



16

Health Care Financing in Eight
Latin American and Caribbean
Nations: The First Regional
National Health Accounts Network

Health Care Financing in Eight Latin American and Caribbean Nations: The First Regional National Health Accounts Network

Peter Berman, Ph.D.
Harvard School of Public Health

Lisa Arellanes, M.Sc.
Harvard School of Public Health

Pamela Henderson, M.Sc.
Consultant
Pan American Health Organization

Alessandro Magnoli, M.B.A.
Harvard School of Public Health

April 1999

This publication was produced by the Partnerships for Health Reform, funded by USAID under contract no. HRN-C-00-95-00024, in collaboration with the Latin America and Caribbean Regional Health Sector Reform Initiative, funded by USAID under contract no. HRN-5974-C-00-5024-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

ABSTRACT

This paper presents summary results of the results of eight national health accounts (NHA) studies conducted in the Latin America and Caribbean region. The work was carried out by national teams using a common methodology. Substantial cooperation among the national groups was fostered through a regional network, which organized meetings and coordinated technical assistance to each team. The results show that comprehensive NHA studies are feasible in lower income countries and can significantly increase the accuracy and detail of health expenditures relative to previous studies. There are large differences across countries in the level of health spending and in its composition. In many of the countries, private sector financing intermediaries comprise a large share of total health spending. Hospitals and public health services are mainly supported by government funders, while ambulatory treatment services are primarily supported by private sector funders. The paper concludes with a discussion of policy applications of NHA and issues in applying the NHA methodology in lower income countries.

TABLE OF CONTENTS

Acronyms	ix
Acknowledgements	xi
1. Introduction.....	1
2. Comparative Analysis of Health Expenditure: What Can We Learn?	3
3. How Do The LACNHA Estimates Compare with Other Recent Efforts in the Region?	7
3.1 Sources of Differences Between Health Expenditure Estimates.....	7
3.2 Specific Analysis of Differences between Estimates: A Look at Four LAC Countries.....	10
4. Income, Total Health Spending, and Outcomes	15
5. The Public-Private Mix in Health Care Financing.....	19
6. Resource Allocation in the Health Sector: Spending on Major Health Care Functions	21
7. The Flow of Funds to Different Types of Health Care Providers.....	23
8. Expenditure Shares to Different Types of Health Care Inputs.....	27
9. Summary and Implications of Key Findings	29
10. Achievements, Limitations and Potential for Future Investigation	31
10.1 Policy Uses of NHA in the Network Countries.....	31
10.2 Sustainability	32
10.3 Methods	32
10.4 Conclusions	33
Annex A. Bolivia	35
Annex B. Dominican Republic	41
Annex C. Ecuador	47
Annex D. El Salvador	53
Annex E. Guatemala	59
Annex F. Mexico.....	63
Annex G. Nicaragua	73
Annex H. Peru.....	79
Annex I. Bibliography.....	83

PUBLICATIONS OF THE REGIONAL INITIATIVE OF HEALTH SECTOR REFORM FOR
LATIN AMERICA AND THE CARIBBEAN..... 85

List of Tables

Table 1. Comparison of Recent Total Health Expenditure Estimates in the LAC Region 8

Table 2. Explanation of Differences Between NHA and PAHO Health Expenditure Estimates..... 10

Table 3. Comparison of Public-Private Proportions of Total Health Expenditure
(in % of total expenditure) 13

Table 4. Contrasting Views of Public-Private Mix in Health Care Financing: Sources and
Financing Intermediaries (% total expenditure)..... 19

Table 5. Distribution of Total Health Expenditure Across the Major Types of Payers or
Financing Intermediaries (in % of total expenditure) 20

Table 6. Shares of Total Health Expenditures Allocated to Specific Functions
(in % of total expenditure) 21

Table 7. Ratio of Public to Private Financing (Financing Intermediaries) for Main Types of
Health Care Services (where available) 22

Table 8. Ecuador, 1995: Financing Intermediaries to Providers Matrix (in % of total Expenditure) 23

Table 9. How Funding Flows to Different Types of Providers Classified by Ownership 24

Table 10. Expenditure Shares to Salary and Drugs and Supplies by Ministries of Health
and Social Insurance Organizations in Eight LAC Countries..... 27

List of Figures

Figure 1. Life Expectancy and Per Capita Health Expenditure 15

Figure 2. Life Expectancy and Health Expenditure in GDP..... 16

Figure 3. GDP and Health Spending: Absolute Values 16

Figure 4. GDP Per Capita and % to Health 17

Figure 5. Social Health Insurance Coverage and Per Capita Health Spending 17

ACRONYMS

GDP	Gross Domestic Product
IADB	Inter-American Development Bank
ILO	International Labor Organization
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
MOH	Ministry of Health
NGO	Non-governmental Organization
NHA	National Health Accounts
OECD	Organization for Economic Cooperation and Development
PAHO	Pan American Health Organization
PHR	Partnerships for Health Reform
USAID	United States Agency for International Development
WHO	World Health Organization

ACKNOWLEDGEMENTS

Support for this work was provided by the United States Agency for International Development (USAID) through the Partnerships for Health Reform (PHR) project (HRN-C-00-95-00024) and through USAID grants under the Latin America and Caribbean Equitable Access Initiative to the Pan American Health Organization. The authors would like to know the helpful comments received from Dr. A. K. Nandakumar and other colleagues at the PHR project. We especially acknowledge the hard work, dedication and excellent work done by the eight NHA country teams, whose reports are cited extensively here. However, the authors take full responsibility for any errors contained in this paper.

1. INTRODUCTION

The Latin America and Caribbean National Health Accounts (LACNHA) network is a collaboration between the Partnerships for Health Reform Project, the Pan American Health Organization (PAHO), and national teams in eight countries in the Latin American and Caribbean region: Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, and Peru. Funding for this project was provided by the United States Agency for International Development (USAID).

The objective of the LACNHA network was the development of consistent and comparable national health accounts estimates in the participating countries. The network also emphasized capacity building in the countries. In each country, NHA teams comprised specialists with different areas of expertise in health system and expenditure analysis, representing different governmental and non-governmental institutions. Typically, these included the Ministry of Health, the Ministry of Finance, national statistical authorities, and research or policy institutes. The network provided training and technical assistance. Through three network meetings, country teams developed their skills, shared experience in process and interim results, and worked to standardize methods and classifications.

Following the third network workshop, each country team produced a final NHA report for their own country. These reports were preceded by a national policy seminar in which results were presented to decision makers and their policy implications discussed. While the focus has been on country-based capacity and the usefulness of NHA for national authorities, the success of the network in using similar allows for a comparison of the country results.

This paper presents the first comparison of the LACNHA results. Its focus is breadth of comparison rather than an in-depth look at specific health expenditure estimates or health care system issues. It covers the major elements of the NHA framework to convey the range of what can be analyzed. This paper describes a number of substantial differences across the LACNHA countries in the level of health sector spending and its composition. Since this is the first time such detailed comparisons have been possible, and since they are based on the first application of a new methodology, readers should be cautious in interpreting these results. While this paper discusses explanations and implications of the estimates reported, it seeks more to provoke questions and further inquiry rather than to provide comprehensively reasoned explanations for similarities and differences.

Section 2 of the paper discusses recent international experience with comparative analysis of health expenditure. The following section (3) compares LACNHA estimates of total health expenditure in dollar and share-of-gross domestic product (GDP) terms with other recent estimates for the network countries, explaining some of the sources of differences with previous figures. Subsequent sections then look at specific results across the LACNHA countries. This includes key aggregate system-level results linking total health spending to health outcomes and levels of insurance coverage (Section 4), the public-private mix of spending (5), resource allocation to specific types of health care services (6), and who finances specific types of providers and services (7). Section 8 presents results of resource use in terms of specific types of expenditures, such as salaries, drugs, and capital investment items. Section 9 reviews the main results and their implications. Finally, Section 10 reviews the limitations of the LACNHA results and proposes follow-up steps for the LACNHA countries and others in the region.

2. COMPARATIVE ANALYSIS OF HEALTH EXPENDITURE: WHAT CAN WE LEARN?

International comparative studies of health expenditure began in the early part of this century and have gained increasing currency in the last 30 years. The movement to create standardized, comparable national health expenditure estimates appears in the work of the International Labor Organization (ILO) and the World Health Organization (WHO) in the 1950s and 1960s (Abel-Smith, 1963). Today, the Organization for Economic Cooperation and Development (OECD) compiles comparable health expenditure statistics annually for its member countries and provides public access to a computerized data set covering over 30 years of such information (OECD, 1998).

For advanced countries, mainly OECD members, comparing the level, composition, and trends in national health spending with other countries is often a starting place for national debates on health sector policies and reform. Hurst (1992) highlighted many of the key issues in his comparison of health spending data for OECD countries. He noted, for example, the generally rising share of national income going to health care, the different rates in expenditure growth across countries with similar levels of health and health insurance coverage, and the differences in how money was being spent on different types of health care services. Such comparisons address a number of important questions for national policy, including:

- What is an appropriate level of spending on health care?
- What return in health improvement can a nation expect from spending more or less or from altering the composition of its spending?
- What health care system factors explain the rate of growth in health spending and differences across countries in that growth? Can health care system policies be adjusted to achieve a desired or feasible rate of growth?

Lower and middle income countries have lagged behind in developing comparable estimates of national health expenditure, although given their poorer health conditions and more limited resources, these and other questions might be seen to be even more important than in the advanced countries. There have been comparative studies of health expenditure in the lower income countries, but these have been constrained by coverage and data problems.

Regional comparative studies were produced for developing nations covering periods in the 1980s: Vogel (1993) for Africa, McGreevey (1990) and Soares et al. (1995) for Latin America, and Griffin (1992) for Asia. These studies generally pulled together data from available international statistics and country reports. They provided cross-national comparisons for one year within a recent range. They estimated total and per capita national health spending and the composition of total spending in terms of public and private financing intermediaries. Partial estimates of the uses of funds were sometimes possible, for example, showing the break-up of public spending in terms of hospital and non-hospital services.

These studies provided a first benchmark comparison of what poorer countries were spending on health care and how those funds were organized in terms of public and private payers. They highlighted several key points:

- There was wide variation in spending levels in lower income countries. Health spending and

health outcomes rose as income rose, but there was not a strong positive correlation between spending and outcomes for countries at similar levels of income.

- Private health spending was a large share of national totals, even in countries striving to achieve a comprehensive public sector finance and delivery system.
- Government spending on primary level services was lower than on hospital services in many lower income countries despite official policy to give priority to primary care.

In 1993, the World Bank and WHO published the first truly global estimate of health spending with estimates for 140 countries including total spending and public and private shares of spending (World Bank, 1993; Murray et al., 1994). No estimates of the composition of health spending in terms of different uses were carried out. For a significant number of countries, private health spending data were not available and had to be estimated based on the link between national income and health spending in countries for which data were available.

These country studies addressed questions similar to the regional comparative analyses but with wider coverage. They highlighted the positive correlation between total spending and national income. They also noted that there was not a close link between national spending as a share of income and health outcomes. This “noise” in the relationship between spending and health suggests that other factors are important. These other factors probably include both health care system factors and other dimensions of social and economic development.

All of these studies suffered from serious data limitations. Even where data were available, a common framework to organize and categorize the information was lacking. This is no different from where the OECD countries were in the 1960s, when they initiated a coordinated effort to develop comparable health expenditure statistics. The development of comparable NHA methods for lower income countries (Berman, 1997), such as those now available for the LACNHA network countries, is an important step in this direction.

This first round of NHA estimates for eight LAC countries cannot address all or even most of the relevant questions. But it does reflect some of the lessons learned from international experience with health expenditure comparisons. The estimates are based on a comprehensive framework of national health spending—boundaries are defined, and missing or inadequate information can be identified. Spending attributed to the public and private sector is clearly defined in terms of sources and financing intermediaries. The composition of health expenditure in terms of several important uses classifications has been estimated.

Based on this framework, as applied in LAC and other countries, one can start to answer some additional important questions for lower and middle income countries:

- In terms of total health expenditure, comprehensive estimates are reporting higher levels of spending than previously measured and indicating that for some lower income countries health spending is already at a high level relative to income (Berman, 1999). What factors account for these different levels of spending and how might they be affected by reforms in finance and organization now being contemplated in the region?
- Much of this higher total spending is related to higher private health spending, especially out-of-pocket spending by households. There are several examples of this in the LACNHA results. How is this burden distributed? Are the benefits in terms of health and welfare commensurate with the costs?

- The influence of public sector spending on the health care system can be gauged in part from different views of the composition of total spending. Which providers and which services are being funded from public financing intermediaries? Can the state achieve health, efficiency, and equity objectives of reform primarily through interventions of state finance and provision? What role should be played by regulation of finance and provision in the non-government sector?
- Within the budget-financed sector, what explains differences in the shares of spending to specific types of inputs such as personnel and drugs? How efficient is the allocation of funds to these inputs?

To address some of these questions, which have captured international attention, lower income countries will ultimately need to be able to track health spending over time. This will require repeated implementation of NHA using a standard framework. The LACNHA network has taken the first steps in this direction.

3. HOW DO THE LACNHA ESTIMATES COMPARE WITH OTHER RECENT EFFORTS IN THE REGION?

Countries in the Latin American and Caribbean region have participated in efforts to estimate national health expenditures almost since such efforts began in the 1960s (see, for example, Abel-Smith, 1963). More recently, international organizations such as the PAHO and the World Bank, as well as USAID, have assembled available information to permit cross-country comparisons of the level and composition of health expenditure (Zschock, 1986; McGreevey, 1990; PAHO, 1994). In the 1990s, several region-wide estimates were developed that can be used for comparison with the current study. These include a careful set of estimates made for 1988 by PAHO (Suarez et al., 1995), estimates assembled for the World Bank's *World Development Report 1993* and then revised (Govindaraj et al., 1997), and most recently preliminary results of a re-estimate by PAHO (1998).

Nevertheless, because the process of collecting and analyzing national health spending data in these other efforts was quite different from that of the LACNHA network, differences in the results should not be surprising. These other studies consist of national and international statistics assembled from secondary sources by small groups of external analysts working with the agencies sponsoring the reviews. The data may not have been developed for the purpose of estimating national health spending. They were sometimes incomplete or included elements that went beyond the agreed upon definition of health expenditure. For example, government spending might have been estimated from the International Monetary Fund's (IMF) statistics on central government expenditure, which do not include spending by state and local governments, but which might include non-health items of expenditure. Data may have been taken from different years and used to estimate spending in the study year. Finally, in assembling these data, it was very difficult to check for internal consistency and double-counting.

In contrast, the LACNHA data were collected by a team in each country based on a comprehensive and consistent framework that had been adopted by all the countries in the group (see Berman, 1997, for more detail on the content and advantages of this approach). The NHA methodology included a common definition of what should be included as health expenditure. Specific spending estimates were entered into a "sources and uses" matrix framework that helps the analyst ensure consistency and avoid double-counting. Estimates were reviewed and discussed by different institutions in each country, which helped identify problems.

A basic problem with comparisons of different estimates is that there is no "gold standard" against which to judge results—such standards will only emerge from more sustained efforts in the region to develop estimation methods and repeatedly apply them, testing the results over time against previous estimates and the standards of plausibility imposed by health finance experts. To overcome this problem, NHA takes a first step to apply a comprehensive methodology at the national level and to compare results with earlier, more ad hoc efforts. The approach for now, therefore, is to look at differences in these estimates and to attempt to explain, with the more detailed information that emerged from the LACNHA studies, why these differences would occur.

3.1 SOURCES OF DIFFERENCES BETWEEN HEALTH EXPENDITURE ESTIMATES

The figures displayed in Table 1 compare the recent estimates for health care expenditures in the LAC region. Some large differences are apparent across the estimates. For example, not only do the

estimates of the Dominican Republic's expenditure on health as a percentage of GDP increase substantially from 1988 to 1995, but the two per capita health expenditure estimates for 1995 differ significantly: US\$164 according to the NHA report and US\$77 according to PAHO.

TABLE 1. COMPARISON OF RECENT TOTAL HEALTH EXPENDITURE ESTIMATES IN THE LAC REGION

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Total per capita health expenditure (US\$1988) ¹	39	32	79	53	30	86	27	41
% GDP (1988) ¹	4.5	4.8	6.3	5	3.3	3.8	5	3.1
Total per capita health expenditure (US\$1990) ²	34	59	39	58	37	155	31	59
% GDP (1990) ²	5.5	3.6	3.7	5.9	5.0	5.5	7.9	3.1
Total per capita health expenditure (US\$1995) ³	39	164*	71	135*	35	168	54	112
% GDP (1995) ³	4.45	7.3*	4.6	7.4*	2.2	5.5	12.9	4.2
Total per capita health expenditure (US\$1995) ⁴	48	77	71	158	56	160	35	128
% GDP (1995) †	6	5.3	5.1	6.8	4.2	4.8	9.2	5.5

¹Estimates are for the year 1996.

²Suarez, R. et al., 1995

³Govindraj, R. et al., 1997

⁴1998 NHA Reports

†PAHO, 1998.

As introduced above, several factors account for these differences. Different studies use different sources of data, and sometimes the data are inconsistent, for a number of reasons. The estimates of national health expenditures by international organizations may rely on internationally published data that may be several years older than those available to the in-country NHA teams. Making reliable projections based on such data depends on stable and predictable economic conditions and on the degree to which they apply to the health sector. One benefit of the NHA studies is the ability to examine health budgets and government accounts in detail and to access the most recent national data on health spending, including data from household surveys. Two examples of this are the Dominican Republic and Guatemala, where each country recently implemented a household survey that yielded data not available to the earlier studies. Using the surveys, the NHA teams were able to estimate current expenditures on health rather than project expenditures from older sources.

Another source of difference may arise from the revisions to macroeconomic data. GDP figures for a given year are often adjusted in later years as more information is obtained. Likewise, the choice of exchange rate (year-average or end-of-year rate) and population estimate also affects of these comparative figures.

Differences also result from changing the scope of what is counted as a health care expenditure. International classifications of government health care expenditures are based on definitions of the functions of governments taken from the standard United Nations classification systems. One source that regularly produces fiscal data on government health expenditures is the International Monetary Fund (IMF), in its annual yearbook on *Government Finance Statistics*. In Section 5 of the *Manual on Government Finance Statistics*, the IMF defines Health Affairs and Services as including:

- Hospital affairs and services,
- Clinics, and medical, dental and paramedical practitioners,

- Public health affairs and services,
- Medications, prostheses, medical equipment, and appliances or other prescribed health-related products,
- Applied research and experimental development related to the health and medical delivery system, and
- Health affairs and services not elsewhere classified.

In estimating government health expenditures, PAHO and the World Bank have drawn information from the *Government Finance Statistics*, as well as from a broad range of official government documents, country studies, and reports. These sources report what governments report to them, assuming consistent application of the classifications and definitions. The NHA country teams on the other hand, had the resources and time to perform a substantially more detailed analysis of expenditures. For example, the teams carefully scrutinized budgets of their ministries of health as well as other ministries and departments, and determined which expenditures were directly related to health care. Thus, although the PAHO/World Bank and NHA definitions of health expenditures may be similar, the two estimates sometimes differ dramatically.

When comparing health spending from the late 1980s to the mid-1990s, it is important to recognize the significant economic changes taking place in the region. At the end of the 1970s, most LAC countries were affected by serious economic crisis, which led to structural adjustment programs. Additionally, in 1982 the external debt burden brought to light the economies' vulnerability to world market fluctuations. The crisis led to a progressive decline in living conditions and the impoverishment of broad sectors of the population. A very important aspect of the crisis was the serious deterioration of quality and coverage of health services (in many countries not yet overcome), which in most cases relied heavily on budgets allocated by national governments. The economic crisis of the 1980s, stabilization, and structural adjustment programs have all had a profound impact on levels of national health expenditures and on the financing of the health sector, with declines in real health spending during the 1980s (Inter-American Development Bank [IADB], 1998; PAHO, 1998).

The LAC region began to show signs of recovery in the second half of the 1980s and the beginning of the 1990s, although serious political crises persisted in several countries. After four years of moderate expansion, with relative price stability and a large inflow of external capital, and an increase in GDP of more than five percent in 1994, the average annual rate of economic growth in the LAC region fell to 0.7 percent in 1995.¹ However, inflation continued to decrease in the region as a whole: the median rate of inflation (the inflation experienced by the typical LAC country) fell from 31 percent in 1990 to 17 percent in 1995. The fiscal consolidation that underpins this inflation decline strengthened during 1995; the average deficit of the region's economies fell to 1.2 percent of GDP, its lowest level in 20 years (IADB, 1998). These processes were accompanied by significant changes in the organization and role of the central governments, characterized in many cases by administrative decentralization and the privatization of public services. Even if LAC countries display considerable variations in central government expenditures as a percentage of GDP and in per capita health spending, it is possible to say that health expenditures recovered substantially during the 1990's (IADB, 1998; PAHO, 1998).

¹ This deceleration was attributable to the fact that Argentina and Mexico, two of the region's largest economies, fell into deep recession in the aftermath of the financial crisis that followed the Mexican devaluation of December 1994. In the rest of the region, growth in 1995 was, on balance, similar to that recorded in 1994.

3.2 SPECIFIC ANALYSIS OF DIFFERENCES BETWEEN ESTIMATES: A LOOK AT FOUR LAC COUNTRIES

To understand the differences in health care expenditure estimates, one has to look at particular countries of concern. A case analysis of each of the four countries in which estimates differ by more than 10 to 15 percent (Bolivia, the Dominican Republic, Guatemala, and Nicaragua) appears below.²

Preliminary to these discussions, Table 2 summarizes the size, direction, and sources of key differences in the country estimates. The most common differences were in the NHA teams' higher (and, in the opinion of the authors, more accurate) estimates of private spending, especially household out-of-pocket spending. In several cases, PAHO estimates of specific public spending sources were projections based on earlier estimates, which the national teams found to be incorrect when examined with up-to-date national data. Differences in GDP estimates were also important in two cases.

TABLE 2. EXPLANATION OF DIFFERENCES BETWEEN NHA AND PAHO HEALTH EXPENDITURE ESTIMATES

	YEAR OF ESTIMATE		DIFFERENCES IN TOTAL HEALTH EXPENDITURES (NHA-PAHO)		DIRECTION AND SOURCES OF DIFFERENCE (NHA-PAHO)						
					GDP ESTIMATE US\$ PER CAPITA (NHA-PAHO)	PUBLIC SPENDING			PRIVATE SPENDING		
	PAHO	NHA	US\$ PER CAPITA	% GDP		Central Govt.	Local Govt.	SOCIAL HEALTH INSURANCE	HH	PRIVATE INSURANCE	OTHER
Bolivia	1995	1995	-9	-1.55	-			-	+		
Dominican Republic	1995	1996	87	2	NA				+	+	
Guatemala	1995	1995	-21	-2	NA	-			+		
Nicaragua	1995	1995	19	3.7	+	+			+		

+ NHA estimate significantly greater than PAHO estimate
- NHA estimate significantly less than PAHO estimate

Bolivia

For Bolivia, PAHO estimates of per capita health expenditures in 1995 exceed NHA estimates by US\$9. The share of GDP spent on health also is greater (1.55 percent) in the PAHO study. A small portion of this difference is accounted for by differences in the values for GDP used: the NHA team estimates a per capita GDP of US\$395 while PAHO uses a per capita expenditure of US\$421. However, this accounts for only a small fraction of the difference.

One major difference results from treatment of spending on social security health funds (*cajas de salud*). In 1990 Bolivia reported that spending on the health funds was approximately 2 percent of GDP. PAHO projections for 1995 increased this expenditure. However, the Bolivian NHA team found that

² Complete NHA country reports for the four countries (as well as the additional four countries that comprise the LACNHA network) are available from the Partnerships for Health Reform and PAHO. See the Publications list at the back of this report for ordering information. A subset of NHA matrices from those reports is an annex to this report.

spending actually *decreased* for the health funds, to approximately 1.5 percent of GDP. This reduces the difference between the two estimates to within 1 percent of GDP.

With respect to private sector spending, both PAHO and the NHA team projected their estimates from the same household survey implemented in 1990. However, the Bolivian NHA team was able to supplement this information with data collected in the 1992 round of the survey. They were also able to capture more subtle expenditure trends by using data from the consumer price index to calibrate their household health expenditure estimates. The team also made an additional adjustment on out-of-pocket spending: when estimating expenditures on pharmaceutical products, the NHA team performed a careful analysis of total pharmaceutical production and purchases and found that the household surveys underestimated out-of-pocket purchases of medication. Their figures for out-of-pocket medical purchases were adjusted accordingly. Finally, the Bolivian NHA report is unique in that it discusses external aid funding in the private sector.

Dominican Republic

Although the NHA figures for the Dominican Republic are for 1996 and PAHO's are for 1995, the difference between the respective estimates is considerable. The NHA team estimated a per capita expenditure of US\$164; PAHO estimated one of US\$77. Additionally, the percent of GDP spent on health care differed—7.3 percent and 5.3 percent respectively.

The difference in the PAHO and the NHA estimates is accounted for almost completely by the use of different sources for private health expenditures. PAHO figures are based on a report (Hatton, 1996) that used data on final private consumption on health produced by the Central Bank. These figures do not include expenditures incurred through private insurance, a small but growing sector in the Dominican Republic. The report quotes a private expenditure of approximately 4 percent of GDP for 1994. Since the figures went only through 1994, PAHO estimated 1995 data using the income elasticity for health. The NHA team was able to utilize the *Encuesta Nacional de Demografía y Salud*, a household survey implemented in 1996 to determine private sector expenditures. The survey showed a private sector expenditure on health care of approximately 6 percent of GDP. This difference alone explains the 2 percent variance in GDP between the two sources.

Guatemala

The NHA team from Guatemala presented a 1995 health expenditure figure substantially lower—more than \$20 per capita and 2 percent of GDP—than that of PAHO. Differences in the estimates for private expenditures account for about 1.2 percent of the GDP discrepancy; the remaining 0.6 percent is due to differences in estimates of public expenditure.

One explanation for the discrepancy stems from the source for private sector spending estimates. PAHO estimates are projections based on a 1981 household survey, the only survey available until recently. The NHA team, on the other hand, was able to utilize a 1997 household survey by the National Statistical Institute. The NHA team was also able to capture foreign aid in the private sector, with approximately 4 percent of total health expenditure occurring in non-governmental organizations (NGOs).

The reason for the difference in figures for public expenditures on health is less clear. The Guatemala NHA report dedicates an entire annex to the discussion of why previous estimates differ so significantly from NHA figures. The NHA team attributes the discrepancy to differences in the definition of health care activities, specifically, that previous estimates included activities related to water and sanitation as preventive health care expenditures. This is one area where further examination may need to be done.

Nicaragua

Of the eight LACNHA network countries, Nicaragua has the lowest GDP per capita and has experienced severe hyperinflation in the past decade (World Bank, 1997). With a GDP deflator for 1985-1995 of 961.6 percent, it is extremely difficult to accurately interpret survey results and budgets and convert to dollars. These kinds of problems can be found in the PAHO and NHA estimates where different values are used for GDP and population sizes. The NHA team reported a GDP per capita for 1995 of \$448.5 while PAHO, using IMF data, reported one of \$431.

The NHA team admittedly experienced difficulties obtaining official GDP figures for 1995 and 1996. This obstacle prohibited the team from consistently quoting a per capita health expenditure estimate. Thus, using the team's estimates for public and private sector spending, and the IMF's published GDP estimate for 1995, this report estimates that approximately 13 percent of GDP was spent on health care. The division between public and private expenditures was 68 percent and 32 percent respectively. This expenditure breakdown is consistent with the 1995 PAHO estimates, although estimates for both the public and private sectors are higher in the NHA study. In Nicaragua, the detailed examination of public expenditures, the inclusion of Ministry of Defense and Ministry of Governance figures, as well as the results of a 1996 household survey, all point to higher levels of expenditures than were previously suggested.

While the percentage of GDP dedicated to health expenditures appears high, in absolute terms, spending on health is relatively low for the region (US\$54). Nicaragua also receives a substantial amount of foreign aid in the health sector, approximately 20 percent of total health expenditure.

These four cases help to demonstrate how and why health care expenditure estimates vary across sources. Still other factors that account for variations are different levels of GDP and inflation rates. Thus, while a country like Mexico may have a relatively average percentage GDP expenditure on health care (5.5 percent), in absolute terms, it has the highest expenditure per capita of any of the eight network countries. A final factor is illustrated in Table 3, which compares the public/private shares of total health expenditures as reported in the eight LACNHA studies. For Guatemala, the NHA report shows a division of 60:40 respectively while the PAHO figures show a 45:55 divide. As mentioned earlier, most, but not all of this difference is accounted for by the lower estimate of household spending resulting from the more recent survey.

**TABLE 3. COMPARISON OF PUBLIC-PRIVATE PROPORTIONS OF TOTAL HEALTH EXPENDITURE
(IN % OF TOTAL EXPENDITURE)**

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
% Public (1990) ¹	32	31	40	26	52	38	74	35
% Private (1990) ¹	68	69	60	74	48	62	26	65
% Public (1990) ²	29	34	63	30	33	56	62	34
% Private (1990) ²	56	63	30	56	58	43	16	64
% Public (1995)-FA ³	65	21	46	46	60	43	68	66
% Private (1995)-FA ³	35	78	46	53	40	57	32	34
% Other (1995)-FA ³		1	9					
% Public (1995) ⁴	55	38	32	27	45	47	63	51
% Private (1995) ⁴	45	62	68	73	55	53	37	49

¹Suarez, R. et al., 1995

²Govindraj, R., et al., 1997

³1998 NHA Reports

⁴PAHO, 1998

Thus, it is important to keep the variances among estimates and across countries in mind during the discussion of the implications of the results of the eight NHA reports and in making cross-country comparisons.

4. INCOME, TOTAL HEALTH SPENDING, AND OUTCOMES

The estimate of total health expenditure in a nation that emerges from a comprehensive NHA study can be linked to a variety of other important national-level variables such as national income (total and per capita) and life expectancy. It is also instructive to explore how large health care system-level factors, such as the level of health insurance coverage in a country, may be associated with health spending.

Estimation of national income is fairly well standardized using the United Nations System of National Accounts. The exception among the LACNHA countries was Nicaragua, which by the time of the NHA study had not produced a reliable estimate of GDP since the early 1990s, when it was emerging from an extended period of civil conflict. Using the older GDP figure, Nicaragua reported health expenditure as 12.9 percent of GDP, a figure certainly well above the probable real level of current GDP. As a consequence of this problem, Nicaragua will be omitted from the comparisons in this section, which use national income figures.

Figures 1 and 2 show the relationship between LACNHA health care spending and life expectancy. This positive association exists whether health spending is expressed in share of GDP terms or in absolute per capita terms. However, as has been shown in analysis of similar relationships for larger groups of countries (World Bank, 1993) this link may not be a simple one. Increasing health care spending is related to better health, but the efficacy of increasing health expenditure per se in improving health depends on other national and health care system factors, as reflected in the distribution of points around the simple linear regression line.

FIGURE 1. LIFE EXPECTANCY AND PER CAPITA HEALTH EXPENDITURE

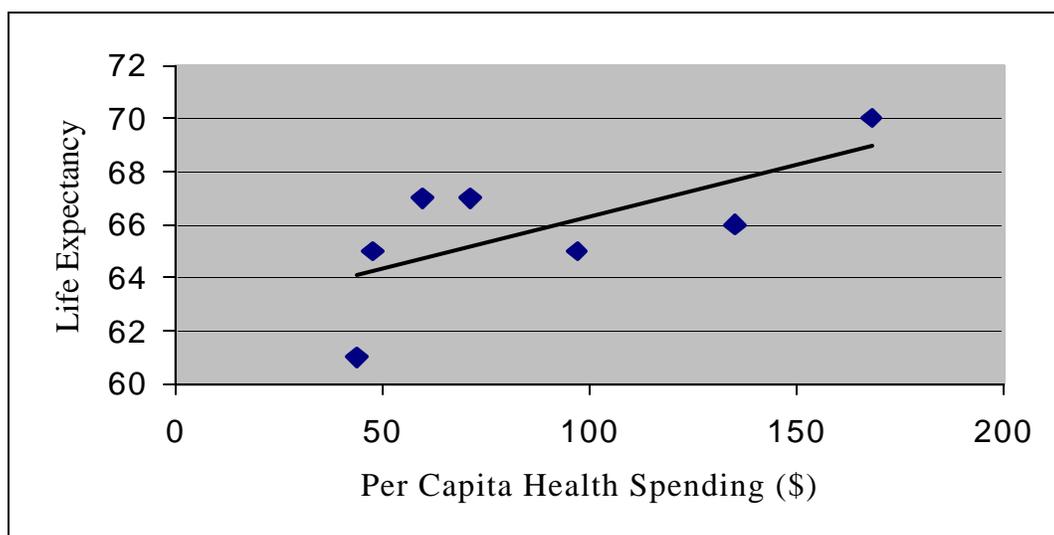
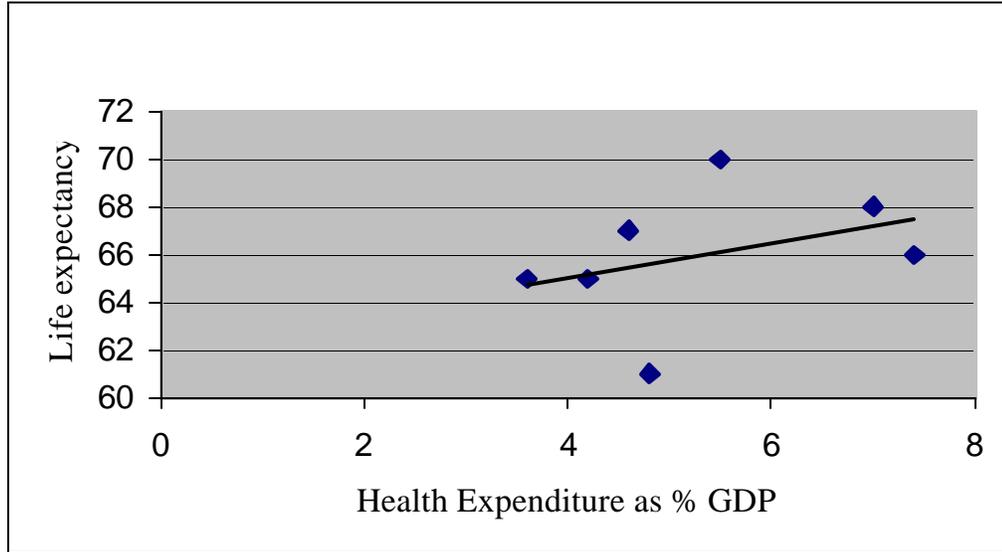


FIGURE 2. LIFE EXPECTANCY AND HEALTH EXPENDITURE IN GDP



Figures 3 and 4 show the link between national income and health spending. While Figure 3, which links actual per capita health spending and per capita GDP, suggests that better-off countries spend somewhat more in absolute terms, Figure 4 shows little trend and much variability across the LACNHA countries in the share of income devoted to health care.

FIGURE 3. GDP AND HEALTH SPENDING: ABSOLUTE VALUES

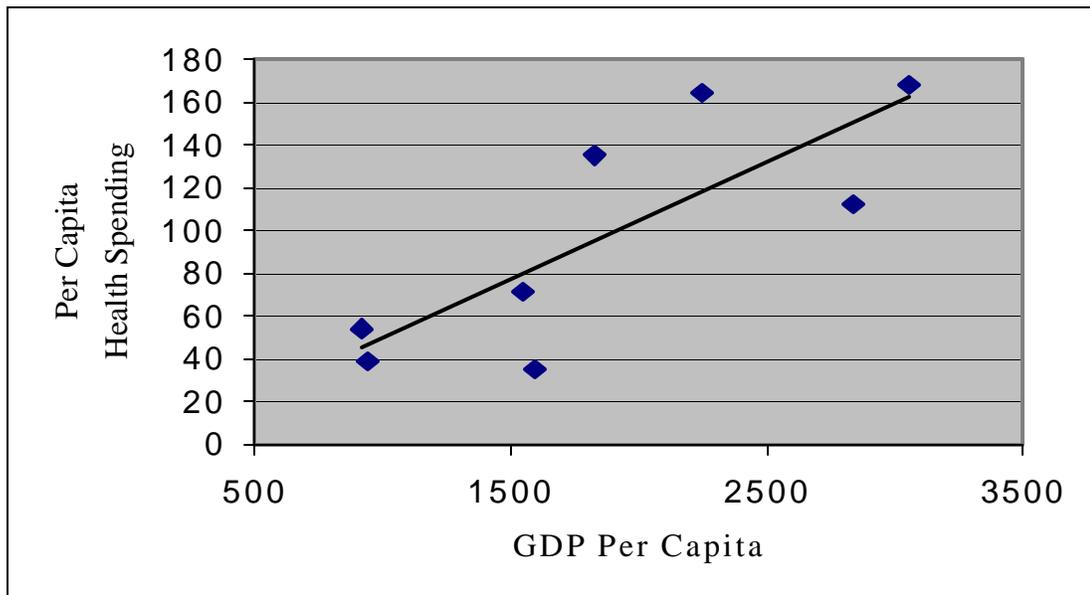


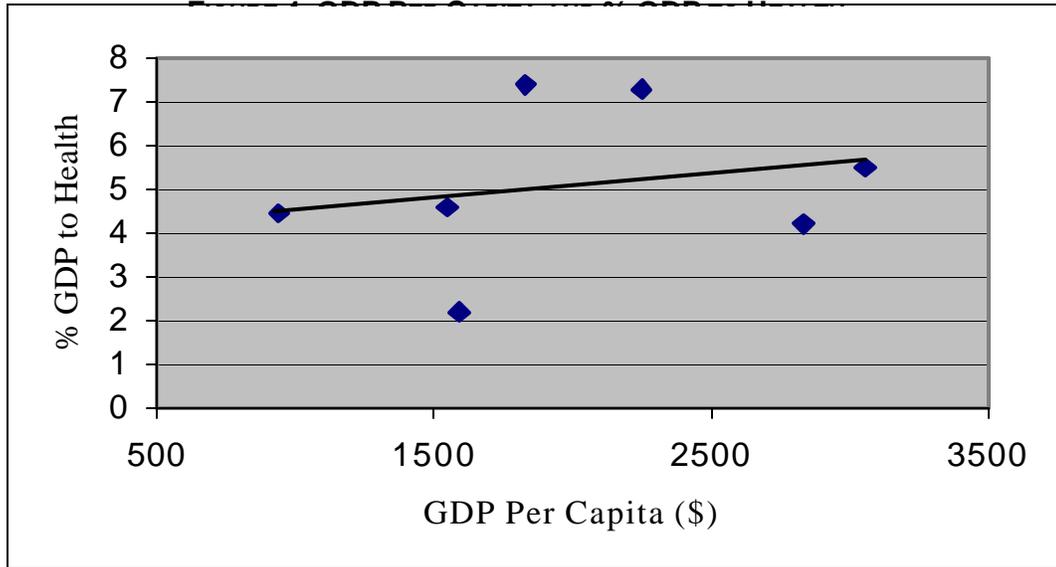
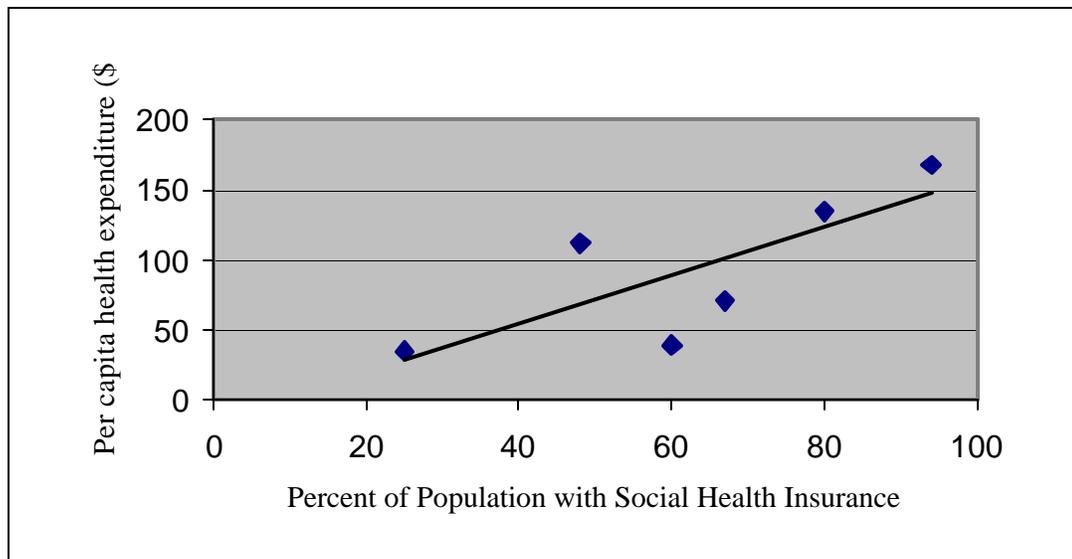
FIGURE 4. GDP PER CAPITA AND % TO HEALTH

Figure 5 links health spending with the level of social health insurance coverage and indicates a strong positive relationship. There are several possible explanations for this. Per capita expenditure by social health insurance is generally higher than for government health services, which could be reflected in higher total health spending as insurance coverage increases. There is also evidence that insurance expenditure may not effectively replace household spending but rather supplement it, resulting in higher total spending.

FIGURE 5. SOCIAL HEALTH INSURANCE COVERAGE AND PER CAPITA HEALTH SPENDING

5. THE PUBLIC-PRIVATE MIX IN HEALTH CARE FINANCING

The NHA methodology provides two breakdowns of the public-private mix in health care financing. The first of these identifies public and private *sources* of financing, as defined in the NHA framework, where sources refers to entities who provide funds to those who are the final payers or purchasers of health care. The second breakdown relates to the public-private composition of expenditure by *financing agents or intermediaries*, the entities who receive funds from sources and use them to purchase or pay for health care services.

This approach differs from the usual presentation of the public-private mix in financing, which generally is drawn from analysis of financing intermediaries. For example, following on the practice of the health expenditure information reported by the Organization for Economic Cooperation and Development, public finance typically includes departments of government and social health insurance institutions, while private finance includes private health insurance, NGOs, direct payments for health care by private firms, and out-of-pocket payments by households.

One would expect the breakdown by sources to differ significantly from that by financing intermediaries. For instance, in many countries, social health insurance is largely financed by payments of private firms and workers through mandatory contributions. It is debatable whether social health insurance contributions should be called taxes or premiums, as they have some characteristics of both. But clearly they are different from general tax revenue collected by the state and not earmarked for health. The NHA methodology makes this distinction by identifying firms' and households' contributions to different financing intermediaries, including mandatory and voluntary insurance contributions and other payments, such as user charges. Of course, ultimately all health care financing is derived from "private" sources, if one considers who pays the taxes. The NHA methodology does not disaggregate sources of government financing according to who ultimately bears the burden.

Table 4 compares the public-private mix in terms of sources of financing with that of financing intermediaries. The sources breakdown includes three categories: public, including departments of government and state-owned enterprises; private, including private firms and households; and external aid, including foreign sources of funds. The financing intermediaries breakdown follows the usual convention, with public including departments of government, state-owned firms, and social health insurance, and private including private insurance, NGOs, private firms, and households.

TABLE 4. CONTRASTING VIEWS OF PUBLIC-PRIVATE MIX IN HEALTH CARE FINANCING: SOURCES AND FINANCING INTERMEDIARIES (% TOTAL EXPENDITURE)

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Financing Intermediaries								
% Public	65	21	46	46	60	43	68	66
% Private	35	78	46	53	40	57	32	34
% Ext Aid		1	9					
Sources								
% Public	56	14	35	22	27	36	42	38
% Private	34	84	56	72	65	64	41	62
% Ext Aid	10	2	9	5	8	0	18	1

Source: See NHA Country Reports (Annexes)

In all eight LACNHA countries, the public share of spending is significantly higher for financing intermediaries than for sources. The difference in shares largely represents the importance of social health insurance and user fees in total expenditure, as public sector “payers” capture a larger share of total spending.

Table 5 presents in greater detail the shares of total health expenditure held by different types of financing intermediaries, with the totals for public and private corresponding to those in Table 4. Direct central government financing ranges from 9 to 32 percent of total expenditure in most of the countries, with Nicaragua an outlier at 58 percent of total spending. The LACNHA countries were not drawn from the wealthiest nations in the region, so that the levels of social insurance financing are relatively low. Private health insurance was generally below 5 percent of total expenditure, whereas households direct spending accounted for a third of the total in five countries and over 50 percent in two countries.

TABLE 5. DISTRIBUTION OF TOTAL HEALTH EXPENDITURE ACROSS THE MAJOR TYPES OF PAYERS OR FINANCING INTERMEDIARIES (IN % OF TOTAL EXPENDITURE)

TYPE OF PAYER/ INTERMEDIARY	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Central govt. depts.	23.9	16.1	23.5	23.0	31.3	9.1	57.5	31.6
Other govt. depts.	1.4		9.6	2.2				9.6
State-owned firms	2	.3			.2			NA
Social health insurance	37.7	4.8	21.5	20.5	27.8	34.3	10.5	24.6
Total Public	65.0	21.2	54.6	45.7	59.3	43.4	68.0	65.8
Private health insurance	2.5	7.5	10.3	1.1	3.9	1.4		3.1
Non-govt. organizations	4.0	1.9	1.3	.2	4.0			.8
Private firms' direct payments		42.7	.7					1.9
Households' direct payments	28.5	26.62	33.1	53.0	32.8	55.2	32.0	28.4
Total Private	35.0	78.7	45.4	54.3	40.7	56.6	32.0	34.2
Total	100	99.9	100	100	100	100	100	100
Health expenditure per capita (US \$)	39	164	71.2	135	35	168	54	112

6. RESOURCE ALLOCATION IN THE HEALTH SECTOR: SPENDING ON MAJOR HEALTH CARE FUNCTIONS

All eight countries tried to develop a “financing intermediaries to functions” matrix, one of the core breakdowns of the NHA framework. This matrix shows the flow of funds to the main health care functions, classified as personal health services for inpatient and ambulatory illness treatment; preventive and promotive public health services, both personal and collective; general administration; and other (includes medical education and training, research, and other unallocable costs). Unfortunately, in four of the countries—Bolivia, Dominican Republic, Ecuador, and Peru—some of the data needed to complete these estimates were not available. In the Dominican Republic and Peru, it was not possible to separate inpatient and ambulatory treatment services. In Bolivia and Ecuador, general administration and “other” expenditures could not be adequately separated. The results as reported are shown in Table 6.

**TABLE 6. SHARES OF TOTAL HEALTH EXPENDITURES ALLOCATED TO SPECIFIC FUNCTIONS
(IN % OF TOTAL EXPENDITURE)**

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Inpatient curative care	30.01	67.04	42.60	42.10	46.98	28.49	35.42	76.02
Ambulatory curative care	31.41		20.80	31.13	33.30	50.67	42.63	
Individual and collective preventive and health promotion services	2.94	7.37	2.30	5.52	4.50	9.00	15.90	12.34
Administration and other	33.17	25.49	34.30	21.25	15.22	11.85	6.11	11.64
Total	100	100	100	100	100	100	100	100

Source: See NHA Country Reports (Annexes)

Some interesting findings do emerge. Spending on personal illness care services ranged across all eight countries from 61 to 80 percent of total spending, with most values clustered nearer the higher number. Countries reporting the inpatient/ambulatory breakdown were evenly split as to which was higher. Preventive and promotive public health services accounted for less than 10 percent of total spending in six of eight countries and in no case more than 16 percent. Administration costs, which mainly include those of government and social health insurance, ranged from 4 percent to 15 percent of total spending in the six countries reporting.

The LACNHA country analysts generally reported difficulty with this type of functional breakdown of expenditures, especially with data from the public sector. Government departments, especially the ministries of health, tend to report expenditures according to budget categories. Often, a directorate of curative services funds both hospitals and clinics, with a significant share of publicly provided ambulatory care given by hospitals. In contrast, preventive and promotive public health services may be financed through budgets defined as such, although this may not include the fixed costs of personnel and facilities supporting these services. Social health insurance organizations may also directly finance their own providers with only limited purchasing of services from private or government providers. This is an important area for future work on national health expenditures.

The “financing intermediaries to function” matrices also can be used to analyze *who* finances different types of services. For example, are the funds available to government, social insurance, and private payers financing a similar mix of services or is there evidence of some type of financial division of responsibility for different types of health care? While the data from the LACNHA countries suffer

from estimation problems already mentioned, there is some indication of differential responsibilities in financing.

Table 7 shows the ratio of expenditure by public to private financing intermediaries for the main types of services: personal—inpatient and ambulatory treatment—and collective public health services. Government and social insurance financing is generally higher for inpatient services, while households direct payments pick up a significantly larger share of spending on ambulatory services. Governments are the largest financier of preventive services in most cases.

TABLE 7. RATIO OF PUBLIC TO PRIVATE FINANCING (FINANCING INTERMEDIARIES) FOR MAIN TYPES OF HEALTH CARE SERVICES (WHERE AVAILABLE)

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Personal Health Services								
Inpatient Care	5.41	0.15	2.59	1.23	2.50	1.48	2.40	1.28
Ambulatory Care	2.84	NA	1.51	0.09	0.60	0.31	1.04	NA
Public Health Services (prevention and promotion)	23.50	0.03	all public	37.31	1.26	0.42	48.44	all public

Source: See NHA Country Reports (Annexes)

7. THE FLOW OF FUNDS TO DIFFERENT TYPES OF HEALTH CARE PROVIDERS

NHA estimates the distribution of total expenditures to different types of health care providers. If the data permit, providers can be classified according to ownership as well as types of facilities.

The primary analysis according to provider types displays the flow of funds from the different financing intermediaries to the different types of providers classified by ownership (government, social insurance, private-for-profit and not-for-profit) and if possible by level of provider (hospitals, health centers and clinics, individual private practitioners, pharmacies, etc.). All the LACNHA countries completed this matrix.

Health care financing in the LAC region is characterized by a high level of “verticality”: that is, each type of financing intermediary—government, social insurance, private insurance, firms, and households—largely pays for health care from providers in that sector. In other words, government departments fund government-owned providers; social insurance agencies largely fund social insurance-owned hospitals and clinics; and private payers purchase health care from private providers.

The “financing agents to providers” matrices produced by the LACNHA countries reflect this characteristic. When the flow of funds from financing intermediaries cuts across sectors in terms of providers, it is usually households’ direct payments that are the main source of such pluralism. This largely consists of household out-of-pocket payments to government and social insurance-owned facilities, usually in the form of user charges or co-payments. In the results reported by the LACNHA countries, this is typically not a large share of total expenditure or a large contribution to government or social insurance-owned providers. While expenditure from private sector financing intermediaries is sometimes a large share of total spending, it is mainly directed at private providers.

The “financing intermediaries to provider” matrix from Ecuador provides a useful example of this, as shown in Table 8.

**TABLE 8. ECUADOR, 1995: FINANCING INTERMEDIARIES TO PROVIDERS MATRIX
(IN % OF TOTAL EXPENDITURE)**

FINANCING INTERMEDIARIES	PROVIDERS							TOTAL
	GOVERNMENT HOSPITALS	GOVERNMENT CLINICS	OTHER GOVERNMENT PROVIDERS	SOCIAL SECURITY PROVIDERS	PRIVATE PROVIDERS	PHARMACIES	OTHER	
Central govt.	11.7	10.3	1.6					23.6
Other govt.			0.9				8.7	9.6
Social security			0.4	20.9				21.3
Private Insurance					6.2	0.2		6.4
NGOs				4.8	.5			5.3
Private firms					0.7	<1.0		.7
Households	1.3	2.6			18.4	10.8		33.1
Total	13.0	12.9	3.0	25.7	25.8	11.0	8.7	100

Private expenditure accounts for about 45 percent of total spending, of which households' direct payments comprise more than three quarters. However, only 12 percent of these household payments (or about 4 percent of total health expenditure) is reported going to government providers. These funds comprise about 12 percent of total spending on services in government health centers and a quarter of total spending on services in government hospitals.

Ecuador reported no direct household spending on services provided by social insurance providers, and a number of the LACNHA countries reported no direct household spending on services at government providers. (NB: if a visit to a government provider resulted in outside purchase of pharmaceuticals this would not and should not be reported as spending at government providers in this breakdown.) The general results confirm that these type of cross-sectoral expenditures are very limited in the LACNHA countries. However, it is also possible that the available data do not record such payments, if they do occur and are illegal or not asked about.

Resource allocation across provider types provides another, sometimes significantly different picture of how health sector funds are being used. The breakdown by ownership categories, such as government-owned facilities, those owned by social health insurance organizations, and privately owned facilities, highlights the relative financial importance of the different sectors in delivering health care. The allocation across facility types, such as hospitals, clinics, and individual practitioners, shows where financial resources are consumed in the delivery system. Since facilities often provide a number of different types of services, the results may be different from the functional breakdowns shown in earlier sections of this paper.

Table 9 shows the allocation of expenditure across the major categories of providers classified by ownership—government, social insurance, and private providers. Government-owned providers accounted for less than 30 percent of total spending in six of the eight countries, the exceptions being Nicaragua and Peru. In Nicaragua, no social health insurance provider sector was reported, so that government facilities account for 62 percent of total spending. In the other seven countries, all of which reported a social health insurance provider sector—that is, hospitals and clinics owned and operated by the social insurance institutions—these facilities accounted for 20 percent to 40 percent of total spending. Private providers were the largest sector in five of the eight countries. In most of these countries private providers accounted for 35 percent to 55 percent of total spending, with the exception of the Dominican Republic where private provision was reported to consume almost four-fifths of total spending.

TABLE 9. HOW FUNDING FLOWS TO DIFFERENT TYPES OF PROVIDERS CLASSIFIED BY OWNERSHIP

	BOLIVIA	DOMINICAN REPUBLIC	ECUADOR	EL SALVADOR	GUATEMALA	MEXICO	NICARAGUA	PERU
Govt. provider	28.59	14.87	28.80	25.12	28.82	9.51	62.60	41.22
Insurance provider	38.21	5.59	20.90	20.54	30.54	33.20		24.59
Private providers	33.20	79.53	41.30	54.35	36.02	57.40	37.40	34.19
Unspecified			8.70		4.62			

Source: See NHA Country Report (Annexes)

Several of the LACNHA countries were able to estimate the flow of funds for total expenditures on specific types of services according to ownership of the providers delivering those services. For example, El Salvador highlights the sharp contrast in which providers (by ownership) deliver which types of services. Seventy percent of expenditures on inpatient curative services go to government and social security hospitals, while 91 percent of expenditures on outpatient curative services go to private providers. Preventive and promotive services expenditures go overwhelmingly to government-owned providers (78 percent) and to those owned by social insurance (almost 20 percent). Unfortunately, most of the other countries did not yet produce this type of “providers by functions” breakdown of expenditures.

8. EXPENDITURE SHARES TO DIFFERENT TYPES OF HEALTH CARE INPUTS

The allocation of funds to different types of health care inputs can be used as a marker of factors related to efficiency and quality in health care production. In comparing similar funding or provision organizations across countries, large differences in the shares of total spending to specific types of inputs, for example, drugs and supplies, can highlight problems in service delivery. Some of these comparisons are possible with the LACNHA data.

Table 10 presents the share of expenditure by two types of financing agents found in all participating countries, ministries of health and national social security organizations. Expenditures reported on personnel (mainly salaries) and on drugs and supplies were broken out, and all other expenditures lumped together in an “other” category.

TABLE 10. EXPENDITURE SHARES TO SALARY AND DRUGS AND SUPPLIES BY MINISTRIES OF HEALTH AND SOCIAL INSURANCE ORGANIZATIONS IN EIGHT LAC COUNTRIES

COUNTRY	AGENCY	% OF EXPENDITURE			
		SALARY	DRUGS & SUPPLIES	ALL OTHER	TOTAL
Bolivia	Ministry of Health	58.3	8.8	32.9	100
	Social Insurance Organization	44.7	21.2	34.1	100
Dominican Republic	Ministry of Health	66.9	16.6	16.5	100
	Social Insurance Organization	71.3	16.5	12.2	100
Ecuador	Ministry of Health	72.2	4.7	23.1	100
	Social Insurance Organization	50.3	29.3	20.4	100
El Salvador	Ministry of Health	47.3	11.5	41.2	100
	Social Insurance Organization	51.3	20.6	28.1	100
Guatemala	Ministry of Health	52.0	21.1	26.9	100
	Social Insurance Organization	50.0	30.9	19.1	100
Mexico	Ministry of Health	47.9	12.3	39.8	100
	Social Insurance Organization	74.4	9.0	16.6	100
Nicaragua	Ministry of Health	37.7	23.5	38.8	100
	Social Insurance Organization	35.7	50.2	14.1	100
Peru	Ministry of Health	11.1	8.2	80.7	100
	Social Insurance Organization	28.0	9.4	62.6	100

Source: See NHA Country Reports (Annexes).

The definitions used by the different organizations are not perfectly comparable. Personnel expenditure may or may not include different types of contract personnel. Drugs and supplies may include certain types of equipment purchases, although obvious classifications of capital equipment purchases were excluded.

In almost all the countries, the social health insurance organizations' share of expenditure on drugs and supplies is greater than that of ministries of health; ministries average about 10 percent while social health insurance agencies average over 20 percent. Since personnel costs are probably higher in these agencies as well, this is probably a significant difference. It may also be reasonable to assume that the health insurance organizations are more likely to assure adequate drug supplies in their facilities and to be more responsive to consumer perceptions of quality. One should not draw strong normative conclusions from this simple comparison, since other factors such as the mix of facilities, programs, and patients may account for such differences. But, combined with widespread anecdotal information that ministry facilities lack essential inputs, it does suggest a systematic problem in resource allocation.

9. SUMMARY AND IMPLICATIONS OF KEY FINDINGS

This paper has presented an initial comparison of the findings of eight countries' national health accounts studies. As with any set of detailed accounts, there are bound to be issues related to specific estimations that should be taken up to improve or refine the figures. Nevertheless, a number of important findings have emerged:

1. *More accurate estimates of health spending.* Where it was possible to compare regional estimation methods with NHA, the NHA approach provided opportunities to collect more complete data and to adjust problematic figures with more precision and justification.
2. *Some evidence of higher health spending.* For five of the eight LACNHA countries, application of a comprehensive NHA framework to national health expenditure analysis resulted in reporting 1995 health expenditures as a larger share of national income than had been reported in earlier studies (most recently, 1990). For comparisons with PAHO's most recent estimates (1995), half of the NHA figures were higher and half lower. Further analysis may provide yet higher estimates, if a secular trend of rising expenditure (as a share of income) is in place and if some poorly estimated pieces of the current studies (for example, firms direct spending) are improved. For two of the countries, the Dominican Republic and El Salvador, the higher estimates were felt to have quite significant policy implications.
3. *Significant private sector share of total spending.* These estimates continue to strengthen our accounting of spending by private sector financing intermediaries, especially household direct spending. This is the main explanation for higher estimates of total spending than earlier studies.
4. *Vertically organized, compartmentalized channels of financing and provision.* The studies confirm earlier observations in the region that financing and provision tend to be vertically organized for public sector payers—specifically the budget-financed services of government ministries and social security institutes. Private insurance is typically very small. Household direct payments are the most diverse type of financing, although they still support mainly private providers.
5. *Diverse roles for public and private sector financing.* Although the degree may differ, the LACNHA countries show a distinct pattern differentiating what types of services and providers are supported by public and private financing intermediaries. Public sector payers provide a larger share of financing for inpatient services and for hospitals, as well as for the public health goods of prevention and promotion. Private sector payers, which are dominated by household direct payments, provide a larger share of financing for outpatient treatment of illness and for private clinics and individual physicians. Outpatient illness care includes many priority health interventions that address common and serious child and adult disease. Governments should consider their roles as regulators and financiers more aggressively to improve efficiency and equity in these services.
6. *Differences in input mix in budget-financed services.* Comparison of the shares of spending on salaries and drugs/supplies between ministry of health payers and social security payers suggests that the former allocate much smaller shares of total spending to consumables relative to salaries. Given anecdotal evidence of quality differences, governments should assess whether they may be systematically underspending on drugs/supplies in public facilities.
7. *Feasibility of NHA studies in the LAC region.* The network demonstrated that multi-institutional teams could successfully complete initial NHA studies in a period of about 18 months with only

modest levels of technical support. While the results can certainly be improved, they provide a human, institutional, and technical basis for further work.

10. ACHIEVEMENTS, LIMITATIONS AND POTENTIAL FOR FUTURE INVESTIGATION

10.1 POLICY USES OF NHA IN THE NETWORK COUNTRIES

The LACNHA network was successful in producing NHA results for the participant countries. Are the results relevant for health policy and health sector reform? Can we demonstrate impact on health sector decision-making emerging from NHA analysis? These important questions remain to be answered. NHA is a basic data collection and analysis tool. It was *not* implemented in each country as a response to a specific national policy agenda, but rather as a general tool for health system analysis. Nonetheless, the national teams reported that NHA has been or will be useful in policy decision-making.

In Bolivia, NHA will provide a baseline estimate of national health spending according to the different uses of funds preceding a major decentralization of health spending authority to local governments. Subsequent studies may show how decentralization of financing affects total spending (do local governments raise more money?) and the allocation of spending to different types of service, providers, and inputs.

In Guatemala, there was great interest in the NHA estimates to help develop new resource allocation strategies as part of the national peace agreement ending that country's civil conflict. The reconciliation government has made explicit promises to increase and redistribute social spending. NHA will help provide a baseline against which to monitor these efforts. NHA will also be an input for health policy design and reform programs as the government introduces reforms to shift the role of the MOH from entirely one of service provide to more of a regulator and intermediary agent in health financing.

Ecuador has been exploring significant health sector reform for several years, although these efforts have often been delayed by political changes. Reform is once again on the agenda and NHA is providing the most recent available picture of health financing.

In Mexico, NHA has been carried out three times since 1990. The results have raised awareness of the significant size of the health sector in Mexico's economy, of regional and socioeconomic disparities in health spending, and of the major role played by private health care providers in Mexico's health care system. This increased awareness has encouraged expanded government efforts to reach underserved regions and populations, and to reform social health insurance, which covers the majority of the population. NHA-type analysis has been expanded in Mexico to the state level, allowing analysis of the health system impact of fiscal decentralization. Government efforts to increase funding for basic health care can be monitored along with success in reorienting priorities toward cost-effective programs.

Peru and the Dominican Republic are planning or launching health care financing reform programs. NHA has provided a comprehensive framework for organizing their health financing information and a basis for estimating the costs and financial impact of reform strategies. Analysts from the Dominican Republic NHA team are using their results to assess the distribution of health care resources to different socio-economic classes in that country.

Three of the participating countries (Peru, El Salvador, and the Dominican Republic) formed teams comprising analysts of national income as well as health expenditures. These countries developed both the NHA and System of National Accounts-based satellite accounts. All three teams reported that the

NHA approach improved their national income accounts estimates and would enhance the understanding of the health sector by national finance authorities.

10.2 SUSTAINABILITY

All eight countries formed strong multi-agency NHA teams. The national results are group efforts, with significant participation by different agencies in the countries and only modest external inputs. This strengthens the acceptability of results in the countries. All eight countries kept to the structure of the NHA framework and produced results with a high degree of inter-country comparability. They all produced all four sets of NHA matrices. Review of the results by national and international experts indicates that these estimates are more comprehensive than most previously available studies, and that they have a high degree of validity. For the several national teams that combined national income accountants with health sector experts, it was generally reported that both sides felt the collaboration strengthened their respective work. In other words, better NHA improves national income estimates, and better understanding of the methods of national income accountants improves NHA.

In Ecuador and Guatemala, the national authorities have now launched specific new efforts to repeat NHA and to sustain NHA capacity for future work.

10.3 METHODS

For many of the participating countries, the LACNHA network was their first experience in developing estimates of national health expenditure. The NHA methods that were used had been developed and tested in a number of country-specific studies. But this was also the first time they were disseminated as part of a multi-country network, where the work was done by interagency national teams with only modest external technical support. This was a learning experience for all. National authorities investigated their own sources of data and debated their accuracy and completeness. External advisors observed and advised their national counterparts to see whether a methodology used in a few countries could be adapted to a much larger group of countries at the same time.

Not surprisingly, the results had both positive and negative elements. Some things worked well, others did not. Based on this experience, NHA methods can be improved. National authorities can learn not only from the new information generated, but also from the limitations of their results. In NHA, sometimes learning what we don't know or can't estimate can be very useful. Some of the key methodology lessons were:

- In general, comparable definitions of expenditure classifications are lacking. This is true when there are differences in categories across countries and even true sometimes when the same terminology is used in different countries. This is not surprising, as this was also the experience in the OECD countries when they began collecting health expenditure information. To strengthen comparability of findings, national authorities should work together to develop standardized definitions and to apply them in budgeting and expenditure for health care.
- While all countries had usable household survey data to estimate private spending, the quality and scope of this data varied greatly. Sometimes there were multiple sources of data which gave highly conflicted results. Since household spending is a large source of total spending in most countries in the region, further technical work on this aspect of national health expenditure estimation is needed. This could include:

- B Better and more standardized instrument design for health items on national consumption surveys and for dedicated health care expenditure surveys;
 - B Technical analysis of differences within countries in estimates from different surveys. (What accounts for these differences and is it possible to develop an algorithm to correct for them?)
 - B Assessment of methods of validating estimates, e.g., by comparison with pharmaceutical market information and other sources.
- Budget and expenditure information from ministries and social insurance organizations was difficult to allocate according to different types of health care services (functions). Most of these agencies do not do any kind of systematic program budgeting. The organizational structure of budgets (e.g., by directorates of curative or preventive care) is a poor representation of functional breakdowns.
 - The financing intermediaries to line items matrix does not work well for non-budgetary organizations, covering most of the private sector. It is not meaningful to try to determine expenditures by input from volume and price data on final consumption. This should be dropped from further analysis.
 - The financing intermediaries to providers and to functions matrices were difficult to distinguish in practice for budgetary organizations, unless they kept their expenditure data in more disaggregated form. For example, if a country's ministry of health has a hospitals directorate which administers expenditures for public hospitals, it will be difficult to separate out the inpatient and outpatient shares of hospital expenditure. Shifting focus toward a "providers to functions" breakdown as an alternative to the "financing intermediaries to functions" breakdown is under consideration.

Many of these issues are already being addressed in the next round of NHA work which has begun in the African and Middle East regions.

10.4 CONCLUSIONS

The LACNHA network has taken large strides in developing consistent and comparable network health accounts estimates in the participating countries. The capacity of national teams has been greatly increased. NHA estimates however, can always be improved to increase accuracy and refined to address specific national policy questions and agendas.

ANNEX A. BOLIVIA

Matriz 1: Agentes y Fuentes de Financiamiento

Matriz 2: Agentes y Prestadores de Servicios

Matriz 3: Agente y Tipo de Servicios

Matriz 4: Agente y Objeto del Gasto

Matriz 1: Agentes y Fuentes de Financiamiento

	GOBIERNO	EMPRESA/ INSTITUCION	HOGARES	EXTERNAS	TOTAL
Sector Público	57,693 (19.78%)	830 (0.28%)		21,072 (7.22%)	79,595 (27.29%)
Ministerio de Salud	56,455 (19.35%)			12,526 (4.29%)	68,981 (23.65%)
Prefecturas/Corporaciones	176 (0.06%)			455 (0.16%)	631 (0.22%)
Municipios	14 (0.005%)				14 (0.00%)
Fondo de Inversión Social	391 (0.13%)	8 (0.003%)		5,640 (1.93%)	6,039 (2.07%)
Otros del Sector Público	657 (0.23%)	823 (0.28%)		2,450 (0.84%)	3,930 (1.35%)
Cajas		109,640 (37.59%)		201 (0.07%)	109,841 (37.65%)
Públicas		94,721 (32.47%)		201 (0.07%)	94,921 (32.54%)
Privadas		3,529 (1.21%)			3,529 (1.21%)
Militar		5,806 (1.99%)			5,806 (1.99%)
Universitarias		5,585 (1.91%)			5,585 (1.91%)
Seguros Privados		3,714 (1.27%)	3,520 (1.21%)		7,234 (2.48%)
Aseguradoras		1,342 (0.46%)	1,162 (0.40%)		2,504 (0.86%)
Prepagadas		2,372 (0.81%)	2,358 (0.81%)		4,730 (1.62%)
ONG's			4,563 (1.56%)	7,082 (2.43%)	11,645 (3.99%)
Hogares			83,395 (28.59%)		83,395 (28.59%)
Total	57,693 (19.78%)	114,184 (39.14%)	91,478 (31.36%)	28,355 (9.72%)	291,709 (100.00%)

Fuente: Estudio CNGS—Bolivia.

Los valores entre paréntesis representan la participación de cada uno de los agentes respecto del Gasto Total.

Matriz 2: Agentes y Prestadores de Servicios

GASTO NACIONAL EN SALUD PARA BOLIVIA, 1995, EN MILES DE DÓLARES CORRIENTES

	SERVICIOS PUBLICOS	CAJAS DE SALUD	SERVICIOS PRIVADOS		FARMACIAS	MED. TRAD.	TOTAL
			LUCRATIVO*	ONG's*			
SECTOR PUBLICO	79,595						79,595
Ministerio de Salud	68,981 (23.65%)						68,981 (23.65%)
Prefecturas/Corporaciones	631 (0.22%)						631 (0.22%)
Municipios	14 (0.00%)						14 (0.005%)
Fondo de Inversión Social	6,039 (2.07%)						6,039 (2.07%)
Otros del Sector Público	3,930 (1.35%)						3,930 (1.35%)
CAJAS		109,841					109,841
Públicas		94,921 (32.54%)					94,921 (32.54%)
Privadas		3,529 (1.21%)					3,529 (1.21%)
Militar		5,806 (1.99%)					5,806 (1.99%)
Universitarias		5,585 (1.91%)					5,585 (1.91%)
SEGUROS PRIVADOS			7,234				7,234
Aseguradoras			2,504 (0.86%)				2,504 (0.86%)
Prepagadas			4,730 (1.62%)				4,730 (1.62%)
ONG's				7,082 (2.43%)			7,082 (2.43%)
HOGARES	3,818 (1.31%)	1,628 (0.56%)	25,366 (8.70%)	4,811 (1.65%)	52,121 (17.87%)	214 (0.07%)	87,958 (30.15%)
TOTAL	83,413 (28.59%)	111,469 (38.21%)	32,600 (11.18%)	11,893 (4.08%)	52,121 (17.87%)	214 (0.07%)	291,709 (100.00%)

Fuente: Estudio CNGS—Bolivia.

Los valores entre paréntesis representan la participación de cada uno de los agentes respecto del Gasto Total.

Matriz 3: Agente y Tipo de Servicios

	HOSPITALARIO	AMBULATORIO	PREVENCION PROMOCION	OTROS	No Asignables	TOTAL
SECTOR PÚBLICO	26,761 (9.17%)	29,034 (9.95%)	8,017 (2.75%)	15,783 (5.41%)		79,595 (27.29%)
Ministerio de Salud	26,447 (9.07%)	26,373 (9.04%)	4,895 (1.68%)	11,266 (3.86%)		68,981 (23.65%)
Prefecturas/Corporaciones	308 (0.11%)	323 (0.11%)				631 (0.22%)
Municipios	5 (0.002%)	8 (0.00%)	1 (0.0003%)			14 (0.005%)
Fondo de Inversión Social		2,331 (0.80%)		3,708 (1.27%)		6,039 (2.07%)
Otros del Sector Público			3,121 (1.07%)	809 (0.28%)		3,930 (1.35%)
CAJAS	47,114 (16.15%)	38,730 (13.28%)	201 (0.07%)	23,796 (8.16%)		109,841 (37.65%)
Públicas	43,378 (14.87%)	29,887 (10.25%)	201 (0.07%)	21,456 (7.36%)		94,921 (32.54%)
Privadas	669 (0.23%)	2,159 (0.74%)		701 (0.24%)		3,529 (1.21%)
Militar	1,671 (0.57%)	3,193 (1.09%)		942 (0.32%)		5,806 (1.99%)
Universitarias	1,396 (0.48%)	3,491 (1.20%)		698 (0.24%)		5,585 (1.91%)
SEGUROS PRIVADOS					7,234 (2.48%)	7,234 (2.48%)
Aseguradoras					2,504 (0.86%)	2,504 (0.86%)
Prepagadas					4,730 (1.62%)	4,730 (1.62%)
ONG's	1,980 (0.68%)	7,802 (2.67%)	349 (0.12%)	1,514 (0.52%)		11,645 (3.99%)
HOGARES	11,681 (4.00%)	16,048 (5.50%)		55,666 (19.08%)		83,395 (28.59%)
TOTAL	87,535 (30.01%)	91,614 (31.41%)	8,567 (2.94%)	96,759 (33.17%)	7,234 (2.48%)	291,709 (100.00%)

Fuente: Estudio CNGS, en base a información proporcionada por el equipo del estudio CNGS.

* Incluye compra de medicamentos en farmacias privadas

nd. No disponible

Matriz 4: Agente y Objeto del Gasto

GASTO NACIONAL EN SALUD PARA BOLIVIA, 1995, EN MILES DE DÓLARES CORRIENTES

	SERVICIOS PERSONALES	SERVICIOS NO PERSONALES	MATERIAL Y SUMINISTRO	MEDICA- MENTOS	ACTIVOS REALES	OTROS	No Asignable	TOTAL
SECTOR PÚBLICO	46,408 (15.91%)	8,134 (2.79%)	6,442 (2.21%)	587 (0.20%)	17,225 (5.90%)	798 (0.27%)		79,595 (27.29%)
Ministerio de Salud	45,875 (15.73%)	7,980 (2.74%)	6,376 (2.19%)	587 (0.20%)	7,770 (2.66%)	394 (0.13%)		68,981 (23.65%)
Prefecturas/Corporaciones					631 (0.22%)			631 (0.22%)
Municipios					14 (0.00%)			14 (0.00%)
Fondo de Inversión Social					6,039 (2.07%)			6,039 (2.07%)
Otros del Sector Público	534 (0.18%)	155 (0.05%)	67 (0.02%)		2,771 (0.95%)	404 (0.14%)		3,930 (1.35%)
CAJAS	48,171 (16.51%)	12,104 (4.15%)	8,197 (2.81%)	15,516 (5.32%)	4,016 (1.38%)	21,836 (7.49%)		109,841 (37.65%)
Públicas	42,465 (14.56%)	8,473 (2.90%)	4,561 (1.56%)	15,516 (5.32%)	3,742 (1.28%)	20,164 (6.91%)		94,921 (32.54%)
Privadas	1,075 (0.37%)	1,390 (0.48%)	701 (0.24%)		63 (0.02%)	300 (0.10%)		3,529 (1.21%)
Militar	2,660 (0.91%)	957 (0.33%)	1,747 (0.60%)		57 (0.02%)	384 (0.13%)		5,806 (1.99%)
Universitarias	1,971 (0.68%)	1,284 (0.44%)	1,188 (0.41%)		154 (0.05%)	989 (0.34%)		5,585 (1.91%)
SEGUROS PRIVADOS							7,234 (2.48%)	7,234 (2.48%)
Aseguradoras							2,504 (0.86%)	2,504 (0.86%)
Prepagadas							4,730 (1.62%)	4,730 (1.62%)
ONG's	6,871 (2.36%)	1,397 (0.48%)	330 (0.11%)	718 (0.25%)	1,863 (0.64%)	466 (0.16%)		11,645 (3.99%)
HOGARES								83,395 (28.59%)
TOTAL	101,450 (34.78%)	21,636 (7.42%)	14,969 (5.13%)	16,821 (5.77%)	23,105 (7.92%)	23,100 (7.92%)	7,234 (2.48%)	291,709 (100.00%)

Fuente: Estudio CNGS - Bolivia
nd. No disponible

ANNEX B. DOMINICAN REPUBLIC

Matriz 1: Flujo de Fondos de los Hogares como Fuente según Agentes Financieros

Matriz 2 Flujo de Hogar como Agente Financiero a los Proveedores

Matriz 3: Gasto en salud de los Hogares por Función

Matriz 4: Gasto en Salud por Objeto

MATRIZ 1: FLUJO DE FONDOS DE LOS HOGARES COMO FUENTE SEGÚN AGENTES FINANCIEROS

FUENTES	SECTOR PUBLICO								SUBTOTAL SECTOR PUBLICO	SECTOR PRIVADO						SUBTOTAL SECTOR PRIVADO	RESTO DEL MUNDO	TOTAL AGENTES FINANCIEROS
	GOBIERNO CENTRAL				INST. DESCENTRAL.	MUNICIPIOS	EMP. NO FIN. PUBLICA	EMP. FIN. PUBLICA		EMP. FIN. PRIVADA	SEGURO MEDICO	EMP. NO FIN. PRIVADA	SEGURO PRIVADO	ONG	HOGARES			
	FINANZAS		PRESIDENCIA	OTROS MINISTERIOS														
	FONDOS PARA SALUD	SESPAS																
SESPAS	1,362,928,291 (7.73%)		125,557,646 (0.71%)					1,488,485,937 (8.45%)						200,553,661 (1.14%)	200,553,661.00 (1.14%)	199,469,177 (1.13%)	2,087,977,952 (11.85%)	
PRESIDENCIA	534,863,418 (3.04%)							534,863,418 (3.04%)						30,428,975 (0.17%)	30,428,974.50 (0.17%)		565,292,393 (3.21%)	
FF.AA	73,646,387 (0.42%)							73,646,387 (0.42%)						4,542,701 (0.03%)	4,542,701.00 (0.03%)		78,189,088 (0.44%)	
OTROS MINISTERIOS	15,761,916 (0.09%)			84,612,269 (0.48%)				100,374,185 (0.57%)								256,000 (0.00%)	100,886,185 (0.57%)	
IDSS			4,000,000 (0.02%)			6,330,590 (0.04%)		10,330,590 (0.06%)		597,131,610 (3.39%)				205,492,540 (1.17%)	802,624,150.00 (4.55%)		812,954,740 (4.61%)	
CRD		3,554,387 (0.02%)	50,000 (0.00%)			6,687 (0.00%)		3,611,074 (0.02%)						4,281,634 (0.02%)	4,281,634.00 (0.02%)		7,892,708 (0.04%)	
UASD								0						2,083,135 (0.01%)	2,083,135.00 (0.01%)		2,083,135 (0.01%)	
CONAFOFA		7,529,746 (0.04%)						7,529,746 (0.04%)								579,386 (0.00%)	8,688,518 (0.05%)	
SHEM		10,090,482 (0.06%)						10,090,482 (0.06%)									10,090,482 (0.06%)	
MUNICIPIOS								0									0	
EMP. NO FIN. PUBLICA								0									0	
EMP. FIN. PUBLICA							44,311,554 (0.25%)	44,311,554 (0.25%)						5,836,532 (0.03%)	5,836,532.00 (0.03%)		50,148,086 (0.28%)	
SUBTOTAL PUBLICO	1,987,200,012 (11.28%)	21,174,615 (0.12%)	129,607,646 (0.74%)	84,612,269 (0.48%)	0	6,687 (0.00%)	6,330,590 (0.04%)	44,311,554 (0.25%)	2,273,243,373 (12.90%)	0	597,131,610 (3.39%)	0	0	453,219,178 (2.57%)	1,050,350,788 (5.96%)	200,304,563 (1.14%)	3,724,203,287 (21.13%)	
EMP. NO. FIN. PRIVADA			492,140 (0.00%)	80,000 (0.00%)				572,140 (0.003%)						7,531,462,062 (42.74%)	7,531,462,062 (42.74%)		7,532,014,202 (42.74%)	
SEGURO PRIVADO		14,369,925 (0.08%)	8,649,520 (0.05%)	32,506,286 (0.18%)	18,612,000 (0.11%)	6,939,000 (0.04%)	72,886,410 (0.41%)	13,287,650 (0.08%)	167,270,791 (2.57%)	95,940,947 (0.54%)	10,054,000 (0.06%)	662,713,432 (3.76%)		293,595,790 (1.67%)	1,062,304,169 (6.03%)	0	1,325,615,907 (7.52%)	
ONG		36,880,810 (0.21%)	2,592,000 (0.01%)	0		283,926 (0.00%)		39,864,736 (0.22%)					0	82,142,258 (0.47%)	82,142,258 (0.47%)	107,212,680 (0.61%)	336,432,354 (1.91%)	
HOGARES								0						4,586,159,770 (26.02%)	4,586,159,770.40 (26.02%)		4,586,159,770 (26.02%)	
SUBTOTAL PRIVADO	0	51,378,735 (0.29%)	11,733,660 (0.07%)	32,566,286 (0.18%)	18,612,000 (0.11%)	7,222,926 (0.04%)	72,886,410 (0.41%)	13,287,650 (0.08%)	207,687,667 (1.18%)	95,940,947 (0.54%)	10,054,000 (0.06%)	662,713,432 (3.76%)	0	12,493,359,881 (70.89%)	13,262,068,259 (75.25%)	107,212,680 (0.61%)	13,780,122,233 (78.19%)	
RESTO DEL MUNDO								2,241,436 (0.01%)						118,774,250 (0.67%)	118,774,250 (0.67%)	0	118,774,250 (0.67%)	
TOTAL FUENTES	1,987,200,012 (11.28%)	72,553,350 (0.41%)	141,341,306 (0.80%)	117,178,555 (0.66%)	18,612,000 (0.11%)	7,229,613 (0.04%)	79,217,000 (0.45%)	59,840,640 (0.34%)	2,480,931,041 (14.08%)	95,940,947 (0.54%)	10,054,000 (0.06%)	1,259,845,042 (7.15%)	0	13,065,353,308 (74.14%)	14,431,193,297 (81.89%)	307,517,243 (1.74%)	17,623,099,770 (100.00%)	

MATRIZ 2: FLUJO DE HOGAR COMO AGENTE FINANCIERO A LOS PROVEEDORES

AGENTES FINANCIEROS	SECTOR PUBLICO											SECTOR PUBLICO	EMP. FIN. PRIVADA (Sin Seguro)	SECTOR PRIVADO							SECTOR PRIVADO	RESTO DEL MUNDO	TOTAL PROVEEDOR	
	GOBIERNO GENERAL													EMP. FIN. PUBLICA	SUBTOTAL SECTOR PUBLICO	EMP. FIN. PRIVADA (Sin Seguro)	EMP. FIN. PRIVADA (Sin Seguro)	EMP. NO FIN. PRIVADA	SEGURO PRIVADO	ONG				HOGARES
	GOBIERNO CENTRAL				INSTITUCIONES DESCENTRALIZADAS																			
	SESPAS	PRESIDENCIA	FF.AA	OTROS MINISTERIOS	IDSS	INAVI	CRD	UASD	CONAPOFA	SNEM														
HOSPITALES Y CLINICAS PUBLICAS	1,888,508,775 (10.97%)	504,856,357 (2.93%)	73,646,387 (0.43%)									2,467,011,519 (14.32%)		0					0		2,467,011,519 (14.32%)			
BOTICAS POPULARES		60,438,036 (0.35%)	4,542,701 (0.02%)									64,978,737 (0.38%)		0					0		64,978,737 (0.38%)			
FARMACIAS				84,612,269 (0.49%)								84,612,269 (0.49%)		#REF!					0		84,612,269 (0.49%)			
OTROS GOB. CENTRAL																			0					
HOSPITALES Y POLICLINICAS					812,954,740 (4.72%)							812,954,740 (4.72%)		0					0		812,954,740 (4.72%)			
LABORAT. Y BCOS. DE SANGRE							2,837,365 (0.02%)	2,083,135 (0.01%)				3,962,141 (0.05%)		0					0		3,962,141 (0.05%)			
OTROS SECTOR PUBLICO				16,017,916 (0.09%)			5,095,343 (0.02%)		8,109,132 (0.05%)	10,090,482 (0.06%)		39,272,873 (0.22%)		#REF!					0		39,272,873 (0.22%)			
TOTAL PROVEEDORES PUBLICOS	1,888,508,775 (10.97%)	565,292,393 (3.28%)	78,189,088 (0.45%)	100,630,185 (0.58%)	812,954,740 (4.72%)	0	7,892,708 (0.05%)	2,083,135 (0.01%)	8,109,132 (0.05%)	10,090,482 (0.06%)	3,962,141 (0.02%)	3,477,712,778 (20.20%)	0	0	#REF!	0	0	0	0	0	3,477,712,778 (20.20%)			
ONG's												0					229,219,674 (1.32%)		229,219,674 (1.32%)		229,219,674 (1.32%)			
CLINICASHOSPITALES PRIVADOS											35,148,874 (0.20%)	35,148,874 (0.20%)			5,867,439,064 (34.07%)	998,074,485 (5.96%)			6,825,513,529 (39.84%)		6,860,662,492 (39.84%)			
FARMACIAS											11,037,072 (0.06%)	11,037,072 (0.06%)			90,394,170 (0.52%)	14,511,261 (0.08%)			104,895,431 (0.61%)		115,932,593 (0.67%)			
OTROS PRIVADOS												0		1,574,190,968 (9.14%)	256,989,233 (1.49%)	4,586,159,770 (26.63%)		6,417,339,972 (37.27%)		6,417,339,972 (37.27%)				
TOTAL PROVEEDORES PRIVADOS	0	0	0	0	0	0	0	0	0	0	46,185,945 (0.27%)	46,185,945 (0.27%)	0	0	7,532,014,293 (43.74%)	1,229,574,959 (7.14%)	229,219,674 (1.32%)	4,586,159,770 (26.63%)	13,576,968,696 (78.85%)	0	13,623,154,551 (78.11%)			
RIM																			0	118,774,250 (0.69%)	118,774,250 (0.69%)			
TOTAL AGENTE FINANCIERO	1,888,508,775 (10.97%)	565,292,393 (3.28%)	78,189,088 (0.45%)	100,630,185 (0.58%)	812,954,740 (4.72%)	0	7,892,708 (0.05%)	2,083,135 (0.01%)	8,109,132 (0.05%)	10,090,482 (0.06%)	50,148,086 (0.29%)	3,523,898,724 (20.46%)	0	0	#REF!	7,532,014,293 (43.74%)	1,229,574,959 (7.14%)	229,219,674 (1.32%)	4,586,159,770 (26.63%)	13,576,968,696 (78.85%)	118,774,250 (0.69%)	17,219,641,579 (100.00%)		

Matriz 3: Gasto en Salud de los Hogares por Función

TIPO DE SERVICIO	SECTOR PUBLICO											SECTOR PRIVADO					RESTO DEL MUNDO	TOTAL GENERAL	
	GOBIERNO GENERAL										EMP. FIN. PUBLICA	SECTOR PUBLICO	EMP. FIN. PRIVADA (Seguro Médico)	EMP. NO FIN. PRIVADA (Clinicas, lab. etc)	ONG	HOGARES			SUBTOTAL SECTOR PRIVADO
	GOBIERNO CENTRAL				INSTITUCIONES DESCENTRALIZADAS														
	SESPAS	PRESIDENCIA	FF.AA	OTROS MINISTERIOS	IDSS	CRD	UASD	CONAPOFA	SNEM										
PROMOCION Y ATENCION PREVENTIVA	12,258,923 (0.07%)			1,484,406 (0.01%)				7,997,901 (0.05%)	9,058,872 (0.05%)	211,119 (0.00%)	31,011,221 (0.18%)	5,226,515 (0.03%)	738,158,211 (4.29%)	45,912,701 (0.27%)	449,456,334 (2.61%)	1,238,753,761 (7.19%)		1,269,764,982 (7.37%)	
ATENCION CURATIVA	830,850,516 (4.83%)		33,192,812 (0.19%)	76,540,649 (0.44%)	518,373,997 (3.01%)	2,899,200 (0.02%)				38,899,894 (0.23%)	1,500,757,068 (8.72%)	941,993,367 (5.47%)	4,768,654,784 (27.69%)	77,865,923 (0.45%)	4,136,703,436 (24.02%)	9,925,217,510 (57.64%)	118,774,250 (0.69%)	11,544,748,828 (67.04%)	
INV. Y FORM. RECURSOS HUMANOS	4,456,082 (0.03%)										4,456,082 (0.03%)			5,363,740 (0.03%)		5,363,740 (0.03%)		9,819,822 (0.06%)	
REGULACION	386,623,812 (2.25%)										386,623,812 (2.25%)			160,454 (0.00%)		160,454 (0.00%)		386,784,266 (2.25%)	
PRODUCCION Y COMPRA DE INSUMOS	512,405,526 (2.98%)	143,613,253 (0.83%)	42,612,932 (0.25%)	22,605,130 (0.13%)	148,191,529 (0.86%)	2,148,487 (0.01%)	2,083,135 (0.01%)	111,231 (0.00%)	1,031,610 (0.01%)	11,037,073 (0.06%)	885,839,906 (5.14%)			24,113,910 (0.14%)		24,113,910 (0.14%)		909,953,815 (5.28%)	
ADMINISTRACION	126,680,629 (0.74%)	21,994,929 (0.13%)	2,383,344 (0.01%)		146,147,878 (0.85%)	2,845,021 (0.02%)					300,051,801 (1.74%)	279,970,274 (1.63%)	2,016,669,208 (11.71%)	71,195,631 (0.41%)		2,367,835,112 (13.75%)		2,667,886,913 (15.49%)	
EDIFICACIONES	15,233,286 (0.09%)	399,684,211 (2.32%)			241,336 (0.00%)						415,158,833 (2.41%)	2,384,802 (0.01%)	8,532,000 (0.05%)	4,607,315 (0.03%)		15,524,117 (0.09%)		430,682,950 (2.50%)	
TOTAL AGENTE FINANCIERO	1,888,508,774 (10.97%)	565,292,393 (3.28%)	78,189,088 (0.45%)	100,630,185 (0.58%)	812,954,740 (4.72%)	7,892,708 (0.05%)	2,083,135 (0.01%)	8,109,132 (0.05%)	10,090,482 (0.06%)	50,148,086 (0.29%)	3,523,898,723 (20.46%)	1,229,574,958 (7.14%)	7,532,014,203 (43.74%)	229,219,674 (1.33%)	4,586,159,771 (26.63%)	13,576,968,605 (78.85%)	118,774,250 (0.69%)	17,219,641,577 (100.00%)	

Matriz 4: Gasto en Salud por Objeto

AGENTES FINANCIEROS	SECTOR PUBLICO										SECTOR PUBLICO	SECTOR PRIVADO					SUB-TOTAL PRIVADO	RESTO DEL MUNDO	TOTAL GENERAL
	GOBIERNO GENERAL											EMP. FIN. PUBLICA	EMP. FIN. PRIVADA (Seguro Médico)	EMP. NO FIN. PRIVADA	ONG	HOGARES			
	GOBIERNO CENTRAL				INSTITUCIONES DESCENTRALIZADAS														
	SESPAS	PRESIDENCIA	FF.AA	OTROS MINISTERIOS	IDSS	CRD	UASD	CONAFOFA	SNEM										
TIPO DE SERVICIO																			
SERVICIOS PERSONALES	1.262.700,265 (7.33%)	21.330,492 (0.12%)	29.960,694 (0.17%)	60,574,383 (0.35%)	579.918,943 (3.37%)	4.646,769 (0.03%)	6.635,430 (0.04%)	7.397,370 (0.04%)	29.118,812 (0.17%)	2,002,283,158 (11.63%)	460,768,896 (2.68%)	2.822,534,605 (16.39%)	140,190,752 (0.81%)	1,718,609,964 (9.98%)	5,142,104,217 (29.86%)	118,774,250 (0.69%)	7,263,161,625 (42.18%)		
SERVICIOS NO PERSONALES	50,425,333 (0.29%)	664,437 (0.00%)	3,232,118 (0.02%)	192,000 (0.00%)	84,844,268 (0.49%)	905,695 (0.01%)	800,560 (0.00%)	1,653,798 (0.01%)		142,718,209 (0.83%)	730,118,967 (4.24%)	4,463,961,842 (25.92%)	51,987,022 (0.30%)	2,723,251,813 (15.81%)	7,969,319,644 (46.28%)		8,112,037,853 (47.11%)		
PROD. MEDICINALES Y FARMACEUTICOS	185,846,905 (1.08%)	85,208,481 (0.49%)	21,646,151 (0.13%)	32,574,787 (0.19%)	71,118,575 (0.41%)	585,583 (0.00%)	556,234 (0.00%)	670,893 (0.00%)	17,021,869 (0.10%)	415,229,478 (2.41%)	27,694,148 (0.16%)	169,646,197 (0.99%)	1,329,474 (0.01%)	103,295,685 (0.60%)	301,965,504 (1.75%)		717,194,982 (4.16%)		
MATERIALES Y SUMINISTROS	128,131,995 (0.74%)	772,406 (0.00%)	20,966,781 (0.12%)	7,156,765 (0.04%)	62,617,648 (0.36%)	1,562,904 (0.01%)	2,083,135 (0.01%)	111,231 (0.00%)	360,717 (0.00%)	4,007,405 (0.02%)	227,770,987 (1.32%)	6,622,263 (0.04%)	40,566,035 (0.24%)	24,686,959 (0.14%)	24,700,208 (0.14%)	96,575,465 (0.56%)		324,346,451 (1.88%)	
EQUIPOS MEDICOS Y SANITARIOS	198,280,048 (1.15%)	57,480,400 (0.33%)	1,135,808 (0.01%)	132,250 (0.00%)	5,347,897 (0.03%)	46,080 (0.00%)		562 (0.00%)			262,423,045 (1.52%)	4,370,684 (0.03%)		2,498,494 (0.01%)		6,869,178 (0.04%)		269,292,223 (1.56%)	
OTROS EQUIPOS Y REPARACIONES	47,890,943 (0.28%)	151,966 (0.00%)	1,247,536 (0.01%)		6,077,657 (0.04%)	137,646 (0.00%)	5,115 (0.00%)	7,704 (0.00%)		55,518,567 (0.32%)		26,773,523 (0.16%)	6,509,839 (0.04%)	16,302,101 (0.09%)	49,585,463 (0.29%)		105,104,030 (0.61%)		
CONSTRUCCIONES DE OBRAS	15,233,286 (0.09%)	399,684,211 (2.32%)			3,029,752 (0.02%)	8,030 (0.00%)				417,955,279 (2.43%)		8,532,000 (0.05%)	2,017,133 (0.01%)		10,549,133 (0.06%)		428,504,412 (2.49%)		
TOTAL AGENTE FINANCIERO	1,888,508,775 (10.97%)	565,292,393 (3.28%)	78,189,088 (0.45%)	100,630,185 (0.58%)	812,954,740 (4.72%)	7,892,707 (0.05%)	2,083,135 (0.01%)	8,109,132 (0.05%)	10,090,482 (0.06%)	50,148,086 (0.29%)	3,523,898,723 (20.46%)	1,229,574,958 (7.14%)	7,532,014,203 (43.74%)	229,219,674 (1.33%)	4,586,159,771 (26.63%)	13,576,968,605 (78.85%)	118,774,250 (0.69%)	17,219,641,577 (100.00%)	

ANNEX C. ECUADOR

Matriz 1: Informe Completo de la Matriz Fuentes a Agentes Financieros

Matriz 2: Informe Completo de la Matriz Agentes Financieros a Proveedores

Matriz 3: Informe Completo de la Matriz Funciones a Agentes Financieros

Matriz 4: Informe Completo de la Matriz Agentes Financieros a Tipos de Gasto

MATRIZ 1: INFORME COMPLETO DE LA MATRIZ FUENTES A AGENTES FINANCIEROS

No ORDEN	AGENTES	FUENTES								TOTAL
		PRESUPUESTO GENERAL DEL ESTADO	MUNICIPIOS	COOPERACIÓN INTERNACIONAL	EMPLEADORES PÚBLICOS	EMPLEADORES PRIVADOS	LOTERÍA	HOGARES FUENTE	No ESPECIFICADO	
11	Ministerio de Salud Pública	453630 (21.66%)								453630 (21.66%)
12	SNEM (Agente)	15111 (0.72%)								15111 (0.72%)
13	Instit.Nacio.Higiene (Agente)	19303 (0.92%)								19303 (0.92%)
14	CEMEIN	6679 (0.32%)								6679 (0.32%)
15	Otros Ministerios	0								0 (0.00%)
16	Municipio de Quito (Agente)	12628 (0.60%)								12628 (0.60%)
17	Patronato San José(Agente)		5222 (0.25%)							5222 (0.25%)
18	Cooper. Internac.(Agente)			182327 (8.71%)						182327 (8.71%)
21	IESS				196470 (9.38%)	43735 (2.09%)		166690 (7.96%)		406895 (19.43%)
22	Seguro Social Campesino				15139 (0.72%)	3764 (0.18%)		12845 (0.61%)		31748 (1.52%)
23	ISSFA	0						0		0 (0.00%)
24	Inst.Seg.Soc. Policía	4324 (0.21%)						6432 (0.31%)		10756 (0.51%)
31	Seguros Privados					9003 (0.43%)		75302 (3.60%)		84305 (4.03%)
32	Medicina Pre-Pagada					3262 (0.16%)		46096 (2.20%)		49358 (2.36%)
41	Junta de Benefic. (Agente)						71363 (3.41%)	9085 (0.43%)	1184 (0.06%)	81632 (3.90%)

FUENTES										
No ORDEN	AGENTES	PRESUPUESTO GENERAL DEL ESTADO	MUNICIPIOS	COOPERACIÓN INTERNACIONAL	EMPLEADORES PÚBLICOS	EMPLEADORES PRIVADOS	LOTERÍA	HOGARES FUENTE	No ESPECIFICADO	TOTAL
42	SOLCA							8818 (0.42%)	4988 (0.24%)	13806 (0.66%)
43	INNFA							448 (0.02%)	4057 (0.19%)	4505 (0.22%)
44	Cruz Roja Ecuatoriana	27 (0.00%)							1164 (0.06%)	1191 (0.06%)
45	Otras ONG´s			5831 (0.28%)		2525 (0.12%)				8356 (0.40%)
49	Empresas (Agente)					14107 (0.67%)				14107 (0.67%)
50	Hogares (Agente)							692855 (33.08%)		692855 (33.08%)
	TOTAL	511702 (24.43%)	5222 (0.25%)	188158 (8.98%)	211609 (10.10%)	76396 (3.65%)	71363 (3.41%)	1E+06 (48.63%)	11393 (0.54%)	2094414 (100.00%)

MATRIZ 2: INFORME COMPLETO DE LA MATRIZ AGENTES FINANCIEROS A PROVEEDORES

No ORDEN	Agentes	P R O V E E D O R E S																			Total		
		Centros de Salud Pública	Hospitales de Salud Públicos	SNEM (proveedor)	INH (Proveedor)	Hospitales de Policía	Hospitales FF:AA	Municipio de Quito (Prov)	Patronato (Proveed.)	Dispensarios del IESS	Hospitales del IESS	Dispensarios del SSC	JBG (Proveedor	SOLCA	INNFA (Proveedor)	Prov.Priv.Sin Lucro	Dispensarios Prop. Empresas	Hosp.Clínicas Cons. Privadas	Laboratorios Privados	Cent.Rehab. Capac. Privada		Farmacias	No Específ.
11	MSP	245,268	208,362																				453,630
12	SNEM			15,111																			15,111
13	Inst.Nac.de Hig				19,303																		19,303
14	CEMEIN		6,679																				6,679
15	Otros Ministerios																						0
16	Municipio de Quito							12,628															12,628
17	Patronato San José								5,222														5,222
18	Coop. Int'l.																				182,327		182,327
21	IESS									238,467	168,428												406,895
22	Seguro Social Campesino																						31,748
23	ISSFA																						0
24	Inst.Seg. Policia Nac.																						10,756
31	Seguros Privados																	80,090	0	4,215			84,305
32	Medicina Pre-Pagada																	38,277	7,014	0	4,067		49,358
41	JBG											81,632											81,632
42	SOLCA												13,806										13,806
43	INNFA													4,505									4,505
44	Cruz Roja Ecuatoriana														1,191								1,191
45	Otras ONG's														8,356								8,356
49	Empresa														204	7,121	4,228	225	2,263	66			14,107
50	Hogares	28,171	54,066															349,990	34,925		225,703		692,855
	TOTAL	273,439	269,107	15,111	19,303	10,756	0	12,628	5,222	238,467	168,428	31,748	81,632	13,806	4,505	9,751	7,121	472,585	42,164	6,478	229,836	182,327	2,094,414

MATRIZ 3 INFORME COMPLETO DE LA MATRIZ FUNCIONES A AGENTES FINANCIEROS

No ORDEN	AGENTES*	FUNCIONES							TOTAL
		PREVENTIVO INDIVIDUAL O COMUNAL	PREVENTIVO AMBIENTAL	CURATIVO PRIMARIO	CURATIVO SECUNDARIO	CURATIVO TERCIARIO	MEDICAMENTOS FÁRMACOS	SIN ESPECIF.	
11	Ministerio de Salud Pública	0	0	76,878	168,390	208,362			453,630
12	SNEM (Agente)		15,111						15,111
13	Inst.Nac.de Hig. (Agente)	19,303							19,303
14	CEMEIN						6,679		6,679
15	Otros Ministerios								0
16	Municipio de Quito (Agente)		12,628						12,628
17	Patronato San José (Agente)			5,222	0	0			5,222
18	Coop.Internac. (Agente)							182,327	182,327
21	IESS			147,805	90,662	168,428			406,895
22	Seguro Social Campesino			31,748					31,748
23	ISSFA			0	0	0			0
24	Inst.Seg.Policía Nacional			984	3,122	6,650			10,756
31	Seguros Privados			35,408		46,368		2,529	84,305
32	Medicina Pre-Pagada			10,859		27,641	3,948	6,910	49,358
41	Junta de Benef.(Agente)							81,632	81,632
42	SOLCA					13,806			13,806
43	INNFA			4,505					4,505
44	Cruz Roja Ecuatoriana	1,013		178					1,191
45	Otras ONG´s			8,356					8,356
49	Empresa (Agente)	381		3,752	9,974				14,107
50	Hogares (Agente)			110,805	131,404	16,219	434,427		692,855
	TOTAL	20,697	27,739	436,500	403,552	487,474	445,054	273,398	2,094,414

MATRIZ 4: INFORME COMPLETO DE LA MATRIZ AGENTES FINANCIEROS A TIPOS DE GASTO

No ORDEN	AGENTES*	TIPOS DE GASTO										TOTAL
		PERSONAL ADMINISTRATIVO	PERSONAL OPERATIVO	GASTOS ADMIST. GENERALES	MATERIALES E INSTRUMENTO DE SALUD	MEDICAMENT OS	OTROS GASTOS	OTROS MATERIAL .	ACTIVOS	SIN CLASIFIC.	TRANSFE- RENCIAS	
11	Ministerio de Salud Pública	38,797	288,559	28,568	12,042	9,483	72,645		3,536			453,630
12	SNEM (Agente)	1,564	11,587	646	829		485					15,111
13	Inst.Nac.de Hig. (Agente)	3,631	14,765	158	449		300					19,303
14	CEMEIN	213	212	141		5,999	114					6,679
15	Otros Ministerios									0		0
16	Municipio de Quito (Agente)		8,523	525	332				231		3,017	12,628
17	Patronato San José (Agente)		3,517	135	1,234		130		172		34	5,222
18	Coop.Internac. (Agente)									182,327		182,327
21	IESS		204,819	23,563	28,234	90,817	8,636	19,305	16,766		14,755	406,895
22	Seguro Social Campesino		24,927	3,212		2,769	796		44			31,748
23	ISSFA									0		0
24	Inst.Seg.Policía Nacional		3,717	1,375				4,646	1,018			10,756
31	Seguros Privados									84,305		84,305
32	Medicina Pre-Pagada									49,358		49,358
41	JBG		29,127	11,183	27,983		1,012		11,592		735	81,632
42	SOLCA									13,806		13,806
43	INNFA									4,505		4,505
44	Cruz Roja Ecuatoriana									1,191		1,191
45	Otras ONG´s									8,356		8,356
49	Empresa (Agente)		8,986	973		1,933		550	1,665			14,107
50	Hogares (Agente)					434,427				258,428		692,855
	TOTAL	44,205	598,739	70,479	71,103	545,428	84,118	24,501	35,024	602,276	18,541	2,094,414

ANNEX D. EL SALVADOR

Matrix 1: Sources to Financing Agents

Matrix 2: Financing Agents to Providers

Matrix 3: Financing Agents to Functions of Health Care

Matrix 4: Financing Agents to Line Items

MATRIX 1: SOURCES TO FINANCING AGENTS

IN COLONES CORRIENTES

FA	Sources						TOTAL
	Central Gov (GOES)	Public Firms	Foreign Assistance	Privately-Owned Firms	Households	Other	
MSPAS	1,309,574,973		333,649,120		42,676,389	16,261,593	1,702,162,075
ISSS		228,848,044		767,512,845	418,159,633	107,485,877	1,522,006,399
HH					3,933,963,960		3,933,963,960
Priv Ins						81,607,000	81,607,000
NGOs			11,981,486				11,981,486
Other	159,150,000						159,150,000
TOTAL	1,468,724,973	228,848,044	345,630,606	767,512,845	4,394,799,982	205,354,470	7,410,870,920

IN PERCENTAGES

FA	Sources						TOTAL
	Central Gov (GOES)	Public Firms	Foreign Assistance	Privately-Owned Firms	Households	Other	
MSPAS	76.94%		19.60%		2.51%	0.96%	100.00%
ISSS		15.04%		50.43%	27.47%	7.06%	100.00%
HH					100.00%		100.00%
Priv Ins						100.00%	100.00%
NGOs			100.00%				100.00%
Other	100.00%						100.00%
TOTAL	19.82%	3.09%	4.66%	10.36%	59.30%	2.77%	100.00%

MATRIX 2: FINANCING AGENTS TO PROVIDERS**IN COLONES CORRIENTES**

FA	Secretary of State	Health Units (prev health)	Health Centers (curative)	Providers of NonHosp Medical Care	Public Hospitals	ISSS General Hospitals	ISSS Specialized Hospitals	Total Hospitals	Pharmacies
MSPAS ¹	76,901,323	277,369,740	152,028,438	429,398,178	628,866,897			628,866,897	
ISSS ²		84,730,608		84,730,608		237,835,586	739,231,017	977,066,603	
HH ³				1,631,021,448				671,527,644	1,631,414,844
Priv Ins ⁴									
NGOs ⁵									
Other ⁶									
TOTAL	76,901,323	362,100,348	152,028,438	2,145,150,234	628,866,897	237,835,586	739,231,017	2,277,461,144	1,631,414,844

(continued)

FA	Other Aut Inst	Infrastructure	Prevention/Promotion	Subsidies to Health Org.	External Aid Projects	Admin	Other	TOTAL	Unspent Resources	Complete Total
MSPAS ¹	42,761,351	27,308,418	58,795,457	1,420,590	333,649,120		2,578,222	1,601,679,556	100,482,519	1,702,162,075
ISSS ²		31,081,196				99,610,904	10,301,062	1,202,790,373	319,216,026	1,522,006,399
HH ³								3,933,963,936	24	3,933,963,960
Priv Ins ⁴							81,607,000	81,607,000	-	81,607,000
NGOs ⁵			10,091,844			1,889,642		11,981,486	-	11,981,486
Other ⁶							159,150,000	159,150,000	-	159,150,000
TOTAL	42,761,351	58,389,614	68,887,301	1,420,590	333,649,120	101,500,546	253,636,284	6,991,172,351	419,698,569	7,410,870,920

AS PERCENTAGES

FA	Secretary of State	Health Units (prev health)	Health Centers (curative)	Total NonHosp Medical Care	Public Hospitals	ISSS General Hospitals	ISSS Specialized Hospitals	Total Hospitals	Pharmacies
MSPAS	4.80%	17.32%	9.49%	26.81%	39.26%			39.26%	
ISSS		7.04%		7.04%		19.77%	61.46%	81.23%	
HH				41.46%				17.07%	41.47%
Priv Ins									
NGOs									
Other									
TOTAL	1.10%	5.18%	2.17%	30.68%	9.00%	3.40%	10.57%	32.58%	23.34%

FA	Other Aut Inst	Infrastructure	Prevention/Promotion	Subsidies to Health Org	External Aid Projects	Admin (central level)	Other	TOTAL
MSPAS	2.67%	1.70%	3.67%	0.09%	20.83%		0.16%	100.00%
ISSS		2.58%				8.28%	0.86%	100.00%
HH								100.00%
Priv Ins								100.00%
NGOs			84%					100.00%
Other							100.00%	100.00%
TOTAL	0.61%	0.84%	0.99%	0.02%	4.77%	1.45%	3.63%	100.00%

MATRIX 3: FINANCING AGENTS TO FUNCTIONS OF HEALTH CARE

IN COLONES CORRIENTES

FA	Functions							TOTAL	Unspent Resources	Complete Total
	Admin	Prevention/Promotion	Ambulatory Care	Hospital Care	Other	Infrastructure	Other (ext aid projects)			
MSPAS ¹	157,271,345	376,028,617	89,696,778	646,819,553	4,021,805	213,553,307	114,288,151	1,601,679,556	100,482,519	1,702,162,075
ISSS ²	99,610,904		84,730,608	977,066,603	10,301,062	31,081,196		1,202,790,373	319,216,026	1,522,006,399
HH ³			2,002,225,598	1,319,613,550	612,124,788			3,933,963,936	24	3,933,963,960
Priv Ins ⁴					81,607,000			81,607,000	-	81,607,000
NGOs ⁵	1,889,642	10,091,844						11,981,486	-	11,981,486
Other ⁶					159,150,000			159,150,000	-	159,150,000
TOTAL	258,771,891	386,120,461	2,176,652,984	2,943,499,706	867,204,655	244,634,503	114,288,151	6,991,172,351	419,698,569	7,410,870,920

AS PERCENTAGES

FA	Functions							TOTAL
	Admin	Prevention/Promotion	Ambulatory Care	Hospital Care	Other	Infrastructure	Other (ext aid projects)	
MSPAS	9.82%	23.48%				13.33%	7.14%	100.00%
ISSS	8.28%				0.86%	2.58%		100.00%
HH			50.90%	33.54%	15.56%			100.00%
Priv Ins					100.00%			100.00%
NGOs	15.77%							100.00%
Other					100.00%			100.00%
TOTAL	3.70%	5.52%	31.13%	42.10%	12.40%	3.50%	1.63%	100.00%

MATRIX 4: FINANCING AGENTS TO LINE ITEMS

IN COLONES CORRIENTES

FA	Line Items									Total	Unspent Resources	Complete Total
	Remunerations	Operational Costs	Food for Patients	Medication	Medical/Surgical Procedures	Insecticides	Equipment & Infraestructre	Other	Unclassified			
MSPAS	758,373,123	121,296,364		183,886,631	77,751,401	2,103,557	246,806,768	28,660,594	148,824,821	1,601,679,556	100,482,519	1,702,162,075
ISSS	609,853,277	188,567,605	33,976,297	244,835,581	66,612,273		56,883,342	14,690,897		1,188,099,526	333,906,873	1,522,006,399
HH			21,347,448	1,631,414,844	2,302,549,116					3,933,963,960	-	3933963960
Priv Ins									81,607,000	81,607,000	-	81,607,000
NGOs	10,416,631	708,786			173,839		261,549	420,681		11,981,486	(0)	11,981,486
Other									159,150,000	159,150,000	-	159,150,000
TOTAL	1,378,643,031	310,572,755	55,323,745	2,060,137,056	2,447,086,629	2,103,557	303,951,659	43,772,172	389,581,821	6,991,172,425	434,389,392	7,410,870,920

AS PERCENTAGES

FA	LINE ITEMS									
	REMUNERATIONS	OPERATIONAL COSTS	FOOD FOR PATIENTS	MEDICATION	MEDICAL / SURGICAL PROCEDURES	INSECTICIDES	EQUIPMENT & INFRASTRUCTUR E	OTHER	UNCLASSIFIED	TOTAL
MSPAS	47.35%	7.57%	2.12%	11.48%	4.85%	0.13%	15.41%	1.79%		100%
ISSS	51.33%	15.87%	1.80%	20.61%	5.61%		4.79%	1.24%		100%
HH				41.47%	58.53%					100%
Priv Ins									100.00%	100%
NGOs	86.94%	5.92%			1.45%		2.18%	3.51%		100%
Other									100.00%	100%
TOTAL	19.72%	4.44%	0.79%	29.47%	35.00%	0.03%	4.35%	0.63%	5.57%	100%

ANNEX E. GUATEMALA

Matriz 1: Fuentes a Agentes, 1995

Matriz 2: Financing Agents to Providers

Matriz 3: Financing Agents to Functions of Health Care

Matriz 4: Financing Agents to Line Items

MATRIZ 1: FUENTES A AGENTES, 1995

(CIFRAS EN QUETZALES)

AGENTES	FUENTES				TOTAL	Dólares EUA
	Gobierno	Cooperación Externa	Hogares	Empresas		
Ministerio de Salud	497,063,143.14	45,223,503.33			542,286,646.47	90,381,107.75
Otros Ministerios	52,682,253.60	n.d.			52,682,253.60	8,780,375.60
Fondos Sociales	3,439,000.00				3,439,000.00	573,166.67
IGSS	44,782,876.44	n.d.	153,878,510.60	330,295,424.07	528,956,811.11	88,159,468.52
Subtotal Gasto Público	597,967,273.18	45,223,503.33	153,878,510.60	330,295,424.07	1,127,364,711.18	187,894,118.53
ONG	8,618,235.10	67,058,510.05	121,276.84	-	75,798,021.98	12,633,003.66
Seguros Privados	n.d.	n.d.	39,650,890.00	35,162,110.00	74,813,000.00	12,468,833.33
Fondo de Hogares			623,095,670.44		623,095,670.44	103,849,278.41
Subtotal Gasto Privado	8,618,235.10	67,058,510.05	662,867,837.28	35,162,110.00	773,706,692.42	128,951,115.40
TOTAL	606,585,508.28	112,282,013.38	816,746,347.88	365,457,534.07	1,901,071,403.60	316,845,233.93
Dólares EUA	101,097,584.71	18,713,668.90	136,124,391.31	60,909,589.01	316,845,233.93	

MATRIZ 2: AGENTES A PROVEEDORES, 1995

(CIFRAS EN QUETZALES)

Proveedores	Ministerio de Salud	Otros Ministerios	Fondos Sociales	IGSS	ONG	Seguros Privados	Fondo de Hogares	TOTAL	DOLARES
Ministerio de Salud	533,214,535.47	47,855,690.09	3,439,000.00				9,475,158.55	593,984,384.11	98,997,397.35
IGSS	-	n.d		528,956,811.11				528,956,811.11	88,159,468.52
Hospital militar y Policía Nacional	-	4,826,563.51						4,826,563.51	804,427.25
Municipalidades	5,526,310.00	n.d.						5,526,310.00	921,051.67
Subtotal Sector Público	538,740,845.47	52,682,253.60	3,439,000.00	528,956,811.11	-	-	9,475,158.55	1,133,294,068.73	188,882,344.79
ONG proveedoras	3,545,801.00	-			26,878,129.53		12,730,580.86	43,154,511.39	7,192,418.56
Privados Lucrativos	-	-				44,109,000.00	410,802,907.91	454,911,907.91	75,818,651.32
Farmacias	-	-		n.d.			190,087,023.12	190,087,023.12	31,681,170.52
Subtotal Sector Privado	3,545,801.00	-	-	-	26,878,129.53	44,109,000.00	613,620,511.89	688,153,442.42	114,692,240.40
Otros					48,919,892.45	30,704,000.00		79,623,892.45	13,270,648.74
TOTAL	542,286,646.47	52,682,253.60	3,439,000.00	528,956,811.11	75,798,021.98	74,813,000.00	623,095,670.44	1,901,071,403.60	316,845,233.93
DOLARES	90,381,107.75	8,780,375.60	573,166.67	88,159,468.52	12,633,003.66	12,468,833.33	103,849,278.41	316,845,233.93	

MATRIZ 3: A FLUJO DE AGENTES A FUNCIONES, 1995

Funciones	Ministerio de Salud	Otros Ministerios	Fondos Sociales	IGSS	ONG	Seguros Privados	Fondo de Hogares	TOTAL	DOLARES
Administración	71,615,831.00	830,328.00	953,000.00	115,695,034.84	10,273,177.41			199,367,371.25	33,227,895.21
Programas Preventivos	22,361,174.00	-		19,040,953.11	19,371,721.18		15,705,898.28	76,479,746.58	12,746,624.43
Atención médica ambulatoria	174,870,049.00	4,686,233.07	106,000.00	76,163,812.45	17,594,474.49		396,814,632.90	670,235,201.92	111,705,866.99
Atención médica hospitalaria	254,814,203.00	-		285,614,296.70	10,213,689.22	44,109,000.00	210,575,139.25	805,326,328.18	134,221,054.70
Infraestructura	445,136.20	47,165,692.53	2,380,000.00	32,442,714.00	n.d.			82,433,542.73	13,738,923.79
Gastos no asignables a prog.	18,180,253.27	-		-	18,344,959.67	30,704,000.00		67,229,212.94	11,204,868.82
TOTAL	542,286,646.47	52,682,253.60	3,439,000.00	528,956,811.11	75,798,021.98	74,813,000.00	623,095,670.44	1,901,071,403.60	316,845,233.93
DOLARES	90,381,107.75	8,780,375.60	573,166.67	88,159,468.52	12,633,003.66	12,468,833.33	103,849,278.41	316,845,233.93	

MATRIZ 4: A FLUJO DE AGENTES A ELEMENTOS DE GASTO, 1995

Elemento de Gasto	Ministerio de Salud	Otros Ministerios	Fondos Sociales	IGSS	ONG	Seguros Privados	Fondo de Hogares	TOTAL	DOLARES
Servicios Personales	282,224,832.43	-	953,000.00	264,564,184.49	n.d.	-		547,742,016.92	91,290,336.15
Servicios No Personales	32,064,314.42	-	-	30,099,877.14	n.d.	-		62,164,191.56	10,360,698.59
Servicios Médicos	9,072,111.00	-	-	-	n.d.	44,109,000.00	433,008,647.32	486,189,758.32	81,031,626.39
Medicamentos	79,887,340.03	2,204,533.07	106,000.00	107,624,336.93	8,552,637.78	-	190,087,023.12	388,461,870.93	64,743,645.15
Equipo y material médico	34,586,287.58	14,348,196.41	644,000.00	55,743,222.04	n.d.	-		105,321,706.03	17,553,617.67
Eq. Y mat. No médico	90,786,388.36	-	-	30,262,095.91	n.d.	-		121,048,484.27	20,174,747.38
Infraestructura	445,136.20	35,299,196.12	1,736,000.00	24,401,160.07	n.d.	-		61,881,492.39	10,313,582.07
Mantenimiento	2,650,905.25	830,328.00	-	4,764,495.41	n.d.	-		8,245,728.66	1,374,288.11
Gastos No Clasificados	10,569,331.20	-	-	11,497,439.12	67,245,384.20	30,704,000.00		120,016,154.52	20,002,692.42
TOTAL	542,286,646.47	52,682,253.60	3,439,000.00	528,956,811.11	75,798,021.98	74,813,000.00	623,095,670.44	1,901,071,403.60	316,845,233.93
Dólares	90,381,107.75	8,780,375.60	573,166.67	88,159,468.52	12,633,003.66	12,468,833.33	103,849,278.41	316,845,233.93	

ANNEX F. MEXICO

Matriz 1: Gasto en Salud según Fuentes de Financiamiento, 1995

Matriz 2: Gasto en Salud que Asignan los Agentes a las Instituciones Prestadores de Servicios

Matriz 3: Gasto en Salud por Tipo de Servicios de los Agentes, 1995

Matriz 4: Tipo de Gasto de los Agentes de Servicios de Salud, 1995

MATRIZ 1: GASTO EN SALUD SEGÚN FUENTES DE FINANCIAMIENTO, 1995

(MILLONES DE PESOS)

Fuentes	Hogar	Empresa	Gobierno Federal	Gobierno Estatal	O.N.G. Nacionales	O.N.G. Internacionales	TOTAL
Agentes							
IMSS	6,676 22.5%	21,451 72.3%	1,505 5.1%	38 0.13%			29,669 29.4%
ISSSTE	921 28.7%		2,212 68.9%	76 2.4%			3,208 3.2%
SEDENA*			307 100%				307 0.30%
MARINA*			80 100%				80 0.08%
PEMEX			1,345 100%				1,345 1.3%
Subtotal Seguridad Social	7,596 21.9%	21,451 62.0%	5,449 15.7%	113 0.33%			34,610 34.3%
SSA			6,459 92.7%	358 5.1%		148 2.1%	6,965 6.9%
IMSS Solidaridad			1,336 99.8%	3 0.24%			1,339 1.3%
DIF			140 51.2%	134 48.8%			274 0.27%
DDF			561 100%				561 0.56%
INI			13 100%				13 0.01%
Subtotal Servicios Públicos			8,510 93.0%	495 5.4%		148 1.6%	9,153 9.1%
Privado Virtual	55,455 99.5%	300 0.5%					55,755 55.2%
Seguro Médico Privado	1,222 86.0%	199 14.0%					1,421 1.4%
Subtotal Servicios Privados	56,677 99.1%	499 0.87%					57,176 56.6%
TOTAL	64,273 63.7%	21,950 21.7%	13,959 13.8%	608 0.60%		148 0.15%	100,938 100%

*Los agentes SEDENA y MARINA reciben recursos de un agente intermediario ISSFAM, en proporción de 19.2% y 17.5% respectivamente.
Fuente: Fundación Mexicana para la Salud. Cuentas Nacionales de Salud, 1995.

(MILLONES DE DÓLARES)

Fuentes	Hogar	Empresa	Federal	Estatal	Nacionales	Internacionales	TOTAL
Agentes							
IMSS	1,011.45 22.5%	3,250.13 72.3%	228.07 5.1%	5.69 0.1%			4,495.34 29.4%
ISSSTE	139.51		335.14 68.9%	11.44 2.4%			486.09 3.2%
SEDENA*			46.54 100.0%				46.54 0.3%
MARINA*			12.09 100.0%				12.09 0.1%
PEMEX			203.80 100.0%				203.80 1.3%
Subtotal Seguridad Social	1,150.96 21.9%	3,250.13 62.0%	825.64 15.7%	17.14 0.3%			5,243.87 34.3%
SSA			978.66 92.7%	54.21 5.1%		22.49 2.1%	1,055.36 6.9%
IMSS Solidaridad			202.46 99.8%	0.48 0.2%			202.94 1.3%
DIF			21.26 51.2%	20.30 48.8%			41.56 0.3%
DDF			85.05 100.0%				85.05 0.6%
INI			1.90 100.0%				1.90 0.0%
Subtotal Servicios Públicos	0.00	0.00	1,289.33 93.0%	74.99 5.4%		22.49 1.6%	1,386.81 9.1%
Privado Virtual	8,402.31 99.5%	45.44 0.5%					8,447.74 55.2%
Seguro Médico Privado	185.10 86.0%	30.13 14.0%					215.23 1.4%
Subtotal Servicios Privados	8,587.41 99.1%	75.57 0.9%	0.00	0.00	0.00	0.00	8,662.98 56.6%
TOTAL	9,738.37 63.7%	3,325.70 21.7%	2,114.97 13.8%	92.12 0.6%	0.00	22.49 0.1%	15,293.65 100.0%

MATRIZ 2: GASTO EN SALUD QUE ASIGNAN LOS AGENTES A LAS INSTITUCIONES PRESTADORAS DE SERVICIOS

(MILLONES DE PESOS)

Instituciones prestadoras	IMSS	ISSSTE	SEDENA	MARINA	PEMEX	SSA	IMSS Sol.	DIF	DDF	INI	Privado Lucrativo	Farmacias	Privado no lucrativo	TOTAL
Agentes														
IMSS	28,670 96.6%										1,000 3.4%			29,669 29.4%
ISSSTE	33 1.0%	3,105 96.8%				8 0.3%					62 1.9%			3,208 3.2%
SEDENA			307 100%											307 0.3%
MARINA				80 100%										80 0.1%
PEMEX					1,345 100%									1,345 1.33%
Subtotal Seguridad Social	28,703 82.9%	3,105 9.0%	307 0.9%	80 0.2%	1,345 3.9%	8 0.02%					1,061 3.1%			34,610 34.3%
SSA						6,965								6,965 6.9%
IMSS Solidaridad							1,339 100%							1,339 1.3%
DIF								274 100%						274 0.3%
DDF									561 100%					561 0.6%
INI										13 100%				13 0.01%
Subtotal Servicios Públicos						6,965 76.1%	1,339 14.6%	274 3.0%	561 6.1%	13 0.14%				9,153 9.1%
Privado Virtual			0.03			349 0.6%					38,649 69%	16,560 30%	198 0.4%	55,755 55.2%
Seguro Médico Privado											1,421 100%			1,421 1.4%
Subtotal Servicios Privados			0.03			349 0.6%					40,069 70.1%	16,560 29.0%	198 0.3%	57,176 56.6%
TOTAL	28,703 28.4%	3,105 3.1%	307 0.3%	80 0.1%	1,345 1.3%	7,322 7.3%	1,339 1.3%	274 0.3%	561 0.6%	13 0.01%	41,131 40.7%	16,560 16.4%	198 0.2%	100,938 100%

(MILLONES DE DÓLARES)

Instituciones prestadoras	IMSS	ISSSTE	SEDENA	MARINA	PEMEX	SSA	IMSS Sol.	DIF	DDF	INI	Privado Lucrativo	Farmacias	Privado no lucrativo	TOTAL
Agentes														
IMSS	4,343.89										151.45			4,495.34
	96.6%										3.4%			4.5%
ISSSTE	5.00	470.46				1.25					9.38			486.09
	1.0%	96.8%				0.3%					1.9%			0.5%
SEDENA			46.54											46.54
			100%											0.0%
MARINA				12.09										12.09
				100%										0.0%
PEMEX					203.80									203.80
					100%									0.20%
Subtotal Seguridad Social	4,348.89	470.46	46.54	12.09	203.80	1.25					160.83			5,243.87
	82.9%	9.0%	0.9%	0.2%	3.9%	0.02%					3.1%			5.2%
SSA														1,055.36
														1.0%
IMSS Solidaridad							202.94							202.94
							100%							0.2%
DIF								41.56						41.56
								100%						0.0%
DDF									85.05					85.05
									100%					0.1%
INI										1.90				1.90
										100%				0.00%
Subtotal Servicios Públicos						1,055.36	202.94	41.56	85.05	1.90				1,386.81
						76.1%	14.6%	3.0%	6.1%	0.14%				1.4%
Privado Virtual			0.00			52.85					5,855.86	2,509.03	29.99	8,447.74
			0.00%			0.6%					69%	30%	0.4%	8.4%
Seguro Médico Privado											215.23			215.23
											100%			0.2%
Subtotal Servicios Privados			0.00			52.85					6,071.09	2,509.03	29.99	8,662.98
			0.00%			0.6%					70.1%	29.0%	0.3%	8.6%
TOTAL	4,348.89	470.46	46.55	12.09	203.80	1,109.47	202.94	41.56	85.05	1.90	6,231.92	2,509.03	29.99	15,293.65
	28.4%	3.1%	0.3%	0.1%	1.3%	7.3%	1.3%	0.3%	0.6%	0.01%	40.7%	16.4%	0.2%	15%

Fuente: Fundación Mexicana para la Salud. Cuentas Nacionales de Salud, 1995.

MATRIZ 3: GASTO EN SALUD POR TIPO DE SERVICIOS DE LOS AGENTES, 1995

(MILLONES DE PESOS)

Tipo de servicio	Administración	Atención Preventiva	Atención Curativa	Producción de Insumos Médicos y Material	Desarrollo de la Investigación Fundamental Aplicada y Experimental	Regulación y Fomento a la Salud	Ampliación y Mejoramiento de la Planta Física Educ. y Capacitación	No Especificado	TOTAL
Agentes									
IMSS	4,919 16.6%	1,410 4.8%	22,058 74.3%		7 0.02%		1,277		29,669 29.4%
ISSSTE	181 5.6%	276 8.6%	2,561 79.8%	0 0.003%	5 0.2%	0.16 0.005%	185.44 5.780%		3,208 3.2%
SEDENA	241 78.4%	0.10 0.03%	33 10.9%	31 10.2%	0.001 0.0002%		1 0.5%		307 0.3%
MARINA	0.00	0.00	0.00	0.00				80 100%	80 0.1%
PEMEX								1,345 100%	1,345 1.3%
Subtotal Seguridad Social	5,340 15.4%	1,686 4.9%	24,652 71.2%	31 0.09%	12 0.03%	0 0.0005%	1,464 4.229%	1,425 4.1%	34,610 34.3%
SSA	2,196 31.5%	728 10.5%	3,233 46.4%	72 1.0%	135 1.9%	141 2.0%	461 6.6%		6,965 6.9%
IMSS Solidaridad	276 20.6%	274 20.5%	694 51.8%				95.48		1,339 1.3%
DIF	243 88.5%				4 1.6%		27.20		274 0.3%
DDF	5.03	11 1.9%	538 95.8%				7.86		561 0.6%
INI		12.53 100%							12.53 0.0%
Subtotal Servicios Públicos	2,720 29.7%	1,025 11.2%	4,464 48.8%	72 0.8%	140 1.5%	141 1.5%	591 6.5%		9,153 9.1%
Privado Virtual		6,236 11.2%	49,519 88.8%						55,755 55.2%
Seguro Médico Privado		159 11.2%	1,262 88.8%						1,421 1.4%
Subtotal Servicios Privados		6,395 11.2%	50,781 88.8%						57,176 56.6%
TOTAL	8,060 8.0%	9,106 9.0%	79,897 79.2%	103 0.10%	152 0.15%	141 0.1%	2,055 2.04%	1,425 1.4%	100,938

(MILLONES DE DÓLARES)

Tipo de servicio	Administración	Atención Preventiva	Atención Curativa	Producción de Insumos Médicos y Material	Desarrollo de la Investigación Fundamental Aplicada y Experimental	Regulación y Fomento a la Salud	Ampliación y Mejoramiento de la Planta Física Educ. Y Capacitación	No Especificado	TOTAL
IMSS	745	214	3,342		1		193		4,495
	16.6%	4.8%	74.3%		0.02%				4.5%
ISSSTE	27	42	388	0	1	0.02	28.10		486
	5.6%	8.6%	79.8%	0.003%	0.2%	0.005%	5.780%		0.5%
SEDENA	37	0.01	5	5	0.000		0		47
	78.4%	0.03%	10.9%	10.2%	0.0002%		0.5%		0.0%
MARINA	0.00	0.00	0.00	0.00				12	12
								100%	0.0%
PEMEX								204	204
								100%	0.2%
Subtotal Seguridad Social	809	255	3,735	5	2	0	222	216	5,244
	15.4%	4.9%	71.2%	0.09%	0.03%	0.0005%	4.229%	4.1%	5.2%
SSA	333	110	490	11	21	21	70		1,055
	31.5%	10.5%	46.4%	1.0%	1.9%	2.0%	6.6%		1.0%
IMSS Solidaridad	42	42	105				14.47		203
	20.6%	20.5%	51.8%						0.2%
DIF	37				1		4.12		42
	88.5%				1.6%				0.0%
DDF	0.76	2	81				1.19		85
		1.9%	95.8%						0.1%
INI		1.90							1.90
		100%							0.0%
Subtotal Servicios Públicos	412	155	676	11	21	21	90		1,387
	29.7%	11.2%	48.8%	0.8%	1.5%	1.5%	6.5%		1.4%
Privado Virtual		945	7,503						8,448
		11.2%	88.8%						8.4%
Seguro Médico Privado		24	191						215
		11.2%	88.8%						0.2%
Subtotal Servicios Privados		969	7,694						8,663
		11.2%	88.8%						8.6%
TOTAL	1,221	1,380	12,106	16	23	21	311	216	15,294
	8.0%	9.0%	79.2%	0.10%	0.15%	0.1%	2.04%	1.4%	

MATRIZ 4: TIPO DE GASTO DE LOS AGENTES DE SERVICIOS DE SALUD, 1995

(MILLONES DE PESOS)

Tipo de Gasto	Servicios personales	Materiales y suministros	Servicios generales	Infraestructura	No Especificado	TOTAL
Agentes						
IMSS	14,223 47.9%	3,639 12.3%	10,866 36.6%	941 3.2%		29,669 29.4%
ISSSTE	782 24.4%	340 10.6%	1,994 62.2%	93 2.9%		3,208 3.2%
SEDENA					307 100%	307 0.3%
MARINA	40 50.2%	12 15.6%	15 19.2%	12 15.1%		80 0.1%
PEMEX	324 24.1%	180 13.4%	750 55.7%	91 6.8%		1,345 1.3%
Subtotal Seguridad Social	15,369 44.4%	4,171 12.1%	13,625 39.4%	1,137 3.3%	307 0.9%	34,610 34.3%
SSA	5,182 74.4%	627 9.0%	692 9.9%	463 6.6%		6,965 6.9%
IMSS Solidaridad	845 63.1%	226 16.9%	173 12.9%	95 7.1%		1,339 1.3%
DIF					274 100%	274 0.3%
DDF					561 100%	561 0.6%
INI					13 100%	13 0.01%
Subtotal Servicios Públicos	6,027 65.8%	854 9.3%	865 9.5%	558 6.1%	848 9.3%	9,153 9.1%
Privado Virtual	15,536 27.9%	17,120 30.7%	17,672 31.7%	5,426 9.7%		55,755 55.2%
Seguro Médico Privado	396 27.9%	436 30.7%	450 31.7%	138 9.7%		1,421 1.4%
Subtotal Servicios Privados	15,932 27.9%	17,556 30.7%	18,123 31.7%	5,564 9.7%		57,176 56.6%
TOTAL	37,329 37.0%	22,581 22.4%	32,613 32.3%	7,260 7.2%	1,155 1.1%	100,938 100%

Fuente: Fundación Mexicana para la Salud. Cuentas Nacionales de Salud, 1995.

(MILLONES DE DÓLARES)						
Tipo de Gasto	Servicios personales	Materiales y suministros	Servicios generales	Infraestructura	No Especificado	TOTAL
Agentes						
IMSS	2,155.05 47.9%	551.36 12.3%	1,646.34 36.6%	142.59 3.2%		4,495.34 29.4%
ISSSTE	118.42 24.4%	51.50 10.6%	302.11 62.2%	14.06 2.9%		486.09 3.2%
SEDENA					46.54 100%	47 0.3%
MARINA	6.06 50.2%	1.89 15.6%	2.32 19.2%	1.82 15.1%		12.09 0.1%
PEMEX	49.13 24.1%	27.25 13.4%	113.58 55.7%	13.84 6.8%		203.80 1.3%
Subtotal Seguridad Social	2,328.67 44.4%	632.00 12.1%	2,064.34 39.4%	172.31 3.3%	46.54 0.9%	5,243.87 34.3%
SSA	785.22 74.4%	95.05 9.0%	104.92 9.9%	70.17 6.6%		1,055.36 6.9%
IMSS Solidaridad	127.99 63.1%	34.31 16.9%	26.21 12.9%	14.44 7.1%		202.94 1.3%
DIF					41.56 100%	41.56 0.3%
DDF					85.05 100%	85.05 0.6%
INI					1.90 100%	1.90 0.0%
Subtotal Servicios Públicos	913.21 65.8%	129.37 9.3%	131.12 9.5%	84.61 6.1%	128.50 9.3%	1,386.81 9.1%
Privado Virtual	2,354.01 27.9%	2,593.98 30.7%	2,677.62 31.7%	822.13 9.7%		8,447.74 55.2%
Seguro Médico Privado	59.98 27.9%	66.09 30.7%	68.22 31.7%	20.95 9.7%		215.23 1.4%
Subtotal Servicios Privados	2,413.99 27.9%	2,660.07 30.7%	2,745.85 31.7%	843.08 9.7%		8,662.98 56.6%
TOTAL	5,655.87 37.0%	3,421.44 22.4%	4,941.31 32.3%	1,099.99 7.2%	175.04 1.1%	15,293.65 100.0%

Fuente: Fundación Mexicana para la Salud. Cuentas Nacionales de Salud, 1995.

ANNEX G. NICARAGUA

Matriz 1: Fuentes de Financiamiento a Fondos

Matriz 2: Fondos/Instituciones de Salud a Prestadores de Servicios de Salud

Matriz 3: Fondos/Instituciones a Tipo de Servicio/Programa

Matriz 4: Fondos/Instituciones a Función/Objeto de Gasto

MATRIZ 1: FUENTES DE FINANCIAMIENTO A FONDOS

Fondos	Fuentes																
	Sector Público						Sector Privado					Cooperación			Total		
	Gobierno Central			Empresas Públicas			Total	Empresas Privadas			Hogares	Total	Externa			Córdobas	(%)
	MIFIN	Ministerios	Subtotal	¹ No financieras	Financieras	Subtotal	Sector Público	No financieras	Financieras	Subtotal		Sector Privado	Donación	Préstamos	Subtotal	Corrientes	
MINSA	558,289.16	0.00	558,289.16	0.00	0.00	0.00	558,289.16	0.00	0.00	0.00	72,973.83	72,973.83	181,722.48	192,200.28	373,922.76	1,005,185.75	54.25%
MINGO	12,580.44	3,428.80	16,009.24	0.00	0.00	0.00	16,009.24	0.00	0.00	0.00	1,124.63	1,124.63	1,949.62	0.00	1,949.62	19,083.49	1.03%
MIDEF	18,926.68	0.00	18,926.68	0.00	0.00	0.00	18,926.68	0.00	0.00	0.00	2,756.60	2,756.60	0.00	0.00	0.00	21,683.28	1.17%
INSS	1,827.33	12,487.53	14,314.86	84,854.50	0.00	84,854.50	99,169.36	76,836.61	11,481.33	88,317.94	7,215.53	95,533.47	0.00	0.00	0.00	194,702.83	10.51%
Otros Ministerios / Entes Autónomos	0.00	0.00	0.00	19,219.58	0.00	19,219.58	19,219.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,219.58	1.04%
Subtotal	591,623.61	15,916.33	607,539.94	104,074.08	0.00	104,074.08	711,614.02	76,836.61	11,481.33	88,317.94	84,070.59	172,388.53	183,672.10	192,200.28	375,872.38	1,259,874.93	68.00%
Empresas	Públicas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	Privadas CFL / SFL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Hogares	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	592,911.52	592,911.52	0.00	0.00	0.00	592,911.52	32.00%
Total Sector	591,623.6	15,916.33	607,539.94	104,074.08	0.00	104,074.08	711,614.02	76,836.61	11,481.33	88,317.94	676,982.11	765,300.05	183,672.10	192,200.28	375,872.38	1,852,786.45	100.00%
(%)	31.9%	0.9%	32.8%	5.6%	0.0%	5.6%	38.4%	4.1%	0.6%	4.8%	36.5%	41.3%	10%	10%	20%	100%	

Nota: No financieros – Entes Autónomos

Elaboración propia de la Comisión Nacional de Cuentas Nacionales en Salud de Nicaragua

Fuente: Ministerio de Salud (MINSA), Ministerio de Gobernación (MIGOB), Ejército de Nicaragua (MINDEF), Instituto Nicaragüense de Acueductos y Alcantarillado (INAA) y Banco Central de Nicaragua (BCN)
Entes Autónomos: Empresa Nacional de Electricidad (ENEL), Telecomunicaciones y Correos (TELCOR), Empresa Nicaragüense de Telecomunicaciones (ENITEL), Instituto Nicaragüense de Acueductos y Alcantarillado (INAA) y Banco Central de Nicaragua (BCN)

MATRIZ 2: FONDOS/INSTITUCIONES DE SALUD A PRESTADORES DE SERVICIOS DE SALUD

Prestadores de Servicios de Salud	Fondos					Otros Ministerios Entes Aut.	Subtotal	Públicas	Empresas		Subtotal	Hogares	Total Córdobas Corrientes	Total (%)
	MINSAs	MIGOB	MIDEF	INSS	Privadas				Subtotal					
					CFL					SFL				
Ministerio de Salud														
Red de SS de primer nivel	368,203.94	0.00	0.00	51,516.33	0	419,720.27	0.00	0.00	0.00	0.00	0.00	0.00	419,720.27	22.7%
Hospitales MINSAs	470,436.28	0.00	0.00	2,711.38	0.00	473,147.66	0.00	0.00	0.00	0.00	0.00	0.00	473,147.66	25.5%
Policlínicas especiales	166,545.60	0.00	0.00	0.00	0.00	166,545.60	0.00	0.00	0.00	0.00	0.00	0.00	166,545.60	9.0%
Centros de Referencia Nacional	0.00	0.00	0.00	48,141.42	0.00	48,141.42	0.00	0.00	0.00	0.00	0.00	0.00	48,141.42	2.6%
Ministerio de Gobernación														
Red de SS de primer nivel	0.00	2,526.18	0.00	0.00	0.00	2,526.18	0.00	0.00	0.00	0.00	0.00	0.00	2,526.18	0.1%
Hospitales	0.00	15,746.73	0.00	0.00	0.00	15,746.73	0.00	0.00	0.00	0.00	0.00	0.00	15,746.73	0.8%
Policlínicas especializadas	0.00	810.61	0.00	0.00	0.00	810.61	0.00	0.00	0.00	0.00	0.00	0.00	810.61	0.04%
Ministerio de Defensa														
Red de SS de primer nivel	0.00	0.00	5,104.18	0.00	0.00	5,104.18	0.00	0.00	0.00	0.00	0.00	0.00	5,104.18	0.3%
Hospitales MIDEF	0.00	0.00	15,134.83	0.00	0.00	15,134.83	0.00	0.00	0.00	0.00	0.00	0.00	15,134.83	0.8%
Policlínica especializada	0.00	0.00	1,444.67	0.00	0.00	1,444.67	0.00	0.00	0.00	0.00	0.00	0.00	1,444.67	0.08%
Subtotal	1,005,185.82	19,083.52	21,683.68	102,369.13	0.00	1,148,322.14	0.00	0.00	0.00	0.00	0.00	0.00	1,148,322.14	62%
P r i v a d o s														
Clínicas sin camas CFL	0.00	0.00	0.00	87,717.01	16,625.82	104,342.83	0.00	0.00	0.00	0.00	0.00	72,299.63	176,642.46	9.5%
Clínicas sin camas SFL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30,985.57	30,985.57	1.7%
Subtotal	0.00	0.00	0.00	87,717.01	16,625.82	104,342.83	0.00	0.00	0.00	0.00	0.00	103,285.20	207,628.03	11.2%
Clínicas y hospitales CFL	0.00	0.00	0.00	4,616.69	2,593.76	7,210.45	0.00	0.00	0.00	0.00	0.00	60,654.9	67,865.30	3.7%
Clínicas y hospitales SFL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.0%
Subtotal	0.00	0.00	0.00	4,616.69	2,593.76	7,210.45	0.00	0.00	0.00	0.00	0.00	60,654.85	67,865.30	3.7%
Farmacias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	428,971.50	428,971.50	23.2%
Subtotal	0.00	0.00	0.00	92,333.70	19,219.58	111,553.28	0.00	0.00	0.00	0.00	0.00	592,911.55	704,464.83	38.0%
TOTAL	1,005,185.82	19,083.52	21,683.68	194,702.83	19,219.58	1,259,875.42	0.00	0.00	0.00	0.00	0.00	592,911.55	1,852,786.97	100.0%

Nota: Elaboración propia de la Comisión Nacional de Cuentas Nacionales en Salud de Nicaragua

Fuente: Ministerio de Salud (MINSAs), Ministerio de Gobernación (MIGOB), Ejército de Nicaragua (MINDEF), Instituto Nicaragüense de Seguridad Social (INSS)

MATRIZ 3: FONDOS/INSTITUCIONES A TIPO DE SERVICIO/PROGRAMA

Fondos	Programa / Tipo de Servicio			Promoción y prevención	Atención Curativa					Rehabili- tación	Formación e investigación	Total Córdobas Corrientes	(%)
	Administración		Subtotal		Ambulatoria			Hospitali- zación	Subtotal				
	Nivel	Coordinación			General	Especializada	Subtotal						
	Central	SILAIS											
MINSAs	35,183.89	22,440.93	57,624.82	254,503.57	92,592.15	156,997.95	249,590.10	443,467.33	693,057.43	0.00	0.00	1,005,185.82	54.25%
MIGOB	1,250.76	0.0	1,250.76	0.0	2,360.61	757.48	3,118.09	14,714.67	17,832.76	0.00	0.00	19,083.52	1.03%
MIDeF	1,049.48	0.0	1,049.48	520.41	4,336.74	1,374.75	5,711.48	14,402.30	20,113.78	0.00	0.00	21,683.67	1.17%
INSS	42,589.03	0.0	42,589.03	27,530.35	0.0	108,777.63	108,777.63	5,725.14	114,502.77	10,080.67	0.00	194,702.82	10.51%
Otros Ministerios / Entes Autónomos	0.0	0.0	0.00			16,625.82	16,625.82	2,593.76	19,219.58	0.00	0.00	19,219.58	1.04%
Subtotal Público	80,073.16	22,440.93	102,514.09	282,554.33	99,289.49	284,533.63	383,823.12	480,903.20	864,726.32	10,080.67	0.00	1,259,875.41	68.00%
													0.00%
Empresas	Públicas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	Privadas CFL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	Privadas SFL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Hogares	0.00	0.00	0.00	5,929.11	313,057.29	78,264.33	391,321.62	195,660.81	586,982.43	0.00	0.00	592,911.54	32.00%
Subtotal Privado	0.00	0.00	0.00	5,929.11	313,057.3	78,264.3	391,321.6	195,660.8	586,982.4	0.00	0.00	592,911.5	32.00%
TOTAL	80,073.16	22,440.93	102,514.09	288,483.44	412,346.78	362,797.96	775,144.74	676,564.01	1,451,708.75	10,080.67	0.00	1,852,786.95	100.00%
(%)	4.32%	1.21%	5.53%	15.57%	22.26%	19.58%	41.84%	36.52%	78.35%	0.54%	0.00%	100.00%	

Nota: Elaboración propia de la Comisión Nacional de Cuentas Nacionales en Salud de Nicaragua

Fuente: Ministerio de Salud (MINSAs), Ministerio de Gobernación (MIGOB), Ejército de Nicaragua (MINDEF), Instituto Nicaragüense de Seguridad Social (INSS)

Entes Autónomos: Empresa Nacional de Electricidad (ENEL), Telecomunicaciones y Correos (TELCOR), Empresa Nicaragüense de Telecomunicaciones (ENTEL), Instituto Nicaragüense de Acueductos y Alcantarillado (INAA) y Banco Central de Nicaragua (BCN)

MATRIZ 4: FONDOS/INSTITUCIONES A FUNCIÓN/ OBJETO DE GASTO

	Funcion / Objeto del Gasto	Fondos						Subtotal	Públicas	Empresas		Subtotal	Hogares	Total			
		MINSa	MIGOB	MIDeF	INSS	Otros Ministerios	Córdoba			%	CFL			SFL	Corrientes		
																Privadas	
01	Servicios personales	379,573.06	8,284.66	7,273.76	69,547.36	4,830.74	469,509.58				0.00	166,015.23	635,524.81	34.30%			
02	Servicios no personales	35,437.99	3,121.19	5,045.31	15,454.53	0.00	59,059.02				0.00	0.00	59,059.02	3.19%			
03	Materiales y suministros	235,919.78	6,825.68	6,288.07	97,760.01	14,082.23	360,875.77				0.00	426,896.32	787,772.09	42.52%			
	Medicamentos	125,625.07	5,503.04	2,411.17	58,161.78	13,951.00	205,652.06					412,073.53	617,725.59				
	Insecticidas	48.92	0.00	0.00	0.00	0.00	48.92					0.00	48.92				
	Productos Sanitarios	17,059.39	310.59	3,575.38	0.00	131.23	21,076.59					14,822.79	35,899.38				
	Varios	93,186.40	1,012.05	301.52	39,598.23	0.00	134,098.20						134,098.20				
04	Bienes de uso	354,254.92	852.00	3,076.54	11,940.92	306.61	370,430.99				0.00		370,430.99	19.99%			
	Equipo Médico y Salud	248,076.17	0.00	778.81	11,940.92	306.61	261,102.51				0.00		261,102.51				
	Edificaciones y construcci	106,178.75	852.00	2,297.73	0.00	0.00	109,328.48						109,328.48				
	TOTAL	1,005,185.75	19,083.53	21,683.68	194,702.82	19,219.58	1,259,875.36	0.00	0.00	0.00	0.00	592,911.55	1,852,786.91	100.00%			

ANNEX H. PERU

Matriz 1: Fuentes de Financiamiento a Fondos

Matriz 2: Agentes Financieros a Proveedores 1996

Matriz 3: Agentes Financieros a Funciones 1996

Matriz 4: Agentes Financieros a Tipos de Gasto 1996

MATRIZ 1: FUENTES A AGENTES FINANCIEROS 1996

(EN NUEVO SOLES)

	Cooperación Extranjera	Empresas Privadas	Hogares	Ministerio de Finanzas	Total
Empresas Privadas		136003	2022948		2158951
Gobiernos Regionales		5397	57894	533104	596395
Instituciones Públicas Descentralizadas		825	3635	83039	87499
Ministerio de Salud	31083	33079	115107	924090	1103359
Organizaciones No Gubernamentales de Servicio de Salud	18469	35945			54414
Otras Instituciones Públicas			6370	1142139	1148509
Seguro Privado		148217	73102		221319
Seguro Social		1722090	28708		1750798
TOTAL	49552	2081556	2307764	2682372	7121244

MATRIZ 2: AGENTES FINANCIEROS A PROVEEDORES 1996

	Empresas Privadas	Gobiernos Regionales	Instituciones Públicas Descentralizadas	Ministerio de Salud	NGOs	Otras Instituciones Públicas	Seguro Privado	Seguro Social	TOTAL
Clínicas Privados con Fines de Lucro	454937						94197	59625	608759
Clínicas Privados sin Fines de Lucro					47877				47877
Empresas Autoproductoras de Salud	50286								50286
Farmacias	1653728				6537		62798		1723063
Hospitales del Seguro Social								1541093	1541093
Hospitales Estatales		563822	19500	1084622		386373			2054317
Seguro Privado							64324		64324
Servicios Públicos Diversos		32575	67998	18737		762135		150080	1031525
TOTAL	2158951	596397	87498	1103359	54414	1148508	221319	1750798	7121244

MATRIZ 3: AGENTES FINANCIEROS A FUNCIONES 1996**(EN NUEVO SOLES)**

	Empresas Privadas	Gobiernos Regionales	Instituciones Públicas Descentralizadas	Ministerio de Salud	NGOs	Otras Instituciones Públicas	Seguro Privado	Seguro Social	TOTAL
Administración de la Salud		110136	8075	119315				249544	487070
Medio Ambiente		585	465	4548					5598
No servicios			302	1967			64324	274880	341473
Nutrición			67231	1497		528312			597040
Saneamiento		31989		10725		233823			276537
Servicios de Salud Individual	2158951	324998		905451	54414	386373	156995	1226374	5213556
Servicios de Salud Públicos		128688	11426	59856					199970
TOTAL	2158951	596396	87499	1103359	54414	1148508	221319	1750798	7121244

MATRIZ 4: AGENTES FINANCIEROS A TIPOS DE GASTO 1996**(EN NUEVO SOLES)**

	Empresas Privadas	Gobiernos Regionales	Instituciones Públicas Descentralizadas	Ministerio de Salud	NGOs	Otras Instituciones Públicas	Seguro Privado	Seguro Social	TOTAL
Gastos de Capital		70384	2809	171498		244139		153653	642483
Medicamentos	1653728	28463	392	91087	6537	18339	62798	165299	2026643
Otros gastos corrientes	505223	375655	83032	718565	47877	869665	158521	942333	3700871
Remuneraciones		121894	1266	122209		16365		489513	751247
TOTAL	2158951	596396	87499	1103359	54414	1148508	221319	1750798	7121244

ANNEX I. BIBLIOGRAPHY

- Abel-Smith, B. 1963. *Paying for health services: A study of the costs and sources of finance in six countries*. WHO Public Health Paper #17. Washington, DC: World Health Organization.
- Berman P. 1997. "National Health Accounts in Developing Countries: Appropriate Methods and Recent Applications." *Health Economics* 6:11-30.
- Berman P. 1999. "What Can the U.S. Learn from National Health Accounting Efforts Elsewhere?" *Health Care Financing Review*. In press.
- CEPAR-USAID. 1998. *Cuentas nacionales de gastos en salud: Ecuador 1995, informe final*. Ecuador: Proyecto Análisis y Promoción de Políticas de Salud.
- Fundación Mexicana para la Salud. 1998. *Cuentas nacionales de salud*.
- Govindaraj R, et al. 1997. "Health Expenditures in Latin America and the Caribbean." *Social Science and Medicine* 44:157-169.
- Griffin, C.C. 1992. *Health Care in Asia: A Comparative Study of Cost and Financing*. World Bank Regional and Sectoral Studies. Washington, DC: The World Bank.
- Hatton, M. 1996. *El Financiamiento Público al Sistema de Salud en la República Dominicana*. Draft. Centro de Investigación Económica para el Caribe (CIECA).
- Hurst, J. 1992. *The Reform of Health Care: A Comparative Analysis of Seven OECD Countries*. Paris: Organisation for Economic Cooperation and Development.
- IADB Department of Statistics. 1998. <http://www.iadb.org/int/sta/English/StaWeb/>.
- International Monetary Fund. 1986. *A Manual on Government Finance Statistics*. Washington, DC: International Monetary Fund.
- McGreevey W. 1990. *Social Security in Latin America: Issues and Options for the World Bank*. World Bank Discussion Papers. Washington, DC: The World Bank.
- Ministerio de Salud y Previsión Social. 1998. *Estudio sobre cuentas nacionales de financiamiento y gasto en salud*. Bolivia: Unidad de Reforma de Salud.
- Murray CJL, Govindaraj R, and Musgrove P. 1994. "National Health Expenditures: A Global Analysis." In Murray, C.J.L. and Lopez, A.D. (eds.) *Global Comparative Assessments in the Health Sector: Disease Burden, Expenditures, and Intervention Packages*. Geneva: World Health Organization.
- Organization for European Cooperation and Development. 1998. *OECD Health Data 98*. Software.
- Pan American Health Organization. 1994. *Health Conditions in the Americas, Volume I*. Washington, DC: Pan American Health Organization, World Health Organization.

- Pan American Health Organization. 1998. *Preliminary Estimates on Health Expenditures in Latin America and the Caribbean*. Washington, DC: PAHO, Public Policy and Health Program, Division of Health and Human Development for Health in the Americas 1998.
- República de Guatemala Ministerio de Salud Pública y Asistencia Social. 1997. *Informe final: Cuentas nacionales de salud, 1995-1997*. Guatemala: Unidad Sectorial de Planificación de la Salud.
- Suares R, Henderson P, Barillas E, and Vieira C. 1995. *National Health Expenditure and Financing in Latin America and the Caribbean: Challenges for the 1990s*. PAHO Health Development Series No. 3. Washington, DC: Pan American Health Organization, WHO.
- Vogel RJ. 1993. *Financing Health Care in sub-Saharan Africa*. Westport, CT: Greenwood Press.
- World Bank. 1993. *Investing in Health*. World Development Report. Washington, DC: The World Bank.
- World Bank. 1997. *World Development Report 1997*. Washington, DC.
- Zschock, 1986. "Medical Care Under Social Insurance in Latin America." *Latin American Research Review* 21(1):99-122.

PUBLICATIONS OF THE REGIONAL INITIATIVE OF HEALTH SECTOR REFORM FOR LATIN AMERICA AND THE CARIBBEAN

1. Methodology for Monitoring and Evaluation of Health Sector Reform in Latin America and the Caribbean (English/Spanish)
2. Base Line for Monitoring and Evaluation of Health Sector Reform in Latin America and the Caribbean (English/Spanish)
3. Análisis del Sector Salud en Paraguay (*Preliminary Version*)
4. Clearinghouse on Health Sector Reform
5. Final Report – Regional Forum on Provider Payment Mechanisms (Lima, Peru, 16-17 November, 1998) (English/Spanish)
6. Indicadores de Medición de la Reforma del Sector Salud en cuanto al Desempeño del Sistema
7. Mecanismos de Pago a Prestadores en el Sistema de Salud: Incentivos, Resultados e Impacto Organizacional en Países en Desarrollo
8. Cuentas Nacionales de Salud: Bolivia
9. Cuentas Nacionales de Salud: Ecuador
10. Cuentas Nacionales de Salud: Guatemala
11. Cuentas Nacionales de Salud: Mexico
12. Cuentas Nacionales de Salud: Perú
13. Cuentas Nacionales de Salud: República Dominicana (*Preliminary Version*)
14. Cuentas Nacionales de Salud: Nicaragua
15. Cuentas Nacionales de Salud: El Salvador (*Preliminary Version*)
16. Health Care Financing in Eight Latin American and Caribbean Nations: The First Regional National Health Accounts network

Special Edition

1. Cuentas Nacionales de Salud: Resúmenes de Ocho Estudios Nacionales en América Latina y el Caribe

To obtain additional information or to order any of our publications please contact:
Partnerships for Health Reform (PHR)
Abt Associates Inc.
4800 Montgomery Lane, Suite 600
Bethesda, MD 20814 USA
Fax (301) 652-3916, E-mail: pub_order@abtassoc.com
Visit our website: www.phrproject.com