

Health Policy 32 (1995) 257–277

HEALTH POLICY

# Comprehensive policy analysis for health system reform<sup>☆</sup>

# Julio Frenk

Mexican Health Foundation and National Institute of Public Health, Periferico SR 4809, Tlalpan, Mexico City, DF 14610, Mexico

Revision received 20 January; accepted 24 January 1995

#### Abstract

This article presents the results of a comprehensive approach to policy analysis that may serve as an input for health system reform. The comprehensive character of this effort stems from the attempt to combine, in a coherent framework, various analytical tools that have been developed recently, such as measurement of the burden of disease, cost-effectiveness analysis to integrate packages of essential interventions, national health accounts, assessment of system performance, consumer surveys, and political mapping. These tools were all applied in a study that was carried out in Mexico from August 1993 through September 1994. After explaining the logic of the study, the paper summarizes the findings and recommendations under five headings that shape the form of reform: the problems, the principles, the purposes, the proposals, and the protagonists. Rather than describing these various elements in detail, the paper focuses on the strategic aspects, which are most relevant to other countries currently planning or implementing reform initiatives. The article concludes that, under the current wave of international interest in health system reform, it is necessary to establish a mechanism for shared learning at the global level. Only in this way will it be possible to reproduce the analytical skills and accumulate the body of evidence that health systems require for their sustained improvement.

<sup>&</sup>lt;sup>\*</sup> This paper summarizes, with modifications, the Overview of the report Health and the Economy: Proposals for Progress in the Mexican Health System, published by Fundacion Mexicana para la Salud (Mexican Health Foundation), Mexico City, 1994.

<sup>0168-8510/95/\$09.50 © 1995</sup> Elsevier Science Ireland Ltd. All rights reserved. SSDI 0168-8510(95)00739-F

Key words: Health systems; Reform; Policy analysis; Mexico

# 1. Introduction

Health systems throughout the world are at a crossroads. They have reached a critical point in their development where they must make the decisions that will shape their future. They arrive at this juncture with a rich legacy of accomplishments, but also with a backlog of unsolved problems and pressure from emerging challenges.

Health systems must be renewed if they are to keep up with the wave of innovation that has swept through economics, politics, culture, and technology. Indeed, we are living in a time of change and a change of times. The millennium is drawing to a close amid some of the most tense and intense transformations in history. The scope, range, and speed of change indicate that we are in a critical process of transition. To steer our way through to the new era we must learn from the past, innovate in the present, and anticipate for the future.

Like a lens, the health field reflects and magnifies many of the changes that the world has been experiencing. Health system reform appears today both as a response to change and as a motor for further social transformation. The remarkable variation in the countries that are currently planning or implementing reform initiatives speaks of the universality of the search for better ways of regulating, financing, and delivering health services.

Modern health systems demand a type of policy analysis that matches their growing complexity. Fortunately, during the past few years the analytical armamentarium has been greatly expanded. Today the policy community can use a number of tools for increasing the quality of decision making. One of the current challenges is to integrate these different approaches into a coherent framework for policy analysis.

This paper will illustrate one attempt to develop and apply such a framework. To this effect we will summarize the approach followed in an detailed study carried out at the Fundacion Mexicana para la Salud (Mexican Health Foundation, or FUNSALUD) from August 1993 through September 1994. The study was entitled 'Health and the economy: Options for financing and delivery of health services'.

FUNSALUD is a private non-profit organization established in 1985. It brings together 125 prominent persons mostly from the business world, who make financial contributions and, through a Board, define the mission and policies. These are implemented by a small executive staff, which operates in a very flexible way through contracts for specific projects with researchers and consultants. The Foundation is highly regarded for its innovative approach to mobilizing private support for health. Increasingly, it is also recognized as an independent voice in the health policy debate. The fact that a large policy review was undertaken by a NGO with mostly private funding, is itself indicative of the vast change that has occurred in the relationship between the State and the civil society.

This paper will first explain the logic of the FUNSALUD study. Because our purpose is to use the Mexican case simply as an illustration, we will not describe the findings per se. Rather, we will examine the approach used in the analysis and presentation of the main results. The last part will discuss the strategic recommendations, which may be relevant to other countries considering health system reform. More than examining the details of one particular study, our purpose is to develop a comprehensive framework for policy analysis as a key input to reform.

# 2. The logic of the study

In August 1993, FUNSALUD decided to launch a major health policy review. The moment seemed ripe to undertake such an effort due to four main circumstances: first, the internal dynamics of the health system; second, the political situation; third, the emergence of health system reform as an important topic in the international agenda; fourth, the availability of new analytical tools to explore policy options.

With respect to the dynamics of the health system, there was a growing realization that the present model had reached its limits. This model came into being over half a century ago. In 1943, the key components of the system were put in place, when the Ministry of Health, the Mexican Institute of Social Security, and the Children's Hospital (the first national institute of health) were founded. During the ensuing 50 years, the health conditions of the population became more complex, consisting of a combination of diseases linked to underdevelopment and ailments related to industrial growth. In addition, the complexity of the health system also increased, absorbing growing amounts of human and material resources. These changes in the health field reflected a more general social and economic transformation, which was greatly accelerated during the last decade. In this context, a crucial question became apparent: Does the present health system respond to the new conditions of the country? If the system needs to adapt, the next critical question led us to consider the alternatives to improve it. These questions could only be answered through a rigorous analysis.

Performing such an analysis became timely in the light of the scheduled Presidential and legislative elections of 1994. A sound policy analysis would enrich the public debate at a crucial political moment, when priorities are likely to be reconsidered and the search for alternatives becomes more intense.

The internal circumstances of the country found a productive echo in the growing visibility of health reform in several elections abroad. The international interest that health care issues have generated in the last few years opened a window of opportunity to develop the study. This interest was greatly enhanced by the publication of the *World Development Report 1993* [1]. Apart from its intrinsic quality, the WDR 1993 was directed at an audience that went beyond health experts and included policy makers in key positions at ministries of finance, central banks, development agencies, and the like. Very often, the decisions of these general policy makers have a greater effect on the health system than the decisions made at the specialized agencies.

Another important contribution of the WDR 1993 was the introduction of new analytical tools, most notably the measurement of the burden of disease through Disability-Adjusted Life Years and the use of cost-effectiveness analysis to devise packages of essential health interventions. Together with other recent developments in the field, these tools empowered policy analysts working at the country level.

The combination of these four factors prompted FUNSALUD to undertake the project on 'Health and the Economy'. The title of the project was meant to emphasize the linkages between economic development, on the one hand, and organization, financing, and performance of the health system, on the other. These connections will be further discussed in the following section. Emphasizing the relevance of health for the economy was a way to draw the attention of policy makers in the key areas where overall development priorities are decided. In other words, the project explicitly tried to take the health debate beyond the boundaries of specialized agencies and make it a central concern for general policy makers as well as business and community leaders.

The objective of the study was to help define and evaluate the options to improve the response of Mexico's health system to the needs of the population, through strategies that promote equity, quality, and efficiency. The study attempted to develop a comprehensive analytical base that could assist in the design of a potential reform.

A requisite element to guide this effort was to have a clear conception of the health system. Hence, we developed a dynamic framework that looks at the health system as a set of relationships among actors. Such a framework has been explained in a previous paper and will not be repeated here [2]. Suffice it to say that the conceptual exercise led to the selection of the main topics to be included in the study.

Fig. 1 summarizes the logic of the FUNSALUD study. The first step was to define the major problems that affect the health of the population. To this end, the burden of disease in Mexico was measured. Apart from examining the dynamics of the epidemiologic transition through conventional mortality indicators, we analyzed the loss of Disability-Adjusted Life Years (DALYs), the new indicator proposed by the WDR 1993. This was the first time that DALYs were estimated for a country [3].

The next step attempted to find the potential solutions to the problems, through a cost-effectiveness analysis of the most frequent health interventions. The best of these solutions can then be brought together in a package of essential services.

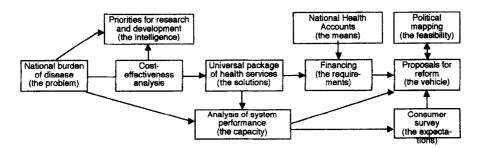


Fig. 1. The logic of the study.

Defining such a package was a fundamental part of the FUNSALUD study [4]. Cost-effectiveness analysis is also useful to identify priorities for research and technological development. R & D priorities are established precisely when there are no cost-effective solutions to a health problem [5].

Of course, it is not enough to have potential solutions; it is also necessary to review the real capacity of the system to apply them. Hence, the study included a detailed examination of system performance [6]. In addition, it is essential to know both the financial requirements and the current expenditures, which was done through the calculation of the National Health Accounts [7]. A complete assessment cannot be limited to objective indicators of technical efficiency and quality, but must also include measures of population satisfaction. To this end, the study carried out the National Survey of Consumer Satisfaction with Health Care, which was also useful to ascertain expectations about possible reforms [8].

The last step was to compare several options for health system reform. The feasibility of the most important alternatives was then subjected to a formal analysis through an innovative approach of political mapping [9]. As can be seen in Fig. 1, the proposals for change are only the final link in a long analytical chain. Without prejudging the need for a reform, the FUNSALUD study first undertook an objective analysis of the situation. Only after such analysis was completed did it conclude that, indeed, the present and future conditions of the country demand a profound change in the health system. In this way, reform proposals become the vehicle to mobilize the financial resources and improve the response capacity of the system, so as to apply the solutions that can address the health problems. Far from being an end in itself, reform serves a defined mission: to improve health conditions with equity, quality, and efficiency.

Since no reform can be imposed as a result of a technical analysis, it is important to devise a strategy for involving the various interested parties in the discussion of the findings and recommendations. As a preliminary activity before putting the final report together, FUNSALUD published a series of 12 working papers under the general heading 'Health and the Economy: Documents for Analysis and Convergence'. These working papers were intended to enrich the study by promoting a debate on its main results and conclusions before publication of the report. To this end, a series of 14 Analysis and Convergence Seminars were organized jointly with the School of Medicine of the National Autonomous University of Mexico, the National Institute of Public Health, the Autonomous Institute of Technology of Mexico, and the six regional chapters of FUNSALUD. The suggestions from these seminars and from 36 other presentations to diverse audiences were incorporated into the final report. This process ensured the involvement of many people and gave greater support to the recommendations.

# 3. The form of reform

Given the purpose of this paper, we will not review the findings from the various components of the study<sup>1</sup>. Instead, we will highlight the main conclusions that lend

<sup>&</sup>lt;sup>1</sup>Apart from the detailed report in Spanish, there is an *Overview* in English, which can be obtained from FUNSALUD.

support to the need for a reform of the health system and discuss the broad outline of the ensuing recommendations.

In any given country, there may be several possible paths towards reform. There are five fundamental factors that must be analyzed in order to decide the form that reform will take:

- The problems;
- The principles and the purposes;
- The proposals;
- The protagonists.

Let us briefly examine the main features of each of these elements for the present situation in Mexico.

#### 3.1. The problems

During the half century since it adopted its present organization, the Mexican health system has achieved considerable progress in reducing mortality, expanding coverage, providing financial protection through the social security system, training capable human resources, and conducting scientific research.

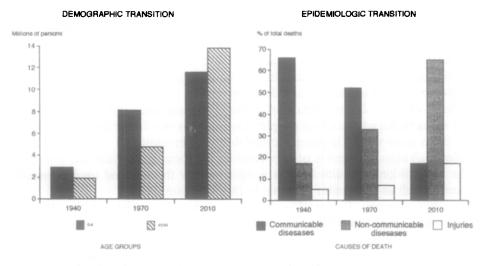
Acknowledging past progress should not hinder recognition of the problems that still remain to be resolved. While it can point to a period of achievements in health, Mexico's health system comes from a model of care that has accumulated important deficiencies. The system, set up 50 years ago, responded to the needs of its time, but many of the institutions created then have been outpaced by economic and social transformation. The nation has outgrown its health suit.

The health system is currently facing strong pressures on several fronts and will be under even greater strain in the near future. A number of changes in Mexico all point to a very sizable increase in the demand for health services during the coming decades. They include the following:

Demographic changes. As illustrated on the left-hand side of Fig. 2, Mexico is experiencing a rapid aging of the population, whereby the older age groups are growing at a faster rate than the younger ones. It is precisely elderly people who tend to develop the more complex and costly health problems. In addition, there has been a massive and sometimes disorderly migration to urban centers. This kind of urbanization leads to higher demand for health care through two mechanisms: first, by increasing exposure to the risks of chronic disease and injury; second, by bringing the population closer to where medical resources are concentrated.

*Epidemiological changes.* The disease profile has become more complex than ever. Indeed, Mexico faces two overlapping health challenges. On the one hand, it must overcome the epidemiological backlog represented by diseases of underdevelopment, such as common infections, malnutrition, and maternal and perinatal deaths. On the other hand, it has to deal with emerging problems related to industrialization and urbanization, such as cardiovascular disease, cancer, mental illness, addictions, and injuries. The right-hand side of Fig. 2 shows the dramatic shift in proportional mortality among communicable and non-communicable dis-

262



Sources: Secretaría de Salud, Compendio histórico de estadísticas vitales. México: SSA, 1993. Fundación Javier Barros Sierra. Escenarios básicos: Proyecciones logísticas hasta el año 2025. México:Fundación Javier Barros Sierra, 1993.

Fig. 2. Health change in Mexico.

eases. Using the more comprehensive indicator of Disability-Adjusted Life Years lost, Fig. 3 illustrates the extent of the double burden of disease and its uneven distribution in the rural and the urban areas.

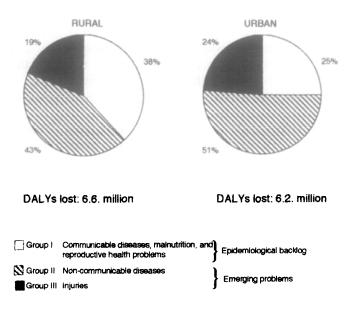


Fig. 3. Distribution of disability-adjusted life years lost, by groups of causes and by residence, Mexico, 1991.

*Educational changes.* A substantial expansion in school attendance has increased people's health knowledge and improved their health habits, making them more qualified to demand services and interact with those who provide them.

*Technological changes.* Recent advances in such fields as biotechnology, information science, and telecommunications can be expected to enhance the ability of health-care services to identify and deal with health problems.

*Cultural changes.* Dissemination of rational explanations and evidence of the power of technology have raised people's expectations of a better quality of life and made them more willing to accept science-based interventions.

*Political changes.* Expansion of opportunities for social participation is evidenced by the recognition of health care as a right, and by the demand for high-quality services as well as for greater freedom in choosing providers.

*Economic changes.* The profound structural transformation of the Mexican economy has laid the foundations for potential income growth, which would further boost demand for medical care.

This last sphere of change in the economy is particularly significant. Health care and the economy are very closely linked. In contrast to other products, health services have a dual character: on the one hand, they constitute an essential component of social development and well-being; on the other, they represent a growing sector of the economy.

Fig. 4 illustrates the relationship between health and the economy. There are two sides to this relationship. Productive investment in equitable, efficient, and high-quality health services has a positive effect on all economic activity, because it raises the quality of human capital, improves productivity and competitivity, creates jobs, encourages scientific research, and stimulates technological innovation. Bcsides, good health is a necessary condition for equality of opportunities. This makes health care an essential element in the fight against poverty. In contrast, unproductive health spending has a negative effect on the economy, because it increases inflation, reduces productivity and competitivity, gives rise to inequalities, and diverts funds from better social uses. It is to everyone's benefit to foster the virtuous rather than the vicious cycle between health and the economy. To do so, it is essential to ensure that the best possible use is made of the funds allocated to health care.

More and more funds are being made available for this purpose. This is indicated by a review of National Health Accounts carried out as part of the FUNSALUD study. The more important findings of the review are summarized in Table 1. Health expenditures in 1992 by the federal public sector and the private sector, respectively, are shown as a total amount, as a per-capita amount, and as a percentage of total GDP. (Amounts are given in US dollars for comparison with other countries.)

Health expenditures, although still insufficient in many respects, have grown considerably during the past few years. Spending by the public sector has returned to the levels it had reached before the economic crisis of the 1980s. In 1992, the federal government spent over US\$9.2 billion, or 2.76% of GDP, on health. Private spending, too, has been rising sharply; estimates for 1992 range from 2.06% to

264

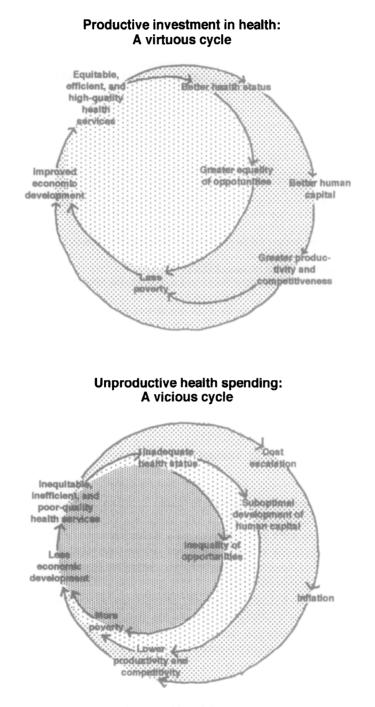


Fig. 4. Health and the economy: two sides of the same coin.

Table 1

National health accounts: public and private expenditures in 1992

Sector	Total expenditures US Dollars <sup>c</sup> (millions)	Per-capita expenditure <sup>a</sup> US Dollars	% of GDP <sup>b</sup> 2.76	
Federal public sector	9211.3	106.2		
Private sector				
Lower estimate <sup>d</sup>	6864.5	79.1	2.06	
Upper estimate <sup>e</sup>	9 900.5	114.1	2.97	
Total				
Lower estimate	16075.8	185.3	4.82	
Upper estimate	19111.8	220.2	5.73	

<sup>a</sup>Based on a population of 86.8 million. Source: Centro de Estudios de Población y Salud, Secretaría de Salud.

<sup>b</sup>GDP for 1992 was 333 244.4 million US dollars. Source: INEGI.

<sup>c</sup>Based on the average exchange rate for 1992 of 3.1005 New Mexican Pesos to the US dollar. Source: Banco de México.

<sup>d</sup>Based on an analysis of the National Household Income and Expenditures Survey, 1992.

<sup>e</sup>Based on the System of National Accounts.

2.97% of GDP, depending on the source of information used. In all, Mexico is devoting between 4.82% and 5.73% of its wealth to health care. These percentages represent very considerable sums of money: some US\$16 billion a year, at least. Though there are substantial variations among different groups, overall per-capita health expenditures are estimated at about US\$185-220. By international standards this level could still increase, yet the amount of funds involved is large and growing.

Thanks to the availability of such funds, Mexico has accumulated a considerable capital of human and physical resources, as shown in Table 2. Some items, such as hospital beds and nursing staff, continue to be relatively scarce and unevenly distributed. Nevertheless, the quantity of resources now being devoted to health care is substantial. For example, with a total workforce of over 663 000 in 1991, medical services occupied ninth place in terms of job creation, out of the 73 branches of activity that make up the economy.

It is clear, then, that the health system has an increasingly prominent place in the national economy. Society as a whole must ensure that these expanding resources are used to achieve the greatest possible benefit for the health of the population. The major problem of the health system is how to make the most of its present and future resources.

Given the profound economic, social, and political changes that the country has undergone, the key question is whether the health system, with its institutional arrangements of half a century ago, is capable of meeting the new challenges. All the evidence points in the same direction: the present patterns of organization and financing hinder health services from contributing as fully as they might to social Table 2

Human and physical resources of the Mexican health system in 1992

Resources	Institutions			Total
	Public institutions for the uninsured	Social security	Private	
Hospitals	410	423	472ª	1 305
Hospital beds	32 319	39 181	17 707ª	89 207
Clinics and health centers	10 309	3 0 3 0	2 233 <sup>b</sup>	15 572
Physicians (according to their primary job <sup>c</sup> )	33 865 <sup>d</sup>	61 990 <sup>e</sup>	47 641	143 496
Nurses	62 160	90 401	24 363	176924

Sources: Sistema Nacional de Salud, Boletín de Información Estadística, No 12, México: SSA, 1992; Secretaría de Salud, Medicina Privada 1992, Recursos Humanos y Materiales, México: SSA, 1993; Instituto Nacional de Salud Pública, Encuesta Nacional de Empleo Médico 1993, resultados preliminares.

<sup>a</sup>Only units with more than 15 beds are included.

<sup>b</sup>Units with less than 15 beds are included; together they have a total of 13353 beds.

<sup>c</sup>The figures for physicians refer to 1993 and are preliminary. In order to avoid double counting due to multiple employment, physicians are distributed according to the institution that they identified as their primary job. In addition to these fully employed physicians, the 1993 National Survey of Medical Employment identified 30 430 inactive, underemployed or unemployed doctors. Hence, the total number of physicians in 1993 was 173 926.

<sup>d</sup>In total, public institutions for the uninsured hired 40570 physicians in 1992.

<sup>e</sup>In total, social security institutions hired 62784 physicians in 1992.

and economic progress. Specifically, there are seven main obstacles to the proper performance of the health system, namely:

*Inequity.* Lack of correspondence between the health needs of different social groups and the allocation of resources to each of them.

Insufficiency. Lack of available resources to solve priority health problems.

*Inefficiency.* Allocation of resources to non-priority health problems and to technologies with high cost and low effectiveness; waste of resources and generation of unnecessary costs.

*Inadequate quality.* Incapacity of services to achieve the expected improvements in the health of the population and of patients, due to flaws in the structure and process of care.

*Dissatisfaction.* Inability to fulfill the needs of the population, which is reflected in an unfavorable opinion about the services and in the utilization of health care outside the institution in which a person is enrolled.

Inflation. Increase in health-care prices relative to other products and to incomes.

Insecurity. Lack of protection and support in sickness, disability or death, leading to emotional harm, financial loss, and disarray.

We will not describe here the indicators that document each of the obstacles for Mexico. (The details can be found in the FUNSALUD report.) Suffice it to mention that, for any given country, one could construct a performance profile based on these seven obstacles. Such profiles would be a powerful tool for comparative analysis. For example, many European health systems have been successful at controlling the problems of inequity, insufficiency, inadequate quality, and insecurity, but face enormous challenges in terms of inefficiency, inflation, and dissatisfaction. At the other extreme, the poorest countries are overwhelmed by the sheer insufficiency of resources. A major problem with middle-income countries like Mexico is that they seem to combine all seven obstacles.

By constructing such a performance profile, one can begin to answer a basic question: Why reform the system? In turn, overcoming the obstacles starts with the principles and the purposes that should guide the reform.

#### 3.2. The principles and the purposes

Renewal of the health system involves more than securing a negative consensus on the shortcomings and deficiencies to be rectified [10]. A positive consensus must be created on specific changes that are likely to lead the system to a higher stage of development.

In building a positive consensus, it should be recognized from the outset that every health system reflects a particular set of social values and that therefore reform is essentially a political process. Every society must begin by asking what values it wishes the health system to promote. Accordingly, the first step is to reach an agreement on the larger principles and purposes that should underpin the reshaping of the system.

The FUNSALUD study opens with a discussion of the basic tenets of reform. It proposes that the reform be underpinned by a set of values embodied by the following four principles and three purposes.

The principles of reform are:

Citizenship. Access to health services is a social right.

*Pluralism.* People are free to choose between several options in a plural system combining the best of the public and the private sectors.

*Solidarity.* Everyone contributes to the system according to his or her capacity, so that each person may receive care when needed.

Universality. The entire population is covered by a universal package of effective and affordable services.

The purposes of reform are:

*Equity.* People facing the same need have the same opportunity of access to priority services, without any kind of discrimination.

Quality. Services produce the greatest possible improvement in health, satisfying users' expectations for competent, timely, continuous, courteous, and respectful care.

*Efficiency.* The system obtains the highest possible return from resources by reducing waste to a minimum and giving priority to investments in services that generate the greatest health gains.

These principles and purposes are ethically sound, scientifically valid, and socially acceptable. They serve as the basis for formulating a vision and a mission for the system. The mission of this system is to improve health, reduce inequalities, control costs, and satisfy both users and providers.

#### 3.3. The proposals

Consensus on a vision and a mission for the system is the map that can guide society on the road towards reform. With the desired model in mind, the specific options can then be examined. How should the health system be reformed to ensure fulfillment of its principles and purposes?

A strategic proposal for reform is one of the key components of the FUN-SALUD study. The proposal does not indicate a single path for reform, but compares several alternatives. This approach may be more conducive to participatory decision making. In fact, the proposal is arranged as a 'decision tree', in which the items are grouped into three categories, each more specific than the preceding one. The general scheme for the proposed reform is portrayed in Fig. 5.

The scheme begins by considering four policy levels: systemic, programmatic, organizational, and instrumental. These levels, which define the domain of every reform effort, have been explained in a previous paper [2]. In essence, the systemic level deals with the structure and the functions of the system, by specifying the institutional arrangements for regulation, financing, and delivery of services; the programmatic level refers to the substantive content of the system, by specifying its priorities, for example through a universal package of health care interventions; the organizational level is concerned with the actual production of services, by focusing on issues of quality assurance and technical efficiency; and the instrumental level generates the institutional intelligence for improving system performance through information, research, technological innovation, and human resource development. Clearly, a comprehensive reform must include all four levels. Yet, a specific reform initiative may begin at any of the levels and proceed to the others as circumstances allow. Reform is not an all-or-nothing event. It is possible and

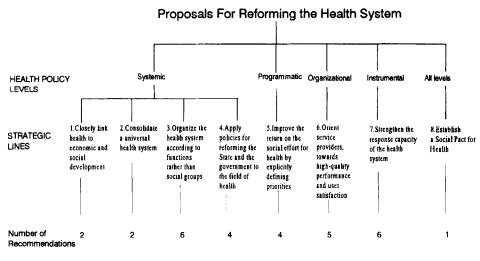




Fig. 5. General scheme of the proposed health reform.

worthwhile to make partial changes, depending on the economic, social, and political conditions of a country.

The concept of the four policy levels is meant to be general and can be applied to any reform initiative. For the specific case of Mexico, the FUNSALUD study derives eight strategic lines from the policy levels. In turn, these strategic lines generate 30 concrete recommendations. In this way, the decision tree moves from the more general to the more specific notions, defining several alternative paths that reform can take.

Space limitations do not allow us to explain each of the reform levels, strategic lines, and recommendations that form the core of the FUNSALUD study. Instead, we would like to distill from them the following seven key messages:

- It is necessary to carry out a reform of the health system, which will effectively link health care to economic and social development.
- Universal coverage must be achieved by the year 2000. To this end, a package of essential health services should be defined and made available to all.
- The health system must overcome its present segmentation. What is required is a pluralistic and solidarity system that combines the best of the public and private sectors. To this end, the health system should be organized by functions rather than by social groups.
- New forms of organization should be fostered that are neither as gigantic as the public institutions nor as atomized as the private sector.
- In order to increase consumer satisfaction and give service providers incentives for good performance, the system should recognize freedom of choice by users.
- A concerted strategy must be established for improving the quality and efficiency of all health-care organizations, including the strengthening of managerial capacity.
- A Social Pact for Health is required, which relies on a consensus-building mechanism to design and implement the reform of the health system.

Let us briefly examine each of these messages. The need for reforming the health system, stated in the first message, has already been explained. Health is both a cause and a consequence of development. Any reform proposal must strengthen this relationship in its two directions. On the one hand, the system must actively promote the improvement of all factors that have an impact on health, such as education, food, housing, environment, employment, public safety, and equality for women. Reciprocally, reform must ensure that investment in health care will contribute to overall development.

The second message gives concrete content to the principle of universality. There is a set of services which are so cost-effective that society accords them high priority and makes them available to the whole population at acceptable standards of quality. The universal package of essential health services is an instrument for improving both equity and efficiency. This type of investment is one of the most effective means to fight against poverty.

The FUNSALUD report presents a concrete approach to determining the package of services by cost-effectiveness analysis. Three packages were calculated,

consisting not only of clinical services for prevention, treatment, and rehabilitation but also of public health and community extension services. Each successive package adds new interventions that reduce growing proportions of the burden of disease at a progressively higher cost. Of course, it is up to decision makers to determine the amount of resources to be invested and, therefore, the specific package to be adopted.

As an illustration, if the intermediate package was made universally available by the year 2000, the national burden of disease (as measured by the number of lost DALYs) would be reduced by approximately 25%, at an additional cost of US\$40 per inhabitant per year. The package can be expanded to include new services as health expenditures grow or as resources are reallocated from costly and ineffective services.

This exercise offers a starting point for the groups involved in health care to reach an agreement on the final package. The explicit definition of priorities through the package will ensure the highest possible return on the social effort devoted to health care. It will also provide a sound basis for proposals on financing. The challenge is to obtain not only more money for health but more health for the money<sup>2</sup>.

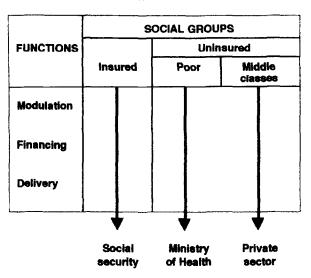
The third message contains the most important recommendation on the structure of the health system. It therefore requires fuller discussion. The basic concept of the proposal is graphically shown in Fig. 6, which presents a matrix indicating the interrelation between the two fundamental dimensions of any health system: the social groups and the functions of the system.

As regards social groups, a fundamental distinction is made in Mexico between the insured and the uninsured. Most of the insured are beneficiaries of the social security system, since private insurance still covers only a very small portion of the population. The uninsured, for their part, are divided into two groups: on the one hand, the urban and rural poor who are not under the social security system because they do not work in the formal sector of the economy; on the other, the mostly urban middle classes who are neither covered by social security nor by any private medical insurance.

Regarding the second dimension of the matrix, every health-care system has three primary functions: delivering direct services, financing health care, and modulating the market. Modulation, as explained in the FUNSALUD report, includes regulation proper, together with a number of other major responsibilities, such as consumer protection.

The chief problem with the Mexican health system is that it segregates the various social groups into separate subsystems. The present structure of health care in Mexico is shown in the top of Fig. 6. It may be described as a system of vertical integration but horizontal segregation. Each institutional segment, the Ministry of Health, the social security institutions, and the private sector, performs the functions of modulation, financing, and delivery of services, but does so only for a specific group.

<sup>&</sup>lt;sup>2</sup>This phrase is borrowed from the distinguished medical researcher, Professor V. Ramalingaswami.



Present situation

```
Proposal
```

	SOCIAL GROUPS				
FUNCTIONS		Uninsured			
	Insured	Poor	Middle classes		
Modulation				┢	Ministry of Health
Financing				≁►	Extended social security + private insurance
Delivery				┢	institutional plurality

Fig. 6. Restructuring the Mexican health system.

This configuration of the health system is the cause of many problems. First, it makes for duplication and waste of resources. Second, it gives each social security institution a monopoly over its respective clientele. People, of course, do not necessarily respect these artificial divisions. In fact, there is a considerable overlap of demand, with a very high proportion of social-security beneficiaries using services provided by the private sector or the Ministry of Health. The problem is that the burden of such a decision is borne by the consumer him or herself, for he or she is forced to pay for the care received elsewhere, despite already having paid an insurance premium. This leads to one of the worst inequities of the system: multiple payments, which impose on many families and businesses a financial burden that is not proportional to the benefits received.

There are at least three options for dealing with the problems of a segregated health system like the Mexican one. The advantages and drawbacks of each are compared in the final section of the FUNSALUD report. The option considered the best is illustrated in the bottom of Fig. 6. It consists of inverting the matrix: instead of the present vertical integration with segregation of social groups, there would be a horizontal integration of functions. In a structure of this kind, the Ministry of Health would concentrate its efforts on modulation. Financing would become the most important function of the social security institutions, with a complementary role for private health insurance. The direct delivery of services would be opened up to pluralism, stimulating competition and the design of more efficient organizations, both in the public and the private sectors. This alternative would strengthen the diversity of institutions already involved in health care. The difference with respect to the present situation is that the division of labor would no longer be by social group but by function.

The corollary to this proposal is contained in the fourth message. To make pluralism a reality in the delivery of health care, new forms of organization are needed that are closer both to the consumers and to the providers themselves. Specifically, the report proposes that 'Health Protection Organizations' be established in urban areas to compete in offering services to groups of individuals and families. In rural areas, 'Solidarity Health Organizations' would be created to introduce innovative schemes for financing and delivering services, with active participation by the community. One such innovation would be to use a franchiselike approach, whereby each Solidarity Health Organization would maintain a high degree of autonomy, but would adopt a common management model linking it to a support network for larger matters such as investment, input procurement, quality control, information systems, staff training, and patient referrals. These initiatives can only flourish in a fully decentralized system.

The new institutional framework for the health system would make it possible to enhance freedom of choice for consumers, as suggested by the fifth message. Freedom of choice would refer mostly to primary providers, since they should represent the entry point into the system. It is the primary provider who must guide patients in referral to higher levels of complexity.

Collective effort for health would be of little avail if the system did not ensure optimum performance by health-care organizations. This is the sense of the sixth message. The report proposes the adoption of a National Strategy for Quality and Efficiency in Health Care. This strategy should institute a culture of continuous assessment and improvement, to ensure that society will obtain the greatest possible benefits from its investment in health care. To attain this ideal, extensive action must be undertaken to train managers in the leadership skills needed by the new health system. Likewise, more dynamic information systems than the existing ones will have to be designed for the proposed reforms. In addition to undertaking these institution-strengthening actions, the health system must invest heavily in the three powerful tools available today to build its future: scientific research, technological innovation, and human resource development.

Lastly, the seventh message stresses the need for establishing a Social Pact for Health. Just as an economic pact was instrumental in resolving the crisis of the late-80s, so a social pact is needed to improve well-being in the 90s. The backwardness still afflicting many regions of the country, on the one hand, and the challenges posed by modernization and globalization, on the other hand, make it essential for society as a whole to take swift concerted action to increase social welfare and justice. The success of macroeconomic adjustment measures is a necessary but not sufficient condition for improving individual and collective well-being. If these adjustment measures are to bear their full fruit, they must be accompanied by explicit action to meet the demands of social development. With economic reform well under way, the time is now ripe in Mexico for a renewed focus on social welfare and justice. Progress in social development will, in turn, bring many economic benefits and greater political stability.

The new Social Pact must give high priority to health reform. The FUNSALUD Report therefore proposes that a mechanism be established to facilitate convergence on the matter among all groups and sectors of society. The mechanism would be specifically charged with designing a comprehensive reform of the health system and preparing a program of gradual transition. The report further suggests that the changes be carried out in three stages, in a progressive fashion that allows the strengths of the system to be preserved while its weaknesses are eliminated.

The proposed mechanism could take one of several forms. It could, for instance, be a commission or task force, with an executive secretariat. To be effective, this mechanism must be created at the highest political level, so as to have sufficient authority in order to involve all the protagonists who have a part to play in the health system.

# 3.4. The protagonists

The Social Pact for Health can only be established by bringing together all the actors involved in the health system: providers of services, financing entities, universities and research centers, private corporations, non-governmental organizations, the government and, of course, the population for whom the system exists in the first place. Only with the active participation of all of these protagonists will it be possible to implement the proposals described above.

In any reform initiative, it is always necessary to ask who will benefit from it. In order to answer this question, the FUNSALUD study included two important analytical exercises. The first one was a consumer survey to ascertain the degree of satisfaction with present arrangements and the expectations about future reforms. A major finding was that four out of five Mexicans over 18 years old would like to see fundamental changes introduced in the health system. The second exercise was a political mapping of some of the main proposals, which had the purpose of establishing the likely distribution of support and opposition among the various actors. In this way, it is possible to proactively anticipate barriers in the adoption and implementation of reform.

# 4. Conclusion

The FUNSALUD study in Mexico illustrates one attempt to develop a comprehensive approach to policy analysis that may assist in the sustainable improvement of the health system. Clearly, reforms are decided on the basis of many other forces apart from analyses. Yet our effort is predicated on the belief that the power of ideas can transform the ideas of power. If evidence is clear and recommendations are rigorous, those who have the power to decide may be stimulated into action. At the very least, sound policy analysis places limits on the discretion of decision makers, who have to consider the costs of ignoring the available data. Without such data, a policy may be incorrect and, adding insult to injury, the decision maker may not even know it. To reform, it is necessary to inform, or else one is likely to deform. In a more illuminated spirit, the decision maker can be inspired by good research and analysis to face the risks of reform when there is evidence of potential health benefits for the population. Designing and implementing a reform is always a complex and uncertain process. The analytical tools that are now available can help to improve the outcomes.

The current wave of international interest in health system reform demands a concerted effort to compare options and evaluate experiences. National initiatives will have a higher likelihood of success if they can all benefit from a global mechanism for shared learning. All over the world, the present historical moment demands health systems that will respond better to growing complexity, that will contribute to reduce poverty, and that will lead the way towards lasting development. In an environment fraught with risks and opportunities, comprehensive policy analysis will increasingly be called upon to illuminate the path of progress.

#### Acknowledgements

The study on 'Health and the Economy' was carried out by a group of researchers that included Enrique Ruelas, Jose-Luis Bobadilla, Rafael Lozano, Beatriz Zurita, Miguel Angel Gonzalez-Block, Carlos Cruz, Fernando Alvarez, Alejandra Gonzalez-Rosetti, Julio Querol, Felicia Knaul, Ricardo Ramirez, Octavio Gomez, Francisco Franco, Armando Arredondo, Patricia Zorrilla, Gustavo Nigenda, and Enrique Villarreal.

The study was a collaborative effort that benefited from the contributions of many organizations and individuals. Prominent among them were the National Institute of Public Health, the Ministry of Health, and the School of Medicine of the National Autonomous University of Mexico. Internationally, valuable collaboration was received from Harvard University, especially through its School of Public Health and its Center for Population and Development Studies, and from the World Bank, through its Department of Health, Population, and Nutrition and its Division of Human Resources at the Technical Department for Latin American and the Caribbean.

The study was made possible by the generous support of 15 Mexican corporations, which are fully acknowledged in the FUNSALUD report. In addition, a grant was awarded by the National Council of Science and Technology (CONACYT). The two meetings of the International Advisory Group had the support of the Pan American Health Organization, Harvard University, the Rockefeller Foundation, and the World Bank. The Consumer Satisfaction Survey was sponsored in part through a grant from the Pew Charitable Trusts to the Mexican Commission for Health Research at the National Academy of Medicine.

The study had the guidance of five collective groups comprising 150 Mexicans and 18 international experts from nine different countries. All of them are individually acknowledged in the report.

Several persons have shared their expertise at different stages of the study. The measurement of the national burden of disease was carried out under the guidance of Christopher Murray, from the Harvard Center for Population and Development Studies. Catherine Michaud and Caroline Cooke greatly contributed to this collaborative relationship. Alan Lopez, from the World Health Organization, helped with the estimation of burden due to risk factors, and Martha Hijar, from the National Institute of Public Health, with the role of accidental and intentional injuries. The calculation of the universal package of essential health services was directed by Jose-Luis Bobadilla, from the Department of Health, Population, and Nutrition at the World Bank. Peter Cowley actively participated in this exercise. We thank the Harvard Center for Risk Analysis for sharing information from their data base on cost-effectiveness analysis. Valuable advice was received from William Hsiao on the design of options for health system reform and from Peter Berman in the estimation of the National Health Accounts. Juan-Luis Londoño and Hector Sanchez enriched the formulation of the stages of reform. Dean Jamison provided important input on the overall design of the study and its recommendations. The Consumer Satisfaction Survey was carried out with the advice of Robert J. Blendon and Karen Donelan and the participation of Bernardo Hernandez, from the Harvard School of Public Health. Jose Gomez de Leon, Virgilio Partida, Sergio Camposortega, and Rosario Cardenas helped with the demographic analysis.

The active involvement of all the aforementioned persons and organizations was essential to the success of the study. Gratitude notwithstanding, the responsibility for the content of this article rests solely with its author.

#### References

- [1] The World Bank, World Development Report 1993: Investing in Health, Oxford University Press for The World Bank, New York, NY, 1993.
- [2] Frenk, J., Dimensions of health system reform, Health Policy, 27 (1994) 19-34.

- [3] Lozano, R., Murray, C.J.L., Frenk, J., Bobadilla, J.L. and Fernandez, S., El peso de la enfermedad en Mexico: Un doble reto. Series Economia y Salud: Documentos para el Analisis y la Convergencia, no. 3, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [4] Bobadilla, J.L., Frenk, J., Cowley, P., Zurita, B., Querol, J., Villarreal, E. and Lozano, R., El paquete universal de servicios esenciales de salud. Series Economia y Salud: Documentos para el Analisis y la Convergencia, no. 11, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [5] Faba, G., Los instrumentos de la reforma: La inteligencia institucional. Series Economia y Salud: Documentos para el Analisis y la Convergencia, no. 10, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [6] Gonzalez-Block, M.A., Zurita, B., Frenk, J., Franco, F., Arredondo, A., Queisser, M. and Ramirez, R., Demanda y oferta de servicios: Obstaculos a la mejoria del sistema de salud en Mexico. Series Economia y Salud: Documentos para el Analisis y la Convergencia, no. 6, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [7] Cruz, C., Alvarcz, F., Frenk, J., Knaul, F., Valdes, C. and Ramirez, R., Las Cuentas Nacionales de Salud y el financiamiento de los servicios. Series Economia y Salud: Documentos para el Analisis y la Convergencia, no. 7, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [8] Blendon, R.J., Donelan, K., Zurita, B., Frenk, J., Ruelas, E. and Gonzalez-Block, M.A., The Mexican Survey of Consumer Satisfaction with Health Care: Interim report, Fundacion Mexicana para la Salud, Mexico City, 1994.
- [9] Reich, M.R., Mapping the Processes of Health Decisions, Harvard School of Public Health, Boston, MA, 1993.
- 10] Starr, P., The Logic of Health Care Reform, Whittle Books, New York, NY, 1994.