45

Targeting Methodologies: Conceptual Approach and Analysis of Experiences

Targeting Methodologies: Conceptual Approach and Analysis of Experiences

Ricardo Bitrán, Ph.D.
Bitrán y Asociados

Claudia Muñoz, MPP
Bitrán y Asociados

September 2000

This publication was produced by the Partnerships for Health Reform (PHR) project, financed by the United States Agency for International Development (USAID) under contract no. HRN-C-95-00024, in partnership with the Latin America and Caribbean Health Sector Reform Initiative, financed by USAID under contract no. HRN-5974-C-00-5024-00.

TABLE OF CONTENTS

ACRONYMS

DDM	Data for Decision Making
FPMD	Family Planning Management Development
LAC	Latin America and the Caribbean
PAHO	Pan American Health Organization
PHR	Partnerships for Health Reform
USAID	United States Agency for International Development

1. INTRODUCTION

1.1 THE LATIN AMERICAN AND CARIBBEAN REGIONAL HEALTH SECTOR REFORM INITIATIVE

The Latin America and Caribbean Regional Health Sector Reform (LAC/HSR) Initiative is a five-year effort (1997–2002) to promote equitable and effective delivery of basic health services through the development of a regional support network. The LAC/HSR Initiative is a combined effort of the Pan American Health Organization, the United States Agency for International Development (USAID), and USAID's Partnerships for Health Reform, Data for Decision Making, and Family Planning Management Development projects. The Initiative funds regional support activities to a maximum total amount of $10.2 million. Its target countries are Bolivia, Brazil, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, and Peru.

The LAC/HSR Initiative focuses on four key strategic areas:

- Development, testing, and dissemination of methodologies and tools for the analysis, design, implementation, and monitoring of national health sector reforms in order to enhance public, private and non-governmental organization (NGO) sector interaction, strengthen health finance decisions, and improve policy analysis and planning.

- Acquisition, processing, and dissemination of information on national health reform efforts, and making this information widely available through an electronic resource center, a series of topical bulletins, a clearinghouse on health reform papers, and an electronic network.

- Monitoring of reform processes and outcomes as well as equitable access to basic health services by developing and implementing tools, and disseminating information obtained to countries, donors, and other partners.

- Helping countries to share experiences and assistance through regional conferences and workshops, institutional linkages, a regional forum for researchers, and study tours.

1.2 TARGETING IN HEALTH

In recent years governments and international agencies have become increasingly concerned with improving equity in the health sector in the

countries of Latin America and the Caribbean and in other developing countries. The ultimate purpose of policies aimed at enhancing equity is to facilitate access by low-income groups to health services of good quality in order to thus help reduce the gaps in health status between the poor and non-poor.

Targeting of public subsidies for health is one of the central policies available for improving equity in the sector. However, the concept and techniques of targeting have been little used by governments, perhaps partly because they are still poorly understood or not well known.

The purpose of this document is to disseminate information about targeting among professionals responsible for formulating and implementing policies in the region's health sector. The concepts presented are illustrated with concrete cases and examples. It is hoped that greater understanding of the ideas included here will help strengthen the knowledge of those who make decisions about health policy. This, in turn, should facilitate the process of formulating activities aimed at improving equity in health.

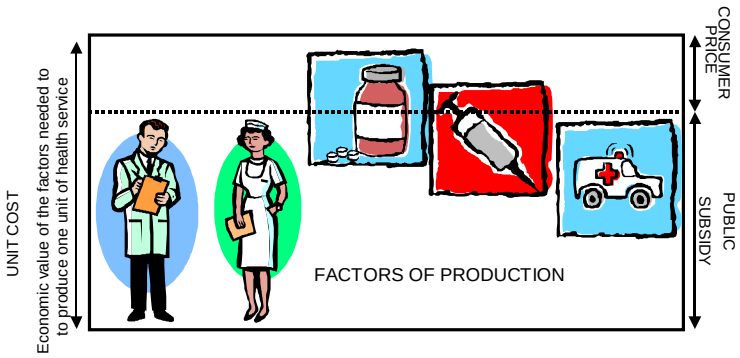
2. WHY AND HOW DO GOVERNMENTS INVEST IN THE HEALTH SECTOR?

2.1 WHAT MOTIVATES PUBLIC SPENDING ON HEALTH?

Most governments of the world, responding to economic and moral principles, play a significant role in financing health services. These principles are summarized below.

Financing of public goods in the health sector. Certain health services benefit all members of society, not just specific individuals. These are known as public health goods. Examples of public goods in the health sector include mass information dissemination campaigns, such as those for the promotion of good hygiene habits or healthy sexual practices, and aerial spraying programs to destroy infectious vectors. Because private funding for these services is generally insufficient or unavailable, without adequate government funding their level of delivery would be low or nonexistent. By allocating funds to finance such services, governments ensure that the level of delivery is appropriate, which benefits society as a whole. Government financing of public goods is motivated by considerations of economic efficiency.

FIGURE 1. WHAT IS A PUBLIC SUBSIDY FOR HEALTH?



PUBLIC SUBSIDY: Subsidization occurs when the consumer, through a direct, out-of-pocket payment, finances only part of the unit cost of producing the good and a government subsidy finances the rest.

Financing of health-related private goods. Other health care services benefit only, or mainly, the patient, not society. These services are known as private health goods. Examples of private goods include many drugs (for example, aspirin or drugs used in chemotherapy for cancer) and curative and preventive services provided on an outpatient or inpatient basis (prenatal care and appendectomies, for example). Since some of these services have high production costs, they are economically beyond the reach of people with low incomes. If the government did not allocate funds to finance such services, many poor people could not afford to pay for them with their own resources, which would be detrimental to their health status. Most governments opt to finance or subsidize (see Figure 1), either partially or totally, certain private health goods for the benefit of the poor. This financing is motivated by considerations of social justice or equity.

2.2 UNIVERSAL COVERAGE: ADVANTAGES AND DISADVANTAGES

How can it be assured that the funds that governments allocate to finance health services for the poor reach their target population? In the case of public health goods, this problem does not arise, since such goods benefit society at large—poor and non-poor alike. In the case of private goods, the matter is more complex, and there are several policy options.

A first option is for the government to make available to all members of society, without distinction, the private health goods that it is subsidizing. An example of such a policy drawn from outside the health sector is the establishment of bread prices at below cost—a measure instituted by many governments around the world in periods of economic crisis. All citizens, regardless of their income level, are entitled to buy bread at the subsidized price. Such measures are known as *general price subsidies* or *universal coverage*. In the health sector, the supply of services free of charge or at subsidized prices to all citizens through public establishments (for example, health centers or hospitals operated by the ministry of health) constitutes a policy of universal coverage.

This policy has advantages and disadvantages. One advantage is that it does not create any barriers that would hinder the poor's use of subsidized services. For that reason, there are no administrative costs, as there are in the case of a system that distinguishes between those who may and may not access the subsidized services—another advantage. A disadvantage is that, because a system of universal coverage does not distinguish between the poor and the non-poor, a significant portion of the subsidies may end up benefiting the non-poor, while many poor people may be left without access to the subsidy.

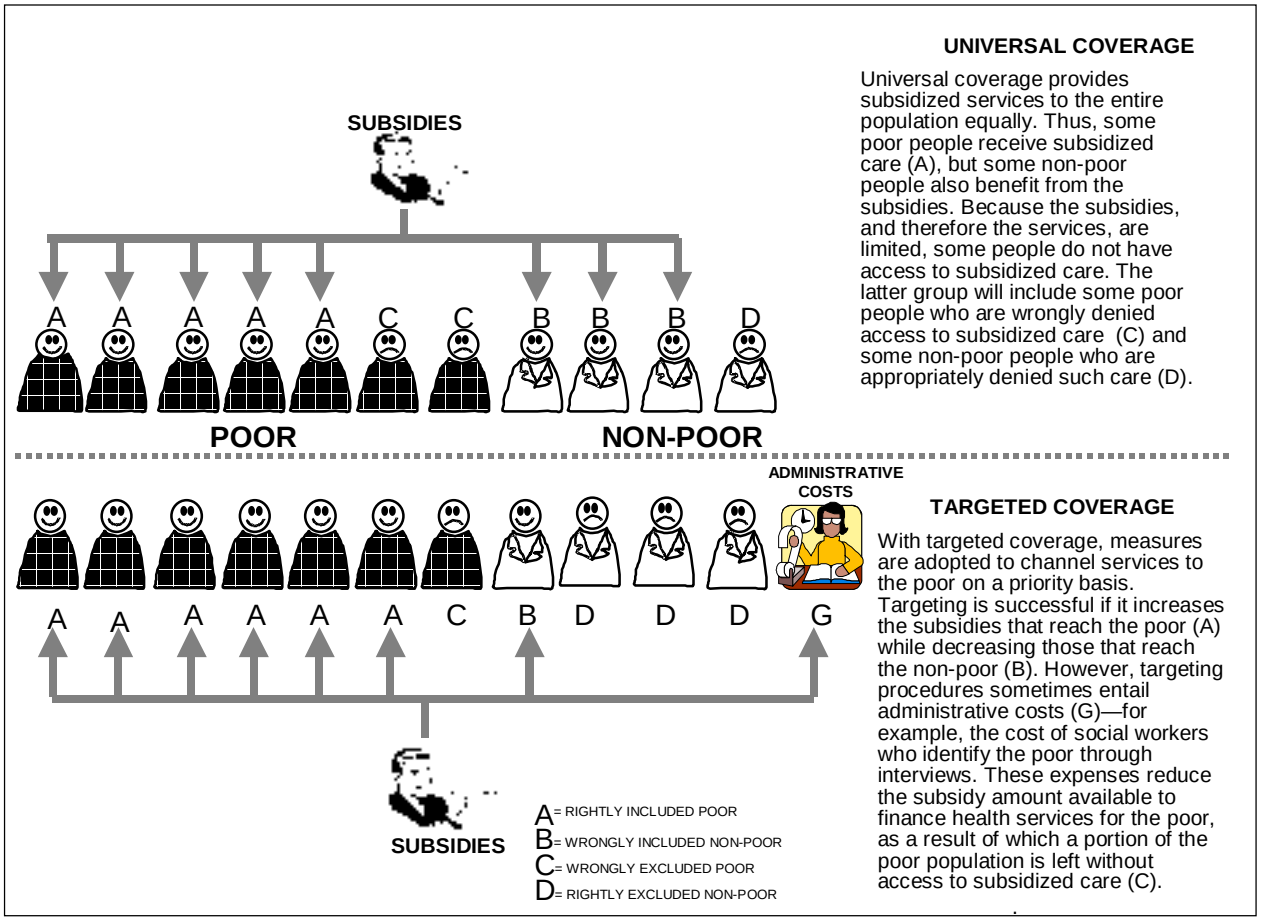
Traditionally, the developing countries have maintained a policy of universal provision of health services through a benevolent ministry of health that makes available to all citizens equally a range of services, which are provided free of charge or at subsidized prices. In recent years, many experts have criticized such policies, offering empiric evidence that reveals the extent to which subsidies are being used by the non-poor (see Section 3). It should be noted, however, that many industrialized countries—including Great Britain, Canada, and New Zealand—have subsidized health care systems with universal coverage, which enjoy broad-based social support.

2.3 TARGETING AS AN ALTERNATIVE TO UNIVERSAL COVERAGE

In reaction to the problems associated with universal coverage, some governments of developing countries, including some in Latin America and the Caribbean, have opted in recent years to implement targeted programs in the area of health as well as in nutrition, education, and housing.

Targeting can be seen as an alternative to universal coverage. A targeting policy seeks to increase the proportion of health care subsidies that reach the poor and reduce or eliminate subsidies to the non-poor. Like universal coverage, targeting has advantages and disadvantages (see Figure 2). The sections that follow will define targeting, explore its advantages and disadvantages—both in theory and practice—and offer some policy conclusions. The remainder of this section examines the concept of equity in health, which is central to an understanding of the issue of targeting, and then presents some possible approaches to channeling public subsidies for health.

FIGURE 2. UNIVERSAL COVERAGE VERSUS TARGETED COVERAGE



2.4 TARGETING AND EQUITY

As was noted above, the aim of targeting public subsidies for health care is to preserve or enhance equity in health. But what is equity and how is it measured? Two types of equity can be identified—*equity in the provision of services* and *equity in financing*—as can two dimensions of the concept—*vertical equity* and *horizontal equity*.

Equity in provision. An analysis of equity in the provision of services examines who receives health care in a system. Because the members of a society generally have differing health care needs—at any given moment, some people will be healthier than others—an analysis of equity in provision should take into account the health status of the people concerned. A health system can be considered to exhibit horizontal equity in the provision of services if all persons with equal need for care have equal possibilities of accessing that care. For example, horizontal equity in the provision of treatment for migraine exists if everyone who suffers from migraine has

equal access to the same type of care. Similarly, horizontal equity in the treatment of myocardial infarction exists if everyone who needs such care has equal access to it.

A health care system is characterized by vertical equity in the provision of services when those who require care are able to access the appropriate level of care needed to treat different individual conditions. Using the previous example, such different conditions and related care may vary, from a myocardial infarction that requires intensive surgical proceedings, to migraines that require a prescription for medication from a rural health post. It is important to point out that a health system may offer horizontal equity but not vertical equity.

It should be clarified that the concept of equity as defined above refers to individuals' access to appropriate health care. Nevertheless, there are other definitions of equity, such as equity in health status. According to this other concept, equity exists when everyone enjoys an equal level of health. This definition is more restrictive and less relevant for the health sector, since health status depends only partially on the actions of the health sector. Other factors also come into play, including the availability of safe drinking water, basic sanitation, nutrition, income, and education.

Equity in financing. The analysis of equity in financing looks at who finances a health system. Since the members of a society typically have different economic situations (measured, for example, by per capita family income), the analysis of equity in financing must take into account the economic situation, or ability to pay, of families or individuals. A health system is said to have *horizontal equity in financing* if persons with equal economic situations make equal contributions toward the financing of health services. Analogously, a system is said to have *vertical equity in financing* if those with the best economic situation pay more toward the financing of the health system. As in the case of provision, a system may be characterized by both types of equity in financing—horizontal and vertical—or only one, or neither.

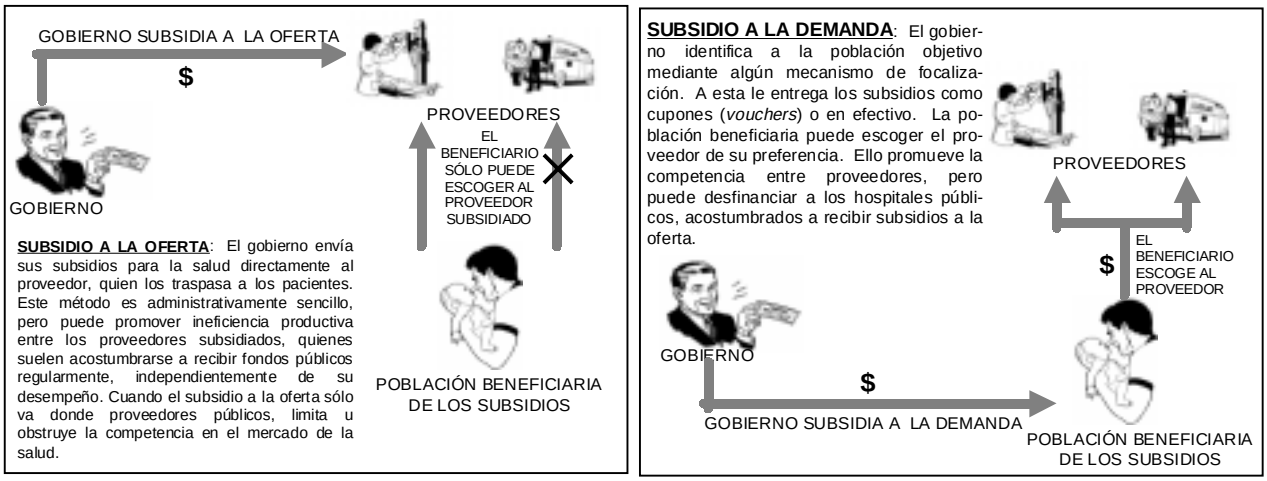
2.5 SUBSIDIZATION OF SUPPLY AND DEMAND

How can public subsidies be channeled from the national treasury to their intended beneficiaries? There are two basic approaches: *supply subsidies* and *demand subsidies*.

Supply subsidies. This is the traditional modality through which governments in the majority of developing countries have financed public health care services (Figure 3). Here the subsidies are channeled to providers, thus financing the supply or provision of services, and the providers deliver services to users at no cost or at a lower cost than the true cost of production. This manner of channeling subsidies has advantages and disadvantages. One advantage is administrative simplicity, since subsidies

are sent to a known group of (generally public) providers. A disadvantage is that, owing to the existence of a set amount of subsidies (a budget) that remains stable over time, providers have few incentives to improve their efficiency as measured by their productivity and/or quality of care. Another disadvantage is that the potential beneficiaries of the subsidy are not free to choose where to obtain subsidized care; they can only see providers who receive the subsidy. The subsidy is transferred to the consumer only indirectly since it is channeled through the producer as an intermediary.

FIGURE 3. SUBSIDIZATION OF SUPPLY AND DEMAND



Demand subsidies. In this case, the public subsidies go directly to the beneficiaries themselves following some process of identification (Figure 3). An advantage of this system is that, in principle, the beneficiaries may choose where to obtain care—for example by handing over their cash subsidy, or a voucher or coupon, to the provider they select (who receives the money or the voucher, redeeming the latter for cash from some public financial entity). This freedom of choice promotes greater competition among public and private providers. A disadvantage of demand subsidies is that it requires a process of beneficiary identification, which may be costly from an administrative standpoint. Another disadvantage is that public providers, because they depend on subsidies to demand, may become financially insolvent in the competition with private providers if they are unable to attract a sufficient number of patients.

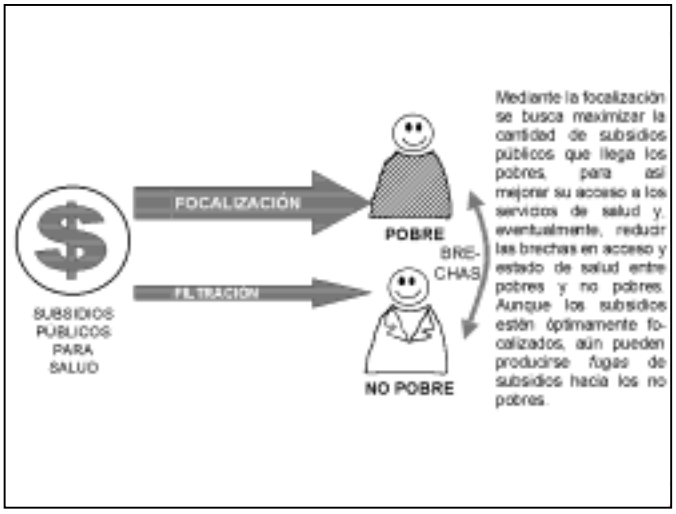
Subsidy allocation and beneficiary identification methodology. As was indicated above, the method of subsidizing demand requires that beneficiaries be identified in some way, for example by their income or place of residence. Under some methods of subsidizing supply, characterized by public financing and universal coverage, it is not necessary to identify the beneficiaries, since everyone is covered. Nevertheless, if providers wish to provide subsidized services only to certain specific population groups—for example, the poorest members of society—then they, too, must adopt some method of distinguishing poor patients from non-poor patients. Hence, the identification of beneficiaries, or targeting, is not a requirement exclusive to systems that subsidize; it may also be a requirement for a system that subsidizes supply.

3. CONCEPTS OF TARGETING

3.1 WHAT IS TARGETING?

Targeting is the act of directing public resources, or *subsidies*, to specific population groups in order to achieve certain policy objectives related to enhancing equity in the health sector. Examples of subsidized programs might include distribution of free milk and food to poor mothers in health care establishments or provision of services for the diagnosis and treatment of venereal diseases to residents of poor neighborhoods.

FIGURE 4. TARGETING AND LEAKAGE OF SUBSIDIES FOR HEALTH CARE



Governments generally target their health subsidies to the poor, but the beneficiaries of targeted programs may also be selected on the basis of other criteria, such as sex or ethnicity.

A government is said to be successful in its targeting effort if all or most of the subsidies reach those who are most in need. It is not successful if a significant portion of the subsidies do not reach the target population, or there is a significant *loss* or *leakage* of subsidies to other groups.

There is evidence that targeting of public spending in the social sectors (education, health, nutrition) can yield better results in terms of enhancing equity than universal provision of services. Nevertheless, universal coverage remains the predominant policy in the developing countries, while the use of targeting techniques is relatively uncommon.

There are various methods for targeting subsidies. They can be targeted on the basis of individual or group characteristics and by self-selection of the beneficiaries (see below). Selection of the most appropriate targeting method will depend on administrative feasibility, implementation costs, political viability, and the impact that the method has on demand.

3.2 INCIDENCE ANALYSIS: WHO BENEFITS AND WHO PAYS?

Effect on the delivery of services. To assess the success of a targeted program, it is necessary to undertake an *incidence analysis of service delivery*. Such an analysis examines who receives the benefits or health services financed with public subsidies and asks: Are the subsidized services reaching the target population? Are subsidies leaking to other population groups? To answer these questions it is useful to define the concepts of *progressiveness* and *regressiveness* in service delivery.

A health program is *progressive* if its benefits are concentrated mainly on the target population. The greater the percentage of benefits that reach the target population, the more progressive the program. Programs 1 and 2 in Table 1 are both progressive, but the second is more progressive than the first because, at all income levels, it concentrates more benefits among those with the lowest incomes. For example, a comparison of the columns showing cumulative percentages (columns 2, 4, and 6) reveals that the middle- and low-income populations, which make up 60% of the total (column 2), receive 69% of the total benefits under Program 1 (column 4), while they obtain 90% of the benefits under Program 2 (column 6). Hence, Program 2 is better targeted than Program 1.

The opposite of a progressive health program is a *regressive* program. A health program is regressive if it delivers a larger proportion of its benefits to the highest-income groups.

TABLE 1. INCIDENCE AND PROGRESSIVENESS IN THE PROVISION OF BENEFITS UNDER TWO SUBSIDIZED HEALTH PROGRAMS (PERCENTAGES)

			PROGRAM 1		PROGRAM 2	
Income group	(1) Total population	**(2) Cumulative population**	(3) Benefits in each population group	**(4) Cumulative benefits**	(5) Benefits in each population group	**(6) Cumulative benefits**
Low income	20	**20**	30	**30**	40	**40**
Lower middle income	20	**40**	20	**50**	30	**70**
Middle income	20	**60**	19	**69**	20	**90**
Upper middle income	20	**80**	18	**87**	8	**98**
High income	20	**100**	13	**100**	2	**100**

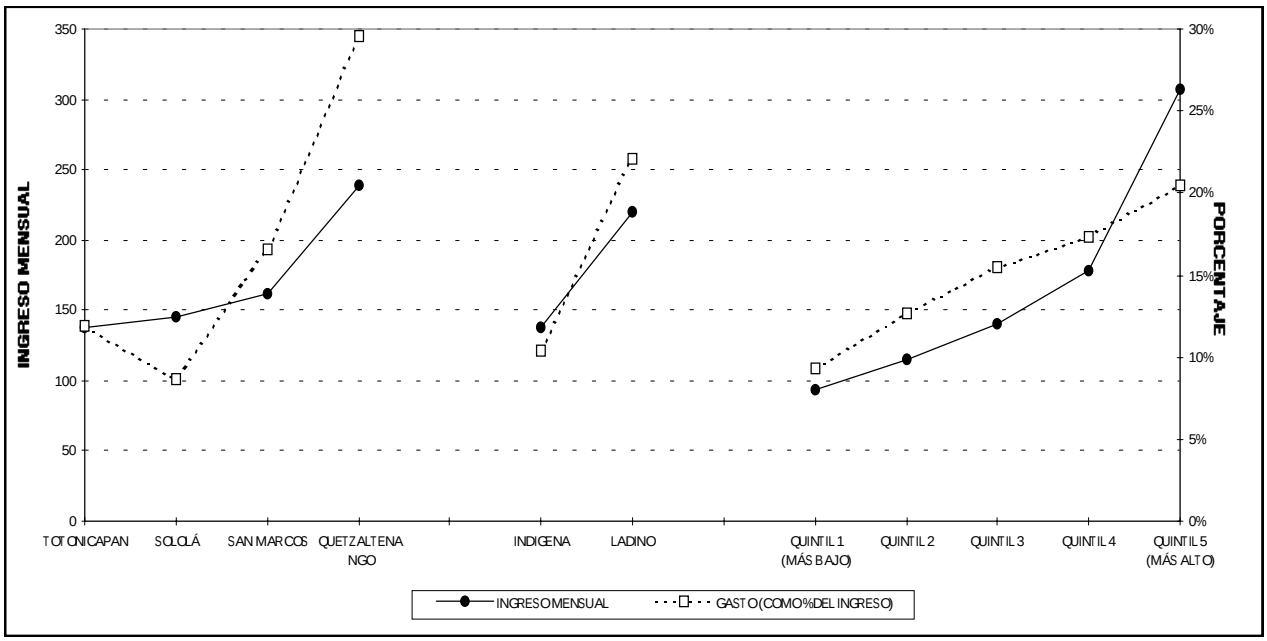
Source: Bitrán y Asociados (1997)

Effect on the financing of services. Just as it is important to determine who receives the benefits of a subsidized program, it is also important to know who finances the program. This is the purpose of an *incidence analysis of financing*. For this analysis, all possible sources of funding should be considered, including (1) taxes, (2) contributions to the health component of social security, (3) premiums paid for private health insurance, and (4) direct out-of-pocket payments by patients. A government may rely on one or several of these sources to subsidize its health programs. Therefore, incidence in terms of financing will depend on the tax structure, the way in which social security is financed, the financing of private health

insurance, and the magnitude of the out-of-pocket payments made by service users.

To preserve equity in health care financing, individuals' contributions should be consonant with their ability to pay. This occurs if those with higher incomes make larger contributions than those who are poorer, irrespective of the use that these two groups make of medical services. A system is *progressive in financing* if, as people's incomes increase, so do their contributions as a fraction of their incomes. A system is *regressive in financing* if the ratio of contributions to income decreases as income increases. Financing is proportional if, at any level of income, the contribution/income ratio remains constant. Figure 5 shows information on the progressiveness of out-of-pocket expenditures among the inhabitants of four departments in Guatemala with a high concentration of Mayan population. An analysis of the progressiveness of the out-of-pocket payments for the various income quintiles suggests that health care financing is rather progressive: on average, an individual in the first (lowest-income) quintile who gets sick will have an expected health care expenditure equivalent to 9.3% of his monthly per capita income, whereas an individual in the fifth quintile in similar circumstances will spend 20.4% of his monthly disposable income. The out-of-pocket financing system also appears to be progressive with respect to the two ethnic groups: the indigenous population expends 10.4% of its monthly per capita income to finance health care, while members of the mestizo population, whose incomes are much higher, spend 22.1% on health care when they get sick.

FIGURE 5. PROGRESSIVENESS OF DIRECT OUT-OF-POCKET FINANCING OF HEALTH CARE IN FOUR DEPARTMENTS OF GUATEMALA



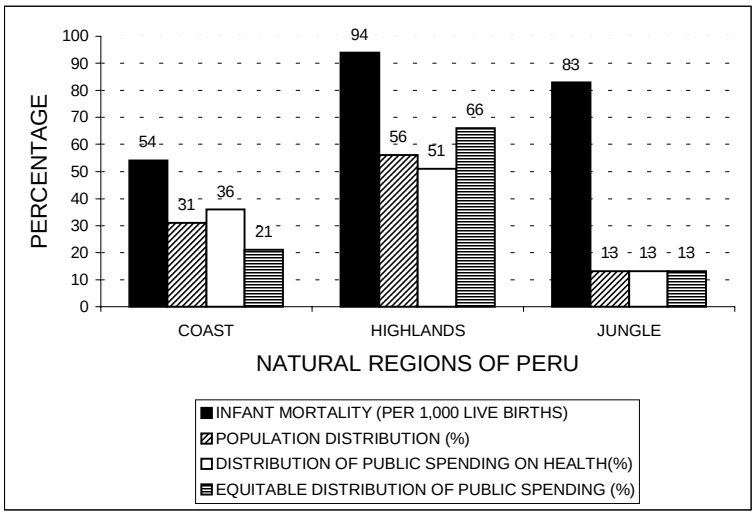
Source: Instituto Nacional de Estadísticas and Ministerio de Salud de Guatemala (1998). Encuesta de Demanda y Gastos en Salud en Cuatro Departamentos de Guatemala. Volumen 1 Informe Descriptivo. [Survey of Demand and

Expenditures for Health Care in Four Departments of Guatemala, Volume I, Descriptive Report.] Marco Internacional y Bitrán y Asociados.

3.3 HOW GOOD IS TARGETING IN THE HEALTH SECTOR IN DEVELOPING COUNTRIES?

To illustrate the situation of targeting in developing countries, the cases of Peru and Indonesia are discussed below.

TABLE 6. INFANT MORTALITY AND DISTRIBUTION OF POPULATION AND PUBLIC SPENDING IN THE NATURAL REGIONS OF PERU

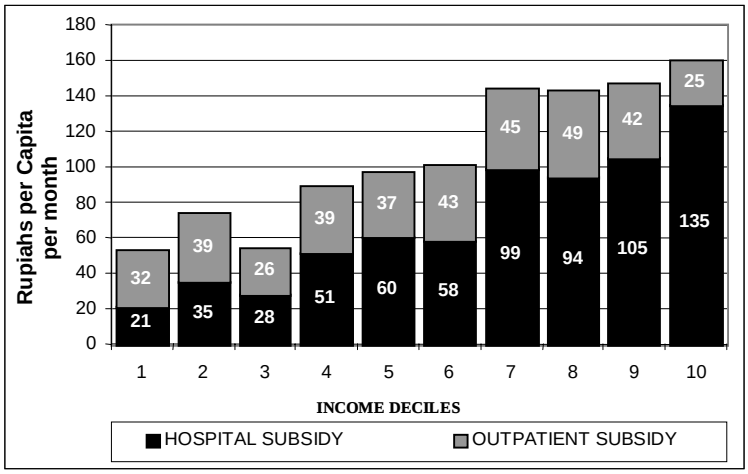


Evidence from Peru. Peru is a country with three large, distinct geographic or natural regions: the coast, the highlands, and the jungle. There are major differences between the regions in terms of the health conditions and status of their inhabitants (Figure 6), as well as the health care resources they possess and the health services they provide. At 94 deaths per 1,000 live births, the infant mortality rate (deaths among children under 1 year of age) is greatest in the highlands. The jungle region has a medium rate (83 per 1,000), while the coastal region has the lowest rate (54 per 1,000). However, as the figure shows, the distribution of public spending on health among the three regions follows the same pattern as the population distribution, which amounts to an inequitable distribution of spending. A more equitable allocation of public expenditure would follow the distribution of the burden of disease. If the latter is calculated as the product of the population times infant mortality, it becomes clear that a fairer distribution of public expenditure would be as follows (see fourth bar in the figure): coast, 21%; highlands, 66%; jungle, 13%.[1] In 1995 the coastal region was receiving a budget almost double the amount it should have received according to the criterion of equity described above, while the jungle received exactly the right amount. The excess budget allocated to the coast had an adverse effect on the highlands.

[1] The burden of disease can be calculated simply and roughly by multiplying the infant mortality rate in each region by the percentage of the national population living in the region. Based on this formula, the burden of disease per 1,000 live births in the three regions would be as follows: 16.7 (54 x 31%) in the coastal region; 52.6 (94 x 56%) in the highlands; and 10.8 (83 x 13%) in the jungle. Hence, for the country, the total burden of disease per 1,000 live births would be 80.2 (16.7 + 52.6 + 10.8). Of this total, the coast would account for 21%; the highlands, 66%; and the jungle, 13%. A more equitable allocation of the public budget would follow this distribution.

Evidence from Indonesia. An investigator examined the allocation of public spending on health in Indonesia in 1987, assessing the consumption of health services by the users of public health care establishments.[2] For that purpose, he divided the population into10 income deciles, with the first decile representing the poorest 10% of the population, the second decile the following 10%, and so on. As Figure 7 shows, the higher a person's income, the larger the subsidy derived from the public system. For example, a citizen belonging to the poorest 10% of the country's population obtained subsidies totaling 53 rupiahs per month—21 rupiahs for inpatient hospital care and 32 rupiahs for outpatient services. A person belonging to the wealthiest 10% of the population, on the other hand, obtained health subsidies totaling 160 rupiahs—triple the amount received by the poorest group. This runs counter to the principles of equity in the allocation of public subsidies for at least two reasons. First, the poorest members of the population have less ability to pay and therefore should obtain higher per capita subsidies. Second, those who are poorest generally have the worst health status, which is further reason to provide them with larger subsidies. Finally, it should be noted that the discrepancies in the size of the subsidies received by the various income groups were attributable mainly to differences in the subsidies for hospital care. This might be due to the fact that people with higher incomes are able to wield greater influence in order to gain access to costly hospital care. Another possible explanation is that more hospitals are located in urban centers, where the average income of the population is higher than in rural areas.

FIGURE 7. ALLOCATION OF PUBLIC SUBSIDIES FOR HEALTH IN INDONESIA



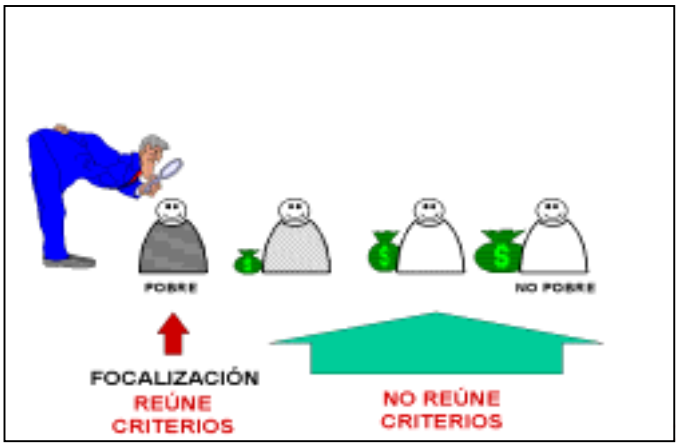
3.4 TARGETING TOOLS

There are four methods of targeting public subsidies for health, which may be applied singly or in combination. Each method offers advantages and disadvantages. Determination of the most appropriate method(s) of targeting will depend on the specific circumstances surrounding the issue.

[2] See van de Walle D (1995). The distribution of subsidies through public health services in Indonesia, 1978-87. In: van de Walle D, Nead K (eds.) (1995). *Public Spending and the Poor. Theory and Evidence*. Baltimore: The Johns Hopkins University Press. (A World Bank Book).

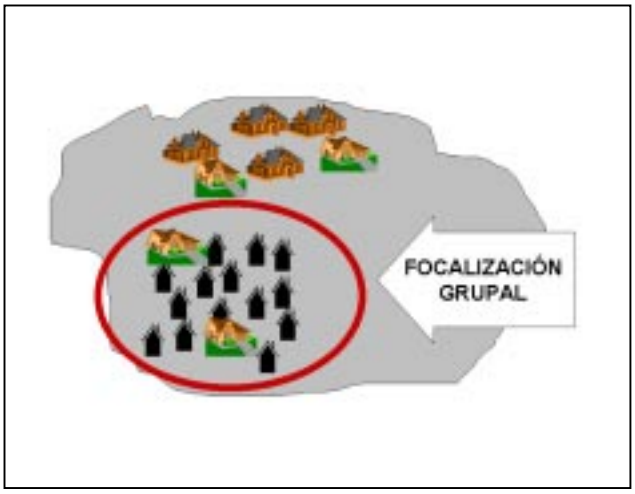
Targeting based on individual assessment. This method consists of determining who should and who should not receive public subsidies based on an assessment of individual characteristics such as income, health status, or nutritional status. Those who meet the appropriate criteria are classified as beneficiaries of the subsidy and others are excluded. Use of this method generally requires that the beneficiaries carry a credential or official document identifying them as such when they seek subsidized care. Individual targeting may be costly, owing to its administrative requirements (identification of beneficiaries and administration of the credential system), but it may also make it possible to achieve great accuracy in targeting.

FIGURE 8. TARGETING BASED ON INDIVIDUAL CHARACTERISTICS



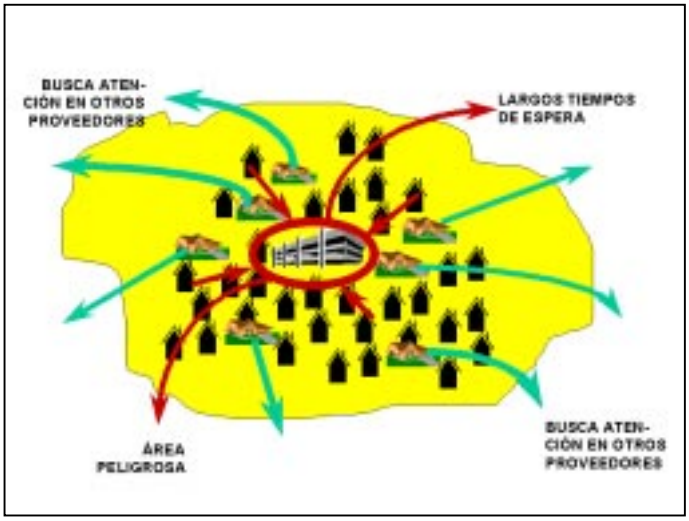
Targeting based on group assessment. In this method the population is classified in groups with similar, easily identifiable characteristics, such as geographic location, sex, or ethnicity. Everyone who possesses the characteristic in question—for example, everyone residing in a certain urban district of the capital—is eligible to receive the subsidy. Because it is not necessary to assess the characteristics of each individual, this system offers the possibility of targeting at a lower cost than targeting based on individual assessment. However, it is not always applicable, and it may result in significant leakage of subsidies to individuals who do not need them. Although this targeting method offers the advantage of lower administrative costs, its use is advisable only when relatively homogeneous groups exist.

FIGURE 9. TARGETING BASED ON GROUP CHARACTERISTICS



Self-targeting. This method is based on the behavior of individuals. It is feasible when the health system is organized in such a way that the intended beneficiaries of the subsidized program spontaneously seek out its benefits, while those who are not in the target population tend to seek care elsewhere. The long lines in some public establishments or their physical location—for example, a public health care center located in a poor and dangerous urban area—motivates self-exclusion behavior by those people who are willing to pay to obtain services in establishments located in better areas or with shorter wait times. In some cases, persons with greater means are willing to pay more to receive care faster and therefore have higher opportunity costs than those who are more deprived. Under this self-targeting method, there are no administrative costs associated with selection of beneficiaries, but there may be significant leakage of subsidies. Moreover, the method is premised on the assumption that the subsidized services will be delivered under unfavorable conditions (long waits, poor location) in comparison with unsubsidized services.

FIGURE 10. SELF-TARGETING



Targeting by type of service. This method of targeting is similar to the preceding one in that it requires that individuals adopt certain behaviors. In this case, it is expected that those who seek subsidized care will mainly be persons who are eligible for public assistance, and that others members of society will not seek such care. It differs from the previous method, however, in that here the factor that determines who will seek subsidized services is determined by the type of services being offered. The principle underlying this method is that the target population for the subsidy has greater need for certain types of health care—for example, free distribution of condoms or screening and treatment for certain venereal diseases. Those who seek such

services are generally men and women with low incomes, including prostitutes. This method of targeting, like the foregoing one, does not entail any administrative costs, but it may be very inaccurate (such as when many non-poor people decide to seek subsidized services).

3.5 MEANS TESTING AND TARGETING

Means testing is an administrative mechanism for assessing a person's eligibility to receive a benefit (subsidy), based on his/her income or another income-related individual characteristic. Application of a means test is a necessity in systems of targeting based on individual characteristics. One of the challenges with a means test policy is to determine how often the test should be reapplied. Granting permanent eligibility creates strong incentives for cheating and may make the system unfair if the economic situation of some beneficiaries improves. On the other hand, reassessing eligibility at each episode of illness may prove too difficult and expensive. The optimum duration of the period of eligibility will depend on the frequency and magnitude of fluctuations in income, the costs associated with means testing, and the cost of managing the information generated.

In some developing countries it is difficult to implement a means test, owing to certain characteristics of those nations, such as population dispersion, lack of suitable information management and storage systems, high percentages of the economically active population participating in the informal economy, and fluctuations in the labor market.

3.6 ERRORS AND ACCURACY IN TARGETING

The aim of targeting is to channel the benefits of a program to the target population—which, for the sake of convenience, will be referred to here as "the poor"—and not to other segments of the population. However, errors may be made in delivering the benefits or services of a program, whether by excluding some of the poor from the program or extending benefits to the non-poor. These errors will be referred to as *Type-I Errors* and *Type-II Errors*, respectively.

FIGURE 12. ACCURACY OF TARGETING: TYPE-I AND TYPE-II ERRORS

		REAL STATUS	
		POOR	NON-POOR
CLASSIFICATION	POOR	BENEFITS RIGHTLY ALLOCATED	**TYPE-II ERROR: BENEFITS WRONGLY ALLOCATED**
	NON-POOR	**TYPE-I ERROR: BENEFITS WRONGLY DENIED**	BENEFITS RIGHTLY DENIED

Type-I error: Erroneous exclusion of the poor. Type-I errors occur when someone who is poor is classified as "non-poor," and benefits are thus denied to someone who needs them. This type of error may occur for several reasons, including the following: (1) some members of

the beneficiary population are unaware of the existence of the subsidized program; (2) the mechanisms for selection of beneficiaries are too cumbersome (for example, the procedures are excessively bureaucratic); (3) potential beneficiaries do not want to be identified as indigent.

Type-II error: erroneous inclusion of the non-poor. Type-II errors occur when individuals who are not poor are classified as such, which results in a leakage of resources to persons outside the target population. This may happen in the following cases: (1) non-poor persons submit false information regarding their identity in order to obtain subsidies; (2) non-poor persons bribe the personnel responsible for classification of beneficiaries; (3) non-poor persons utilize their influence to access subsidized services even though they do not qualify as beneficiaries; and (4) the beneficiary selection system includes erroneous criteria that lead to mistaken classification. Some experts maintain that type-I errors are more serious than type-II errors because they keep the poor from obtaining the subsidies they need. In contrast, a subsidized program could suffer from type-II errors but still have ample resources to enable it to extend benefits to all of the poor (i.e., the program would not suffer from any type-I errors).

The accuracy of a targeting effort is measured by the level of error. If no type-I or type-II errors exist, then the targeting is perfectly accurate. If there are errors, the degree of accuracy can be calculated. For example, a program's accuracy with respect to type-I errors can be assessed by calculating the ratio of number of excluded poor to total number of poor. Accuracy in terms of type-II errors can be gauged by dividing the number of non-poor who receive the subsidy by the total number of poor.

3.7 COSTS OF TARGETING

In order to implement a process of targeting, human, financial, and technical resources are needed. The cost of targeting is the economic value of all the resources devoted to the effort. For example, if a subsidy is granted on the basis of the socioeconomic status of individuals or population groups, the costs of targeting may include the salaries of the social workers who are given the task of classifying potential beneficiaries or the costs of a national household survey to assess the socioeconomic status of different population groups, including the homogeneity of the households within and outside the groups. Each method of targeting is associated with different costs since each requires different types of information. Individual targeting requires information on the economic status of individuals, which, as noted above, may be very costly to obtain. Group targeting generally has lower costs because there are fewer groups than individuals. Self-targeting and targeting by type of service do not call for any explicit effort at targeting, although the design of these strategies generally requires the availability of information on patterns of demand for medical services by various population groups.

There is another category of costs associated with targeting processes—the costs of targeting errors. In the case of type-I errors, the cost is equal to the loss (or unrealized gain) in well-being of beneficiaries erroneously excluded from the subsidized service. In the case of type-II errors, the cost may be the same as for type-I errors if the type-I error occurs as a consequence of a type-II error (i.e., the poor are excluded because the subsidies are used up as a result of leakage of benefits to some non-poor people).

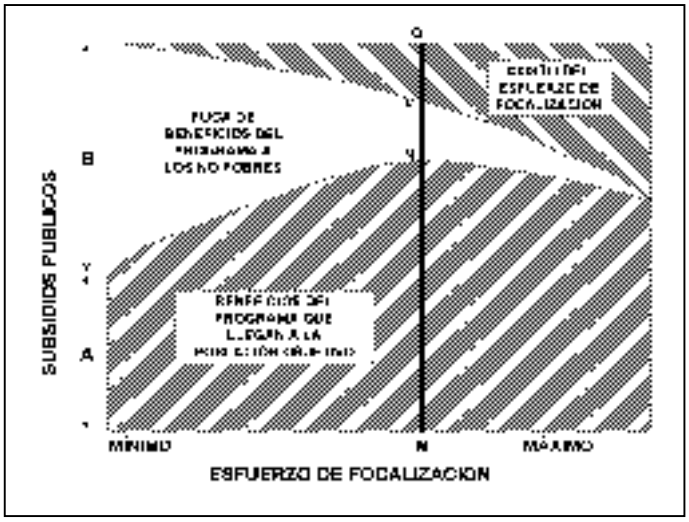


FIGURE 13. RELATIONSHIP BETWEEN EFFORT, ACCURACY, AND SCOPE OF TARGETING

If the type-II error does not induce type I errors (that is, if the type-II error does not divert subsidies and if all the poor are able to obtain the desired subsidy), figuring the social cost of type-II errors is conceptually more complex. For example, suppose that a subsidized medical service is erroneously provided to a person of high income. Suppose, also, that this person, despite his/her wealth, was unwilling to pay for the service required. In such a case, the subsidy would yield a net profit for society by improving the health status of the individual concerned. Suppose, on the other hand, that the person was willing to pay for the required medical attention, but he/she opted to obtain the service free of charge. In this case, the subsidy only replaced a private expenditure that the person would have made anyway. The targeting error would therefore not be offset by any medical benefit; it would only enable the person to have access to an amount of money equal to the alternative cost of the care.

3.8 COST-ACCURACY RATIO: EFFICIENCY OF TARGETING

It is useful to determine the ratio between the cost and the accuracy of targeting (see the definition of accuracy in Section 3.6). Dividing cost by accuracy yields a measure of the efficiency of the targeting effort: for a given level of accuracy, the lower the cost/accuracy ratio, the more efficient the targeting effort is. Similarly, at a given cost, the greater the accuracy, the greater the efficiency.

Generally speaking, there is a direct correlation between the targeting effort and its accuracy. Greater effort will usually translate into greater accuracy. Unfortunately, the greater effort costs more money and therefore the cost of the targeting increases, leaving a lesser amount of subsidies available to provide health care benefits. This situation is illustrated in the

above figure. Suppose that there is a total amount of subsidies equal to A + B and that, if there is no targeting effort, a subsidy amount equal to A reaches the poor, while amount B leaks to the non-poor. Increasing the targeting effort also increases the amount of subsidies that reach the poor and decreases the amount diverted to the non-poor. However, a new cost arises—that of the targeting effort itself. Hence, the ideal situation, in which a maximum amount of subsidies reaches the poor, is not associated with the greatest targeting effort. This is because a highly intensive targeting effort, though very accurate, would also be extremely expensive; it would consume a large portion of the resources available for the subsidized program and would leave few resources to finance health services.

3.9 COMPARISON OF TARGETING MECHANISMS

The following table provides a summary and comparison of the advantages and disadvantages of the various targeting mechanisms available, as well as their administrative requirements and the circumstances that favor their application.

TABLE 2. TARGETING MECHANISMS AND THEIR FEATURES

TARGETING MECHANISM	ADVANTAGES	DISADVANTAGES	ADMINISTRATIVE REQUIREMENTS	APPROPRIATE CIRCUMSTANCES
A. INDIVIDUAL TARGETING				
Simple means test				
Based on reported household income, size, and composition No attempt to value in-kind income, seasonal income, consider individual adjustments in needs or means No verification of reported income, except occasional visits to households to check housing quality	Simplicity	Inaccuracy Respondents have strong incentive to lie about the information	Staff to conduct interviews (may be done in field or office) Record-keeping	Existence of elements of self-targeting and/or geographic targeting to help improve accuracy Benefit levels are low, and therefore administrative costs should also be low
Sophisticated means test				
Adjusts family income according to family size, seasonality, costs of major items such as housing, university tuition, major medical expenses	Accuracy	Higher administrative costs Verification may work only for literate applicants working in the formal sector	Staff to conduct longer interviews Staff time for verifying information Detailed record- keeping	High benefit levels Applicant pool literate and employed in the formal sector
Proxy means test				
Objectively calculates synthetic needs score or index based on a series of variables that may include housing characteristics and location, family structure, occupation, education, gender of head of household, ownership of durable goods Calculation of index may be done by interviewers or computer	Uniform systematic algorithm to weight variables Not clear to applicant how to lie effectively Gets at permanent income without having to adjust for seasonal or in-kind income	Requires longer interview than simple means test Weighting algorithm is inflexible, may not detect special circumstances such as catastrophic illness, natural disasters Applicants may perceive system as arbitrary	Staff to conduct interviews (may be done in field or office) Detailed record- keeping Computerized option requires data entry capacity, sometimes at local level Software design can be centralized Previous analytical work and periodic updates to establish variables and weights	Broadly applicable Especially useful when: high benefit levels are to go to candidate pool from illiterate, informal sector; and access to basic infrastructure is so extensive that it is impossible to distinguish the need for subsidies with less detailed beneficiary identification mechanisms

TARGETING MECHANISM	ADVANTAGES	DISADVANTAGES	ADMINISTRATIVE REQUIREMENTS	APPROPRIATE CIRCUMSTANCES
Social worker evaluation				
Subjectively evaluates the same kind of information as used in proxy means test	Can detect special circumstances	Uniformity and consistency hard to ensure Mixed record in practice Applicants may perceive system as allowing favoritism, influence-peddling	Staff to conduct interviews Record-keeping	Broadly applicable
Nutritional status				
Weight-for-age Growth retardation Nutritional risk as figured by mother's fertility history, siblings' health history, family Socioeconomic characteristics	Objective, verifiable, accurate indication of need More preventive focus, detects problems earlier	Curative orientation, waits until child is malnourished before intervening Standards can be controversial Results very sensitive to inaccuracy in weighing and recording and to child's state of hydration Adds new information requirement in health services	Growth monitoring capacity High accuracy in growth monitoring capacity Prior studies to determine risk factors and their weights Training for medical staff in unfamiliar process	Malnutrition widespread Forms part of well-established preventive and/or curative health package
B. CATEGORICAL TARGETING (GROUP OR GEOGRAPHIC)				
By region Individual characteristics (e.g., students, pregnant women)	Simple	• Inaccurate unless linked to other criteria, which can lead to high leakage • Does not detect special circumstances		Poverty highly regionally concentrated or closely associated with specific individual characteristics
C. SELF-TARGETING				
Public-works form of wage Credit programs In-kind—subsidizes goods or form of good/pattern of consumption peculiar to the poor	Simple Low cost Low leakage	Can have high administrative cost	Marketing analysis to determine consumption patterns of the poor	When there is clear demarcation of consumption patterns between the poor and non-poor
D. UNIVERSAL PROVISION				
	• Simple	• High leakage	• Minimal	When the target group is broad-based

Source: Adapted from World Bank (2000). What Are the Various Types of Targeting Mechanisms? http://www.worldbank.org/poverty/safety/design/choosing2p12.htm, which in turn was adapted from World Bank (1994). Administering Targeted Social Protection Programs in Latin America and Uzbekistan Adjusting Social Protection.

3.10 THE POLITICAL ECONOMY OF TARGETING[3]

All interventions create winners and losers. The goal of policy-makers should be to compensate losers for their loss without punishing winners (e.g. in the case of structural adjustment policies). Nevertheless, different political interests exist within governments and the administration of social programs. The government, therefore, cannot be assumed to be a unitary and homogeneous actor. A given balance of interests within the government and the various programs may favor some groups over others.

The political economy of targeting essentially refers to the need to make decisions between tradeoffs—for example, choosing between the objectives of minimizing leakage or reducing administrative costs, or between focusing the targeting process or implementing broader programs to maximize political viability.

Gelback and Pritchett (1995) hypothesize that too much indicator-based targeting may result in expenditure cuts that offset the benefits of better targeting. Self-targeting, on the other hand, stands a better chance of political survival than other forms of targeting because the politician can say the individual decided to participate or not to participate and that this was not a government decision.

One lesson from experience is that the decision between targeted programs vs. generalized transfer programs may be political, and it may therefore be used as part of an election platform by parties. Standard political economy analysis (e.g. applications of an average voter model) can show that the party with the targeted program will lose, regardless of the criterion used for targeting, because it addresses the desires of fewer voters.

[3] Extracted and adapted from World Bank (2000). The Political Economy of Targeting for Safety Net Programs. http://www.worldbank.org/poverty/safety/design/choosing2p19.htm.

4. EXPERIENCES IN TARGETING

4.1 FOOD VOUCHERS FOR MOTHERS AND CHILDREN IN HONDURAS

In 1990, the Government of Honduras introduced the maternal and child food voucher (*Bono Maternoinfantil, BMI)*, which was made available through public health care facilities. This program originated as a response to the high prevalence of malnutrition in the country in the late 1980s.

Objectives of the targeted program. The main objectives of the voucher program were: (1) to supplement the incomes of the poor population; (2) to reduce food insecurity; (3) to control malnutrition during the period of economic adjustment; and (4) to promote greater use of preventive and curative services for the maternal-child population. The program provided monthly food vouchers with an approximate face value of 20 lempiras (US$ 4.00) to mothers who sought maternal and child health services in public health care establishments. The vouchers could be used to buy food or other goods in the market. The target population for the program consisted of all poor persons belonging to the following groups: children under 5 years of age (with preference given to those under 2), pregnant women who had not received any vouchers in the previous two years, nursing mothers, disabled children under12 years of age, and—in special cases—young people under the age of 18.

Targeting method used. At the national level, the program was targeted geographically according to criteria established by the PRAF[4] food program on the basis of regional indicators of malnutrition and poverty. This first level of targeting made it possible to select the regions in which the program would be carried out. Individual targeting was implemented at a second level, in which the health center personnel selected those families that would participate in the BMI program. The targeting was carried out by a social worker at centers staffed by physicians and by nursing auxiliaries at centers not staffed by physicians. The beneficiaries were selected based on family income and nutritional status of the children in the household.

Impact on the use of services. A study[5] examined the program's impact on the use of health services in three regions of the country.[6] That

---

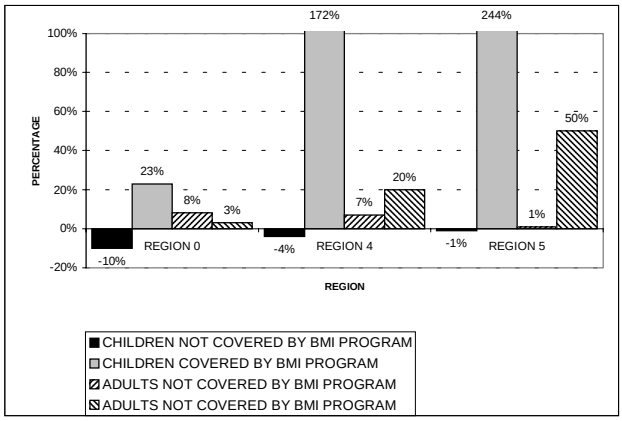
[4] PRAF: Programa de Asignación Famliar [Family Allowance Program].

[5] Bitrán R, Heinig S (1992). *Study of the Effect of the BMI Maternal and Child Food Coupon Program on Health Services Utilization in Ministry of Health Facilities in Honduras.* Cambridge, Massachusetts: Abt Associates, Inc. for the World Bank.

[6] These regions were the National District (Region 0), the Department of Valle (Region 4), and Santa Rosa de Copán (Region 5).

study found that the use of curative and preventive services by children under 5 increased dramatically between 1990 and 1991. In the health centers that did not participate in the program, on the other hand, use of services by this population group decreased. The service-use behavior of the adults was similar, although the change was less marked than in the case of children (see Figure 14). Another study conducted in 1995 concluded that the voucher program had a significantly positive impact on the education of women, which presumably would lead to their having more appropriate demand for health services. Nevertheless, the study found no significant changes in calorie intake by women or children. Per capita intake of protein increased only 3.5 grams—a smaller change than that achieved through other programs such as PAC and PAMI (which registered gains of 5 and 4 grams, respectively).

FIGURE 14: CHANGE IN USE OF HEALTH SERVICES BY CHILDREN AND ADULTS, 1990-1999



Targeting accuracy. The BMI program was well targeted in that all the beneficiaries were members of poor families. Hence, there were few or no type-II errors. Still, the program only covered part of the target population (type-I error). This type-I error, however, was not due a lack of funding for the program. It was estimated that the program's resources would be sufficient to cover 15% of the poor population. In reality, it covered only 10%, but this was due more to higher-than-expected implementation costs than to poor targeting.

Targeting costs. The operating costs for the voucher program amounted to 10% of the total program costs. A comparison between this cost and that of the PAC and PAMI programs revealed that the voucher program was more efficient, as the administrative costs of the other two programs were 36% and 53% of the total costs, respectively. Moreover, the voucher program had a lower cost per beneficiary—205 lempiras (US$ 37.27) per year vs. 390 lempiras for the PAC and 432 lempiras for the PAMI.

Conclusions. During the period of the evaluation, the BMI program was an accurately targeted program that encouraged use of primary health care services by children and adults. It was also a relatively low-cost program. Nevertheless, its performance, in terms of promoting greater intake of calories and protein, was comparatively poor.

4.2 TARGETING IN THE CHILEAN PUBLIC HEALTH CARE SYSTEM

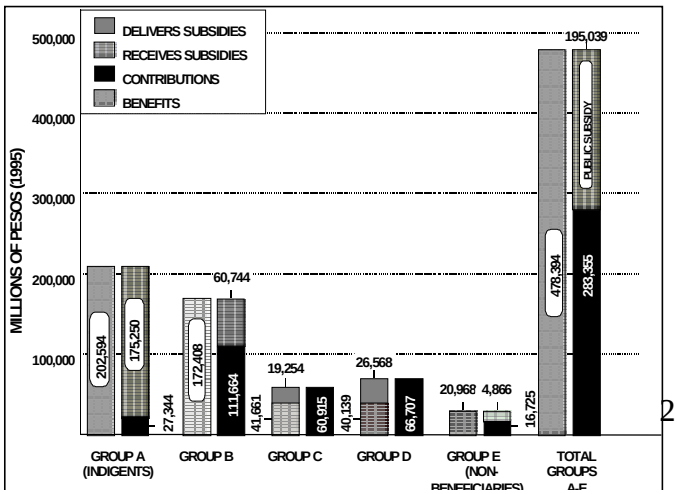
Chile has a mixed public-private health care system. Health care is financed by the National Health Fund (*Fondo Nacional de Salud, FONASA*),

the sole public insurer, and private health insurance entities known as *Instituciones de Salud Previsional (ISAPREs).* Health services are provided by numerous public and private establishments. In principle, all Chileans are free to choose between the public insurer and the private insurers. In practice, however, it is a person's level of income that determines his/her access to FONASA or an ISAPRE. FONASA covers persons of middle to low income, while the ISAPREs cover people of middle to high income. Approximately 75% of the national population is covered by FONASA and 25% by the ISAPREs. FONASA receives approximately 40% of its funding through subsidies from the national treasury and 60% through contributions by beneficiaries. The latter consist mainly of social insurance payroll withholdings equal to 7% of the beneficiary's salary and, to a much lesser extent, co-payments made by patients. The ISAPREs are self-financed through the 7% payroll deductions and additional voluntary contributions by members. Approximately 45% of FONASA beneficiaries are classified as "indigent" and belong to "Group A." Individuals in this group are not required to contribute to FONASA. The remaining 55% are classified as "contributing beneficiaries" (Groups B, C, and D), and these beneficiaries pay their 7% contribution, plus co-payments. The co-payments are either zero or very small for members of Group B, medium for Group C, and larger for Group D. Individuals covered by ISAPREs and others not covered by FONASA who have middle to high income (Group E) may utilize the public health care system through payment of special fees for private patients.

Objectives of the targeted program. In 1994 the Ministry of Health and FONASA formulated the following principles of equity in the financing of the public health insurance system. Principle 1: The benefits received by the indigent (Group A) must be financed exclusively through public subsidies; Principle 2: The contributing beneficiaries (Groups B, C, and D) must jointly finance the total of their benefits; and Principle 3: When persons in the Group E make use of the public health care system, they must cover, through out-of-pocket payments, at least the total cost of the services they receive. In addition, the two institutions established the following principle of efficiency in financing: The government is responsible for financing public health goods for all citizens.

Targeting method used. FONASA has adopted a targeting system based on individual assessment. Indigent beneficiaries of FONASA must undergo a means test administered by social workers employed by the 27 national public health services or by municipalities. Contributing beneficiaries also undergo a means test, but it is administered directly by FONASA officials. It is a simple test, which consists of reviewing the pay stub or income statement of the beneficiary.

FIGURE 15. BENEFITS, CONTRIBUTIONS, AND CROSS-SUBSIDIES IN THE PUBLIC HEALTH CARE SYSTEM, CHILE, 1995



Contributing beneficiaries are classified in Groups B, C, and D, depending on their income level. Both indigent and contributing beneficiaries must present a FONASA credential when seeking services. The medical provider has a legal obligation to verify that the beneficiary has a credential before providing health care under the conditions stipulated by FONASA.

Impact of the targeting. A study commissioned by the Ministry of Health and FONASA assessed the degree to which the financing principles described above were being fulfilled. The main findings were: (1) services for indigent beneficiaries (Group A) were financed almost entirely out of public subsidies, in accordance with Principle 1 (see Figure 15); (2) contributing beneficiaries as a whole (Groups B, C, and D) virtually self-financed their benefits, in accordance with Principle 2; (3) within the group of contributing beneficiaries, however, cross-subsidization occurred: the contributions of people in Groups C and D exceeded their benefits, and the difference constituted a cross-subsidy from these two groups to the beneficiaries in Group B, whose contributions were less than their benefits; (4) people in Group E contributed less than the amount of benefits they received, contrary to Principle 3; and (5) there are a great many citizens working in the informal sector who are not enrolled in FONASA. These persons use the public health care system, either by presenting another person's credential or a false credential or by finding away around the credential requirement.

Conclusions. Chile's public health care system uses targeting based on individual assessment to establish whether people will be covered by FONASA as indigents and also to assign contributing beneficiaries to different groups, which determine the level of their co-payments. The cost of the targeting system is estimated to be low. Two of the three principles of equity formulated by the government are being followed. However, low- and high-income segments of the population who make use of the public health care system derive a net benefit from doing so, which constitutes a leakage of public subsidies. Nevertheless, this leakage (estimated at approximately 5 billion Chilean pesos) seems modest in relation to the total volume of public subsidies provided (195 billion pesos). FONASA might consider: (1) revising the system of fees charged to private users (Group E); (2) making membership in some health insurance system (either FONASA or an ISAPRE) mandatory for all workers, including those in the informal sector; (3) evaluating and strengthening the current system of means testing and identification of indigent and contributing beneficiaries; and (4) evaluating and improving the system for issuance, maintenance, and verification of the FONASA credential.

4.3 TARGETING OF PUBLIC SUBSIDIES IN COLOMBIA'S HEALTH REFORM INITIATIVE

In 1993, with the enactment of Law 100, Colombia introduced radical reforms in its system of social security in the health sector. Until that time, the public health care system was characterized by inefficiency in the

allocation of resources, inadequate targeting of public subsidies, and low productivity. Health insurance coverage (public and private) was also low, as was access to health services. The main objectives of the reform were: (1) to achieve universal coverage for a package of basic health benefits; (2) to improve efficiency in production; and (3) to assure adequate levels of health care quality. The reform established the right of all citizens to access the package of basic medical benefits and to choose their health insurer freely. Under the new system, those who could afford to pay were expected to affiliate with some "health promoting entity"*(Entidad Promotora de Salud, EPS*)—a private insurer—through payment of a monthly premium equal to 12% of their income. The poor could enroll with one of the entities responsible for administering the subsidized system *(Administradora del Régimen Subsidiado, ARS*)—insurance entities financed mainly by the State through direct subsidies for members and, to a lesser extent, by the premiums paid by EPS members.[7] Delivery of health services was entrusted to public and private providers, who were expected to compete among themselves for health care delivery contracts awarded by the EPS and ARS.

Targeting method used. To identify the target population for the government-subsidized health services—i.e., those who could belong to an ARS—a method of individual targeting was adopted based on systematic assessment of the poverty level of households. To that end, a system for the selection of beneficiaries of social programs (*Sistema de Selección de Beneficiarios, SISBEN*) was developed, under which all the households in each community were surveyed. Based on information from the survey, each household received a score ranging from 0 to100. The score reflected four characteristics of the household: (1) quality of housing and ownership of goods; (2) use of services; (3) demographic features of household members; and (4) education of household members and social security coverage. Households scoring under 48 points were entitled to be beneficiaries of public subsidies through affiliation in an ARS.

Impact of the targeting. As of late 1996, 5.6 million poor Colombians had affiliated with an ARS, which amounts to 50% of the indigent population in the country and represents a considerable achievement in terms of reform. Unfortunately, not enough information is available yet to assess the accuracy of the system for targeting public subsidies. However, several problems in the implementation of the system have been identified. One is SISBEN's lack of adaptation to the realities in each region, coupled with a shortage of resources for its application. This has led some communities to adopt alternative systems of targeting, such as use of census information to classify the population in strata as a basis for selecting beneficiaries.

---

[7] Of the 12% premium, 11% was to be used to finance the EPS and 1% was to be devoted to cross-subsidization of the ARS through the Solidarity and Guarantee Fund (*Fondo de Solidaridad y Garantía, FOSYGA*).

Conclusions. The Colombian health reform has been an ambitious effort to address, through its innovative design, the principal problems confronting the health sector. Targeting of public subsidies through SISBEN has been a valid and systematic attempt to allocate national public resources to the poorest members of the population in order to achieve a higher degree of equity in the health sector. The problems that have hampered SISBEN's implementation were predictable, but their existence does not mean that such a selection procedure is not necessary. Rather, it points up the need to introduce some adjustments—for example, tailoring SISBEN more to local circumstances in order to make the targeting system more effective.

4.4 EVIDENCE FROM 30 SOCIAL PROGRAMS IN LATIN AMERICA AND THE CARIBBEAN

The foregoing examples illustrate the impact of several specific targeted programs. A recent evaluation undertaken by Grosh[8] looked at a set of 30 targeted social programs throughout Latin America. This section summarizes the results of that study, which sought to assess the relationship between administrative costs of targeting and its impact, in terms of accuracy.

Objective of the programs. The objective of the programs included in Grosh's study is the delivery of benefits to poor segments of the population with a view to mitigating the effects of worsening poverty during the 1980s and lessening the social costs of macroeconomic adjustment programs. These social programs are financed with national funds and are executed by public institutions or nongovernmental organizations.

TABLE 3. SUBSIDIZED SOCIAL PROGRAMS INCLUDED IN GROSH'S STUDY

Type of subsidized program	Number of programs
Food or subsidy provision program	8
School lunch program	3
Food stamp program	5
Program for delivery of health care for free or for a reduced fee, or with health insurance	3
Student loan program	3
Cash subsidy program	3
Employment program	2
Child care and preschool program	2
Mortgage program	1
TOTAL	30

Source: Grosh (1995).

[8] Grosh ME (1995). Toward qualifying the trade-off: Administrative costs and incidence in targeted programs in Latin America. In: van de Walle D, Nead K (eds.) (1995). Public Spending and the Poor: Theory and Evidence. Baltimore: The John Hopkins Press. (A World Bank Book).

Targeting methods used. The programs studied use various methods of targeting: targeting based on individual assessment (17 programs); targeting by group characteristics or geographic location (7 programs); and self-targeting (6 programs). The investigator examined the cost of the targeted programs, including administrative costs and specific costs of the targeting effort and the volume of benefits of the targeted programs that reached the poorest 40% of the population (i.e., the lowest two income quintiles). She then compared the costs and accuracy of the targeted and non-targeted programs. Finally, she compared costs and accuracy for the different types of targeted programs.

Impact of the targeting. Grosh concluded that the non-targeted programs (general price subsidies) with the best performance delivered 37% of the subsidies to the poorest 40% of households, whereas the targeted programs with the worst performance delivered a much higher proportion of subsidies, channeling 59% of the benefits to the poorest 40% of the population. When the author compared all the programs, including both non-targeted and targeted programs (instead of comparing the best of the former with the worst of the latter), she found that the non-targeted programs allocated 33% of their benefits to the two poorest quintiles, while the targeted programs allocated 72% of their benefits to that population. These findings demonstrate that, in terms of incidence, the targeted programs yield considerably better results than the non-targeted programs. After examining the various methods of targeting, Grosh concludes that they achieve similar results. The targeted programs based on individual assessment are able to channel, on average, 73% of their benefits to the two poorest quintiles; this figure is 72% for programs with geographic (or group) targeting and 71% for self-targeted programs.

Costs of the targeting. The average administrative costs vary according to the targeting method used. The study indicates that for programs that use individual assessment as a targeting mechanism, administrative costs account for 9% of total costs. The figure for programs using geographic targeting is 7%, and for self-targeted programs it is 6%. Not all the administrative costs are associated with the targeting effort, however. Grosh estimates that the cost of the targeting effort itself ranges from 0.4% to 8% of the total program costs.

Conclusions. After examining the relationship between administrative costs and incidence of targeting for 30 social programs in Latin American countries, Grosh draws the following conclusions: (1) targeted programs yield better results, in terms of incidence, than non-targeted programs; (2) the various methods of targeting achieve similar results in terms of benefit incidence; (3) the administrative costs of programs that use some method of targeting are not excessively high; and (4) there does not appear to be a clear connection between the results of targeting and administrative costs.

5. CONCLUSIONS

This document has examined issues relating to the concept of targeting of subsidies in health and other social programs, it has illustrated these issues by means of real examples, and it has analyzed four concrete cases of targeted programs in Latin America.

The aim of targeting public subsidies for health is to accurately channel subsidies— through a variety of methods—to specific population groups, generally those that are poorest. Targeting is an alternative to general price subsidies or universal coverage. The main objective of targeted programs is to improve the incidence of the subsidies (i.e., to ensure that a greater proportion of the subsidies reach the neediest members of the population). Higher incidence leads to greater equity in the health sector.

An analysis of experiences suggests that some health programs (and other social programs) that are not targeted perform poorly in terms of benefit incidence and could be substantially improved by means of targeting. The cost of targeting may be very low in relation to total program costs. However, the adoption of mass national targeting systems entails operational difficulties. Improving the performance of targeted programs, by fine-tuning the tools of targeting, is a tedious process and a challenge for those involved in formulating and adopting reforms in the health sector.

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 and Spanish)

2) Base Line for Monitoring and Evaluation of Health Sector Reform in Latin America and the Caribbean. (English and Spanish)

3) Análisis del Sector Salud en Paraguay (Preliminary Version). (Spanish only)

4) Clearinghouse on Health Sector Reform. (English and Spanish)

5) Final Report – Regional Forum on Provider Payment Mechanisms (Lima, Peru, 16-17 November, 1998). (English and Spanish)

6) Indicadores de Medición del Desempeño del Sistema de Salud. (Spanish only)

7) Mecanismos de Pago a Prestadores en el Sistema de Salud: Incentivos, Resultados e Impacto Organizacional en Países en Desarrollo. (Spanish only)

8) Cuentas Nacionales de Salud: Bolivia. (Spanish only)

9) Cuentas Nacionales de Salud: Ecuador. (Spanish only)

10) Cuentas Nacionales de Salud: Guatemala. (Spanish only)

11) Cuentas Nacionales de Salud: México. (Spanish only)

12) Cuentas Nacionales de Salud: Perú. (Spanish only)

13) Cuentas Nacionales de Salud: República Dominicana (Preliminary Version). (Spanish only)

14) Cuentas Nacionales de Salud: Nicaragua. (Spanish only)

15) Cuentas Nacionales de Salud: El Salvador (Preliminary Version). (Spanish only)

16) Health Care Financing in Eight Latin American and Caribbean Nations: The First Regional National Health Accounts Network. (English only)

17) Decentralization of Health Systems: Decision Space, Innovation, and Performance. (English only)

18) Comparative Analysis of Policy Processes: Enhancing the Political Feasibility of Health Reform. (English only)

19) Lineamientos para la Realización de Análisis Estratégicos de los Actores de la Reforma Sectorial en Salud. (Spanish only)

20) Strengthening NGO Capacity to Support Health Sector Reform: Sharing Tools and Methodologies. (English only)

21) Foro Subregional Andino sobre Reforma Sectorial en Salud. Informe de Relatoría. (Santa Cruz, Bolivia, 5 a 6 de Julio de 1999). (Spanish only)

22) State of the Practice: Public-NGO Partnerships in Response to Decentralization. (English only)

23) State of the Practice: Public-NGO Partnerships for Quality Assurance. (English only)

24) Using National Health accounts to Make Health Sector Policy: Finding of a Latin America/Caribbean Regional Workshop. (English and Spanish)

25) Partnerships between the Public Sector and Non-Governmental Organizations Contracting for Primary Health Care Services. A State of the Practice Paper. (English and Spanish)

26) Partnerships between the Public Sector and Non-Governmental Organizations: The NGO Role in Health Sector Reform. (English/Spanish)

27) Análisis del Plan Maestro de Inversiones en Salud (PMIS) de Nicaragua. (Spanish only)

28) Plan de Inversiones del Ministerio de Salud 2000-2002. (In progress)

29) Decentralization of Health Systems in Latin America: A Comparative Study of Chile, Colombia, and Bolivia. (English and Spanish)

30) Guidelines for Promoting Decentralization of Health Systems in Latin America. (English and Spanish)

31) Methodological Guidelines for Applied Research on Decentralization of Health Systems in Latin America. (English only)

32) Applied Research on Decentralization of Health Care Systems in Latin America: Colombia Case Study. (English only)

33) Applied Research on Decentralization of Health Care Systems in Latin America: Chile Case Study. (English only)

34) Applied Research on Decentralization of Health Care Systems in Latin America: Bolivia Case Study. (English only)

35) La Descentralización de los Servicios de Salud en Bolivia. (Spanish only)

36) Enhancing the Political Feasibility of Health Reform: A Comparative Analysis of Chile, Colombia, and Mexico. (English and Spanish)

37) Guidelines for Enhancing the Political Feasibility of Health Reform in Latin America. (English and Spanish)

38) Methodological Guidelines for Enhancing the Political Feasibility of Health Reform in Latin America. (English only)

39) Enhancing the Political Feasibility of Health Reform: The Colombia Case. (English only)

40) Enhancing the Political Feasibility of Health Reform: The Chilean Case. (English only)

41) Enhancing the Political Feasibility of Health Reform: The Mexico Case. (English only)

42) Financing Social Health Insurance: A Social Insurance Assessment Tool for Policy Decisions. (English and Spanish)

43) Human Resource Management: Building Capacity to Improve Health Sector Reform and Organizational Performance. (English and Spanish)

44) Performance Based Reimbursement to Improve Impact: Evidence from Haiti. (English and Spanish)

45) Targeting Methodologies: Conceptual Approach and Analysis of Experiences. (English and Spanish)

46) Managing the Transition from Public Hospital to "Social Enterprise:" A Case Study of Three Colombian Hospitals. (English and Spanish)

47) Policy Toolkit for Strengthening Health Sector Reform. (English and Spanish)

48) The Use of Research in Health Sector Reform in Latin America and The Caribbean. Report on the Regional Forum. Salvador, Bahia, May 3-5, 2000.

49) Comparative Analysis of Social Insurance in Latin America and the Caribbean. (English, for Spanish Version refer to Special Edition #3)

50) Provider Payment Alternatives for Latin America: Concepts and Stakeholder Strategies. (English, for Spanish Version refer to Special Edition #4)

51) Guide to Prospective Capitation with Illustrations from Latin America. (English, for Spanish Version refer to Special Edition #5)

52) Prospective Case-Based Payment for Hospitals: A Guide with Illustrations from Latin America. (English, for Spanish Version refer to Special Edition #6)

53) Trainer's Guide to the Policy Toolkit for Strengthening Health Sector Reform. (English and Spanish)

Special Edition

1) Cuentas Nacionales de Salud: Resúmenes de Ocho Estudios Nacionales en América latina y el Caribe. (Spanish only)

2) Guía Básica de Política: Toma de Decisiones para la Equidad en la Reforma del Sector Salud. (Spanish only)

3) Dimensiones Horizontal y Vertical en el Aseguramiento Social en Salud de América Latina y El Caribe. (Spanish, for English version refer to #49 Regular Edition)

4) Alternativas de Pago a los Proveedores para América Latina: Conceptos y Estrategias de las Partes Interesadas (Spanish, for English version refer to #50 Regular Edition)

5) Guía para la Capitación Prospectiva con ejemplos de América Latina. (Spanish, for English version refer to #51 Regular Edition)

6) El Pago Prospectivo por Caso Hospitalario en América Latina: Una Guía Metodológica. (Spanish, for English version refer to #52 Regular Edition)

TO VIEW OR DOWNLOAD ANY PUBLICATIONS PLEASE GO TO THE INITIATIVE WEB PAGE:

http://www.americas.health-sector-reform.org

AND SELECT "LACHSR INITIATIVE PRODUCT INVENTORY"