once 3 = Between 2 and 3 times 4 = Between 4 and 6 times	40. If there were delays, on average how long were they in days?
	a. Permanent employee		
	b. Contract worker		

41. If there were delays, why did they occur?

J. Personnel working in Network administration and in facilities

42. From the beginning of 2007 to date: Did the Network submit official requests for more personnel in the following categories of professionals or technicians?		1 = Yes 2 = No	
43. Categories of professionals or technicians that were requested	44. How many official requests were made in each category? (number)	45. How many official requests were approved? (number)	46. How much time passed from the submission of the official request and its approval? (months)
i.			
ii.			
iii.			
iv.			
v.			
vi.			
vii.			
viii.			

47. In general, if there was a delay in the approval of the official request, why do you think this happened?

48. Do you think your control system for attendance allows you supervise properly?

49. Since the beginning of the year to date, has the Network received visits from the following institutions?	1 = Yes 2 = No	50. How many visits? Number	51. Reason for the visits :		
			1 = Supervision of personnel 2 = Evaluation of biosecurity conditions, number of personnel, work conditions, number of personnel, etc 3 = Petty cash balance		
			1	2	3
C.S. Delicias de Villa					
C.S. San Genaro de Villa					
C.S. Santiago de Surco					
C.S. Alicia Lastres					
C.S. Gaudencio Bernasconi					

52. What were the recommendations after the visits?
a
b
c

PERSON IN CHARGE OF ADMINISTRATION / LOGISTICS

K. Utilities

53. During the last 12 months, were your utilities cut or did you receive a notice of a cut due to delay in payment?	1 = Never 2 = Once 3 = Between two and three times 4 = More than three times			
	i. Water and sewage	ii. Electricity	iii. Telephone	iv. Local taxes
C.S. Delicias de Villa				
C.S. San Genaro de Villa				
C.S. Santiago de Surco				
C.S. Alicia Lastres				
C.S. Gaudencio Bernasconi				

L. Petty Cash (administrated by the facilities)

Petty cash - Own collected resources

	Integral Health Insurance (SIS)	54. When did you send the petty cash corresponding to the following periods? Month/day (enter 0 if you did not send it)	55. How much did you send as petty cash to the facilities? (soles)	56. After sending the petty cash, how many days were left to the facilities for accountability? Month/day
C.S. Delicias de Villa	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. San Genaro de Villa	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Santiago de Surco	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Alicia Lastres	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Gaudencio Bernasconi	i. January 2008			
	ii. February 2008			
	iii. March 2008			

Petty Cash - INTEGRAL HEALTH INSURANCE (SIS)

	Months:	57. When did you send petty cash corresponding to the following periods? Month / day (enter 0 if you did not send it)	58. How much did you send as petty cash to the facilities? (soles)	59. After receiving cash, how many days were left to the facilities for accountability? Day / month
C.S. Delicias de Villa	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. San Genaro	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Santiago de Surco	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Alicia Lastres	i. January 2008			
	ii. February 2008			
	iii. March 2008			
C.S. Gaudencio Bernasconi	i. January 2008			
	ii. February 2008			
	iii. March 2008			

M. Goods for consumption

60. What are the five goods most consumed by facilities?	61. Did you experience shortages of any of these goods? 1 = Yes 2 =No	62. How long did the shortage last? (days)
i.		
ii.		
iii.		
iv.		
v.		

63. If there was a shortage, why did it occur?	64. How did the facilities solve their shortage problems?		
65. Does any medical service pick up their goods directly from the Network or the Micro-Network? For example: doctor's office, laboratories, programs, etc.	1 = Yes 2 = No		

N. Equipment

	66. Have you received any requests for additional equipment and/or furniture from the following facilities?	67. When did you receive the requests?	68. Currently, has a decision on the request been made?	69. If the request was approved, when was the item(s) sent?
	1 = Yes 2 = No	Month /year	1 = Yes 2= No	Month /year
C.S. Delicias de Villa				
C.S. San Genaro de Villa				
C.S. Santiago de Surco				
C.S. Alicia Lastres				
C.S. Gaudencio Bernasconi				

70. Has the Network requested additional equipment and/or furniture?	1 = Yes 2 = No	
--	-------------------	--

Types of equipment and/or furniture requested	71. When did you make the request?	72. Currently, has a decision on the request been made?	73. If the request was approved, when was the item(s) received?
(name)	Month /year	1 = Yes 2= No	Month /year
i.			
ii.			
iii.			

74. Has the Network ever received equipment or furniture that was not requested or needed?	1 = Yes 2 = No	
75. Comments:		

SIS OFFICE

SIS OFFICE

GENERAL CASH

INTEGRAL HEALTH INSURANCE (SIS) DATA INPUT STAFF MEMBER, WORKING AT THE NETWORK

O. Public insurance reimbursement for the attention of SIS patients

	Months	76. In the following months, how many reimbursement forms were sent by the facilities?	77. How many reimbursement forms were approved by the Network? (preventive quality control)	78. How many reimbursement forms were approved by SIS?	79. How much was reimbursed by SIS? (soles)	80. When was it reimbursed? (Take into account the number of installments in which it was received) Example: February and April
C.S. Delicias de Villa	January 2008					
	February 2008					
	March 2008					
C.S. San Genaro de Villa	January 2008					
	February 2008					
	March 2008					
C.S. Santiago de Surco	January 2008					
	February 2008					
	March 2008					
C.S. Alicia Lastres	January 2008					
	February 2008					
	March 2008					
C.S. Gaudencio Bernasconi	January 2008					
	February 2008					
	March 2008					

PERSON IN CHARGE OF GENERAL CASH PERSON IN CHARGE OF GENERAL CASH PERSON IN CHARGE OF GENERAL CASH

PERSON IN CHARGE OF GENERAL CASH

P. Collections for medical services by facilities

		81. How much was deposited into the Network's account for medical services? (last three months, in soles)
C.S. Delicias de Villa	January 2008	
	February 2008	
	March 2008	
C.S. San Genaro de Villa	January 2008	
	February 2008	
	March 2008	
C.S. Santiago de Surco	January 2008	
	February 2008	
	March 2008	
C.S. Alicia Lastres	January 2008	
	February 2008	
	March 2008	
C.S. Gaudencio Bernasconi	January 2008	
	February 2008	
	March 2008	

82. How frequently are resources collected for medical services deposited into the Network's account?	1 = Daily 2 = Weekly 3 = Other (specify)	
---	--	--

PERSON IN CHARGE OF PHARMACY

Q. Drug and vaccine storages

83. Does the Network have a storeroom or space assigned for the drugs received from DISA?	1 = Yes 2 = No	
84. Does the Network have a storeroom or space assigned for the vaccines received from DISA?	1 = Yes 2 = No	
85. Who registers the vaccines that there are in the storeroom? (Fill in the control stock card)	1= National Program coordinators 2 = Person in charge of the storage 3= Both	
86. Have you had (or do you have) any objections or limitation regarding storage/management of drugs or vaccines stock?		

R. Drugs

87. Did you know in advance when you should pick up drugs from the DISA?	1 = Yes 2 = No	
88. In the last quarter, what was the percentage of drugs in NORMAL STOCK? (between 4 and 6 months' supply)	%	
89. In the last quarter, what was the percentage of drugs in SUB STOCK?(between 1 and 4 months' supply)	%	
90. In the last quarter, what was the percentage of drugs in UNDER STOCK? (less than 1 month' supply)	%	
91. In relation to deliveries of drugs, choose the most frequently occurring situation from the following list:	1 = Delivers the complete order at the expected date. 2 = Delivers the complete order with a delay 3 = Delivers an incomplete order at the expected date. 4 = Delivers an incomplete order with a delay.	

92. What are the five drugs most frequently needed by the facilities?	93. In the last 12 months, have the drugs mentioned been affected by shortages?	94. If the answer is yes, how many days did the shortage last? Take into account all occurrences.
Name	1 = Yes 2 = No	days
i.		
ii.		
iii.		
iv.		
v.		

PERSON IN CHARGE OF PHARMACY

PERU. THE ROUTE OF EXPENDITURE AND DECISION MAKING IN THE HEALTH SECTOR

95. Does the Network have any control system for the expired drugs?	1 = Yes 2 = No	
96. Who decides on the drug price list?	1 = Central level (DIGEMID) 2 = DISA / DIRESA (Executive Direction of Drugs) 3 = Network 4 = Micro-Network 5 = Other (specify)	
97. Do all the facilities have a price list?	1 = Yes 2 = No	

98. During this year, has the Network visited the following facilities to collect information about drugs?	99. How many visits?	100. What were the motives for the visits?
	Number	1 = To verify use of the price list by the facilities. 2 = To verify that the facility does not store expired medicine. 3 = To verify the stock of drugs.
	1 = Yes 2 = No	
C.S. Delicias de Villa		
C.S. San Genaro de Villa		
C.S. Santiago de Surco		
C.S. Alicia Lastres		
C.S. Gaudencio Bernasconi		

101. What recommendations were made after the visits?

PERSON IN CHARGE OF THE NATIONAL HEALTH STRATEGY FOR TUBERCULOSIS PREVENTION AND CONTROL (ESN-PCT)

PERSONNEL IN CHARGE OF ESN-PCT

102.	Number of cases diagnosed in 2007	
103.	Profession the person in charge of ESN-PCT in the facility	

	104. Average number days between order submission and the arrival of drugs from DEMID/ the hospital (MDR) days	105. Previous knowledge of pick up date 1 = Yes 2 = No	106. Delay in the arrival of drugs during the last 12 months. 1 = Yes 2 = No	107. Shortage of any of Tuberculosis drugs during last 12 months 1 = Yes 2 = No
i. Primary Plan (EP)				
ii. Multidrug-resistant (MDR)				

PERSONNEL IN CHARGE OF ESN-PCT

108. If your facility presents delay or drug availability problems, why did this occur?	1 = Communication problems between facilities. 2 = Lack of stock in DISA/DEMID storage. 3 = Other	(more than one option can be selected)
---	---	--

109. Comments:

PERSONNEL IN CHARGE OF ESN-PCT

110. Have you had (or do you have) any objections or limitations related to the execution of the promotion component?	1 = Yes 2 = No	
111. Comments:		

PERSONNEL IN CHARGE OF LABORATORY

PERSONNEL IN CHARGE OF LABORATORY PERSONNEL IN CHARGE OF LABORATORY PERSONNEL IN CHARGE OF LABORATORY

	112. Average days between the order and the arrival of the following materials/in-kind to the facility: days	113. Delay in the receipt of materials/in-kind necessary to execute the strategy (during the last 12 months). 1 = Yes 2 = No	114. Shortages of any of the following materials/in-kind (during the last 12 months) 1 = Yes 2 = No
i. Basic fuchsin reagents			
ii. Immersion oil			
iii. Microscopic slides			
iv. Methylene blue			
v. Acid-Alcohol			

115. If your facilities had shortages, how did you solve the problem?
116. In your opinion, why did these shortages occur?

	117. Do all the facilities have the following equipment? 1 = Yes 2 = No	118. If they do have the equipment, which institution should provide it? 1 = MINSA 2 = DISA 3 = Network 4 = Micro-Network
i. 100x Binocular microscope		
ii. Bunsen burner		
iii. Propane tank		

PERSON IN CHARGE OF THE NATIONAL HEALTH STRATEGY FOR VACCINATIONS (ESN-INMUNIZACIONES)

PERSONNEL IN CHARGE OF ESN-IN

119.	Number of protected persons in 2007	
120.	Profession of the person in charge of the strategy in the facility	

	121. Did facilities have previous knowledge of delivery date? 1 = Yes 2 = No	122. Was there a delay in the arrival of vaccines/medical inputs to execute the strategy once the campaign started (last 12 months)? 1 = Yes 2 = No	123. If there was a delay, how long did it last (in days)?
i. Vaccines			
ii. Medical inputs (needles, syringes, and others)			

124. If your facility experienced delays or vaccine availability problems, what was the reason?	1 = Communication problems with the facilities. 2 = Lack of stock in DISA/MINSA storage 3 = Others	(more than one option can be selected)
125. Comments:		

126. Have you had (or do you have) any objections or limitation related to the executions of the promotion component?	1 = Yes 2 = No	
127. Comments:		

Monetary remittances to the Strategy

128. Have you received remittances for the most recent campaign?	1 = Yes 2 = No	
129. If you received remittances, when did they arrive?	1 = At the end or after the campaign 2 = During the campaign 3 = Before or at the beginning of the campaign	
130. If you received remittances late, how many days after the start of the campaign did you receive remittances?	days	
131. Did you receive remittances for the previous campaign?	1 = Yes 2 = No	
132. If you received remittances, when did they arrive?	1 = At the end or after the campaign 2 = During the campaign 3 = Before or at the beginning of the campaign	

PERU. THE ROUTE OF EXPENDITURE AND DECISION MAKING IN THE HEALTH SECTOR

133. When you do not receive remittances, how do the facilities cover the lack of money?	1 = Petty Cash 2 = Facility manager's and/or healthcare personnel's own money 3= Supplier's credit 4 = Others 5 = It was not covered	
--	--	--