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HEALTH FINANCING REFORM
A FRAMEWORK FOR EVALUATION

REVISED WORKING DOCUMENT

National Health Systems and Policies Unit
Division of Strengthening of Health Services
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Introduction

Financing issues have dominated approaches to health reform in many countries. In low-income countries, an objective of policy has often been to rectify an overall shortfall of health sector funding. This has led to numerous measures designed to mobilize supplemental resources, such as community financing, expanded social insurance, and new fee systems for publicly provided health services. In general, these measures have placed additional financial demands on households. The objectives of equity, and, to a lesser extent, efficiency, have received lower priority relative to the aim of increasing revenues. Middle- and higher-income countries have given more attention to changing organizational structures and incentives that influence service providers, rather than just consumers. In these countries, more attention has been paid to the objectives of cost-effectiveness, quality and acceptability, and cost containment.

Although understanding of health financing concepts and issues has expanded in recent years, there is a conspicuous shortage of evaluations of measures that have been implemented in developing countries. To improve the outcomes of health financing policies, countries must have the ability to monitor and evaluate the effects of reform measures and use this information to modify policies periodically as needed. Unfortunately, this ability and related systems are weak in most developing countries. Yet reforms continue to be implemented in the absence of this capacity, and thus the policy making process often lacks an adequate analytical base. Therefore, many countries need to strengthen their policy making process by improving systems and human resource capacities to analyze information to evaluate reforms.

Relatively little is known about the conditions that facilitate progress toward sectoral goals. In addition, there has been no systematic attempt to generate information about the institutional and managerial conditions needed to facilitate positive outcomes of financing policy changes. There is, therefore, a clear need for country-based assessments of the effects of specific financing measures and the conditions supportive of effective implementation. Such research can improve understanding of the effects of financing policies and the role of supporting conditions for national policy makers, international agencies, and consultants advising on health finance policy.

Because of these needs, the National Health Systems and Policies (NHP) unit of the Division of Strengthening of Health Systems (SHS) of the World Health Organization (WHO) is conducting a multi-country activity to support national capacities to evaluate the effects of health financing reforms. This framework has been prepared to provide a common approach to reporting the effects of financing changes. It is not, however, a strict protocol describing a methodological approach. Countries participating in this activity will define the specific reform(s) that they are implementing and that they wish to evaluate. They will also develop specific protocols to evaluate the effects of these reforms, including identification of relevant outcome and process indicators, data needs, data collection systems, and analytical methodology. This will include also mechanisms and systems to feed this information into the national policy making process.[1] WHO and other sources of expertise will provide technical support as needed and requested by the participating

[1] A consultation was held on 6-8 June, 1995, at WHO/Geneva, with the purpose of generating an initial set of country protocols for evaluation based on the framework.

countries. It is expected that the country-based evaluations will be supported over a 12 to 18 month period following implementation of the reform.

Objectives of this Activity

The evaluations of health financing reforms to be supported under this activity are not intended to be part of an academic exercise. The success of this activity depends, in large part, on the extent to which the evaluations are used to improve existing policies. Plans to evaluate policy change in each participating country, therefore, should also describe a process for transmitting findings periodically to the country's health sector decision-makers. It is hoped that the findings will be used to improve the implementation of health finance policies and by so doing, lead ministries of health to incorporate evaluative work into their normal activities. This is important because the activities that can be supported under this work program are time-limited, whereas the process of reform is ongoing, and the effects occur over many years. With this in mind, a critical objective of the evaluation activities to be supported in each country is to strengthen capacity for policy monitoring and assessment. In addition, it is hoped that the findings of the evaluations in each country will contribute to the growing body of literature on health care financing and, by doing so, to improved policy recommendations and outcomes. With these broad goals in mind, this activity has the following objectives:

- To promote greater use of policy analysis in ministries of health by demonstrating to national decision makers that evaluation of reforms can provide practical information useful for improving policies and implementation.

- To improve understanding of the effects of specific health financing changes on the sectoral objectives of efficiency, equity, sustainability, acceptability to clients and providers, and quality.

- To identify specific policy, institutional, managerial, and extra-sectoral conditions necessary for reforms to achieve their intended effects.

- To disseminate the findings of the country studies to a broad audience of policy makers and researchers from governments and international agencies.

Overview and Purpose of the Framework for Evaluation

The proposed framework suggests a common approach to reporting the consequences of health finance reforms that can be applied in a variety of country settings. An outline of the framework is presented in Table 1. It begins with the **context** for the reform, i.e., the existing or pre-existing health system, health situation, and other relevant issues prior to the implementation of the reform. This is followed by a description of the specific nature, or **type**, of the policy change that has been (or is to be) put in place. Following the description of the intended policy change, the **process of implementation** is described. These first three parts of the framework for evaluation are largely descriptive. The fourth part consists of an **assessment** of the effect of the policy change on sectoral objectives and institutions. The assessment will be based on protocols for data collection and analysis developed by the participating countries. This is followed by what is likely to be the most

Table 1. Framework for Evaluation/Outline for Country Reports

1. Context for Reform

1.1 (Pre-)Existing health finance institutions, financial flows and incentives
1.2 Epidemiological and demographic profile and service utilization patterns
1.3 Macroeconomic and other extra-sectoral conditions
1.4 Systems for policy making, policy analysis, and use of information
1.5 Initial assessment and major perceived problems in the health sector

2. Type of Reform

2.1 Description of the specific reform(s) being implemented
2.2 Intended changes in health finance institutions, financial flows and incentives
2.3 Description of other relevant reforms being implemented
2.4 Expectation of how the reform(s) will address identified health sector problems

3. Process of Implementation

3.1 Description of the actual process of implementation of the reform(s)
3.2 New health finance institutions, financial flows and incentives
3.3 New systems for policy making, policy analysis, and use of information

4. Assessment of the Effects of the Reform

4.1 Equity
4.2 Efficiency
4.3 Sustainability
4.4 Acceptability

5. Policy Feedback

5.1 Systems and processes for transmitting evaluative information to policy makers
5.2 Integration of evaluation into the policy making process

6. Synthesis of Conditions with Consequences for the Effects of Reform

6.1 The financing reform(s)
6.2 Other health policies
6.3 Institutional conditions in the health sector
6.4 Managerial capacity in the health sector
6.5 Extra-sectoral factors

important phase of the work to be carried out: **feedback of policy analysis** to decision-makers, preferably based on data generated by the existing or upgraded health information system. At the end of the evaluation process, each element of the health financing change is analyzed with the aim of **synthesizing the conditions** that have the most important impacts on the outcome of the policy change. These refer to concurrent policy reforms, institutional and managerial features, and extra-sectoral factors that either facilitate or hinder the success of the financing change.

The framework provides a common approach to reporting the effects of policy change, but it is not a methodology for evaluation. Because countries will determine the specific reforms that they will evaluate, because data availability and methodological possibilities vary considerably from country to country, and because they may be at different stages of the reform process, it is not realistic to propose that the same analytical method be used in each country evaluation. Therefore, the commonality expected to be achieved in the different country evaluations is with regard to the organization of country reports (i.e., discussion of context, type, implementation, assessment of outcomes, policy feedback, and synthesis of conditions) and the criteria against which the financing changes will be evaluated. The suggested criteria relate directly to the perceived objectives of health policy and are as follows:

a. equity in the utilization and financing of health care;
b. allocational and technical efficiency;
c. financial and institutional sustainability; and
d. acceptability to clients and providers.

Each of these is discussed in greater detail below. It is not expected that it will be possible or desirable for each country to assess specific reforms with respect to every criterion, but it is important to establish the range of criteria against which reforms could be evaluated.

In practice, reform is a process rather than a discreet event, and different countries are likely to be in different stages of the process of health finance reform. Furthermore, changes in health financing policy are likely to be part of an overall package of reforms that may include, for example, decentralization or budget reform. This may cause difficulty in attributing observed changes in output indicators to specific reform measures. In addition, as stated above, data availability varies greatly across countries, and it is unlikely that the evaluative work in a single country will lead to robust conclusions about the effects of specific reforms on each sectoral objective. Because of the great variation in country circumstances, lists of possible output indicators and questions to answer are presented in the framework with the understanding that no single country will be able to address the full range.

Criteria for Country Participation

Since the country-based activities are intended to provide an assessment of the effects of health financing change and feed those results back to policymakers, the principal criterion for participation in this activity is that a country has either recently or will imminently implement changes in its health financing mechanisms on either a national or pilot basis.

In other words, there must exist the potential for a concurrent evaluation of the policy change. The health financing reforms to be considered for inclusion in this activity are user charges, health insurance, or a combination of the two. However, these may be interpreted broadly to include reforms within these mechanisms or reforms that have the express purpose of changing the way service providers are paid or shifting the relative share of health financing derived from general taxation, social insurance contributions, private insurance premiums, or out-of-pocket payments by users. Thus, for example, reforms that could be analyzed as part of this activity include:

User Fees

- changes in the level or structure of prices charged in government health facilities;
- changes in policy or implementation with regard to exemption from charges;
- changes in policy with regard to fee retention or the management of fee revenues;

Health Insurance

- expansion of coverage under social insurance or publicly mandated and subsidized insurance;
- changes in provider payment mechanisms and/or the role of the fund holding institution(s);
- changes in the package of services covered by insurance; or
- changes in beneficiary cost sharing.

Part 1. Context for Health Financing Reform

This section of each country report should identify the key issues, both inside and outside of the health sector, that led to the decision to implement reform. This will include an assessment of who (institutionally) are the key actors and/or interest groups motivating reform, and, conversely, which groups are resistant to reform. The context should also provide an initial assessment of the equity and efficiency of health sector financing and delivery, plus a description of the major perceived problems and issues facing the sector.

To evaluate the effects of reform, it is necessary to define a baseline situation to which a post-reform situation will be compared. An understanding of context is needed to allow for a reasonable understanding of the changes in process and outcomes that occur as a consequence of the financing change. The description of context should inform judgment as to the changes that are attributable to the policy change and those that reflect pre-existing underlying trends.

1.1 Existing health finance institutions, financial flows and incentives

The institutions and organization of the health sector prior to the implementation of reform should be described because these factors condition responses to specific reform measures. The description should include both the physical and managerial structure of the services, with emphasis given to the key institutional actors with control over resource-related decisions. This need not be a long description but should focus on those institutional and organizational issues of relevance to the reforms being implemented. It should also allow for an initial assessment of health sector performance (i.e., equity, efficiency, acceptability, sustainability).

Sources of finance. How are health services financed? What is the role of government (including various levels and entities in addition to the ministry of health), private citizens, employers, donors, and any other groups in paying for health services? What are the relative amounts contributed by each? To what extent are payments from each source made via taxation, social insurance contributions, private insurance premiums, and out-of-pocket payments? To what extent does government provide indirect financing of particular sources through the tax system (tax credits or deductions for private health insurance premiums paid by employers, for example)?

Have these patterns of financing been changing in recent years (i.e., what are the trends)? An understanding of trends is useful for putting observed changes in context. It might be useful to present global information on trends in such indicators as the share of public and total health expenditure in GDP, per capita health spending (public and private), and the share of health in total government expenditures. This may also contribute to an understanding of the sustainability of sectoral financing.

Try to determine the extent to which each of these sources of finance is progressive or regressive relative to individual or household ability to pay. This should involve an examination of the ways in which revenues from each source are generated and from whom. In most developing countries, unfortunately, the availability of reliable survey data

needed to estimate, for example, the incidence of taxation falling on different income groups is limited. Nevertheless, a descriptive analysis of sources of government funds can enable investigators to make a reasonable "guesstimate" as to whether public financing is progressive. Where household survey data exist, comparisons of out-of-pocket spending with household income levels can be made to assess equity in private finance.[2]

Management of finance. With the exception of direct out-of-pocket payment by individuals to providers, funding for health services is managed by an intermediate entity between the original source of funds and the service provider. In publicly managed systems, this manager of finance, or fund holder, is usually the ministry of health. Other examples of fund holding institutions are social insurance funds, private insurers, entities that combine management of finance with service delivery (such as health maintenance organizations), or any other institution responsible for purchasing health care services.

Within the public delivery system, at what level of the health system are decisions on resource allocation and use made? For what types of decisions? In other words, how decentralized is health sector decision making, and what is the specific nature of this decentralization. What are the roles and functions of (either public or private) fund holding institutions in the sector? Are they purely financial intermediaries, or are they actively involved in setting/enforcing rules for service use (e.g., referral requirements) and monitoring provider performance? In the public sector, are there health fund holders in addition to a central ministry of health? Are these local government entities or government health insurance bodies (e.g., social security health insurance funds)? In the private sector, are the fund holders (insurers) for-profit or not-for-profit? Is there a single fund holder or are there many? If there are multiple fund holders, do they compete with each other, or are their members (the sources of the contributions they receive) defined by law (e.g., by location of residence or employment category)? Where fund holders compete for beneficiaries, it will be important to describe the nature of this competition. In particular, the manner in which government regulates this competition, if it does so at all, is of vital importance for understanding incentive structures.

Service providers (recipients of finance). Fundamentally, health care financing is concerned with paying providers. Understanding the composition and distribution of service providers is thus central to understanding the implications of alternative methods of financing. For example, are services delivered mainly from public or private sources? How effective is government at regulating, or at least monitoring, private providers? To what extent is the sector characterized by competition or monopoly in delivery? Very often, but not always, the distribution of providers leads to competition in urban areas and monopoly (or the absence of providers) in rural areas. This is a separate issue from the question of the "public/private mix" because publicly-organized systems can have competitive processes at work (e.g., as with the reforms to the National Health Service of the U.K.), and privately-oriented systems can have monopolistic systems of delivery (e.g., a private mission hospital in a rural area with no other providers of similar services).

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[2] For examples of assessments of the progressivity of health care financing, see Baker, Judy L. and Jacques van der Gaag. 1993. "Equity in Health Care and Health Care Financing: Evidence from Five Developing Countries." In Eddy Van Doorslaer, Adam Wagstaff, and Frans Rutten, Eds. *Equity in the Finance and Delivery of Health Care: An International Perspective*. Oxford University Press.

Health finance flows and provider payment. The description of the institutional sources, management, and recipients of health sector finance allows for a depiction of the flow of funds in the sector, such as the example shown in Figure 1.[3] The figure presents the flow of funds under a health system where public health services, training, and research are fully funded by government and provided by the ministry of health. Personal health services provided in public facilities are also fully funded by government through the ministry of health. Private providers are paid directly by individuals and by employers on behalf of their employees. There is no insurance fund holder in this example. The figure does not, of course, give the only possibility for the organization of financial flows, but it provides a model for describing financing mechanisms and institutional arrangements in specific countries. As is shown in Parts 2 and 3 below, it can also provide a point of comparison of financial flows before and after reforms are implemented.

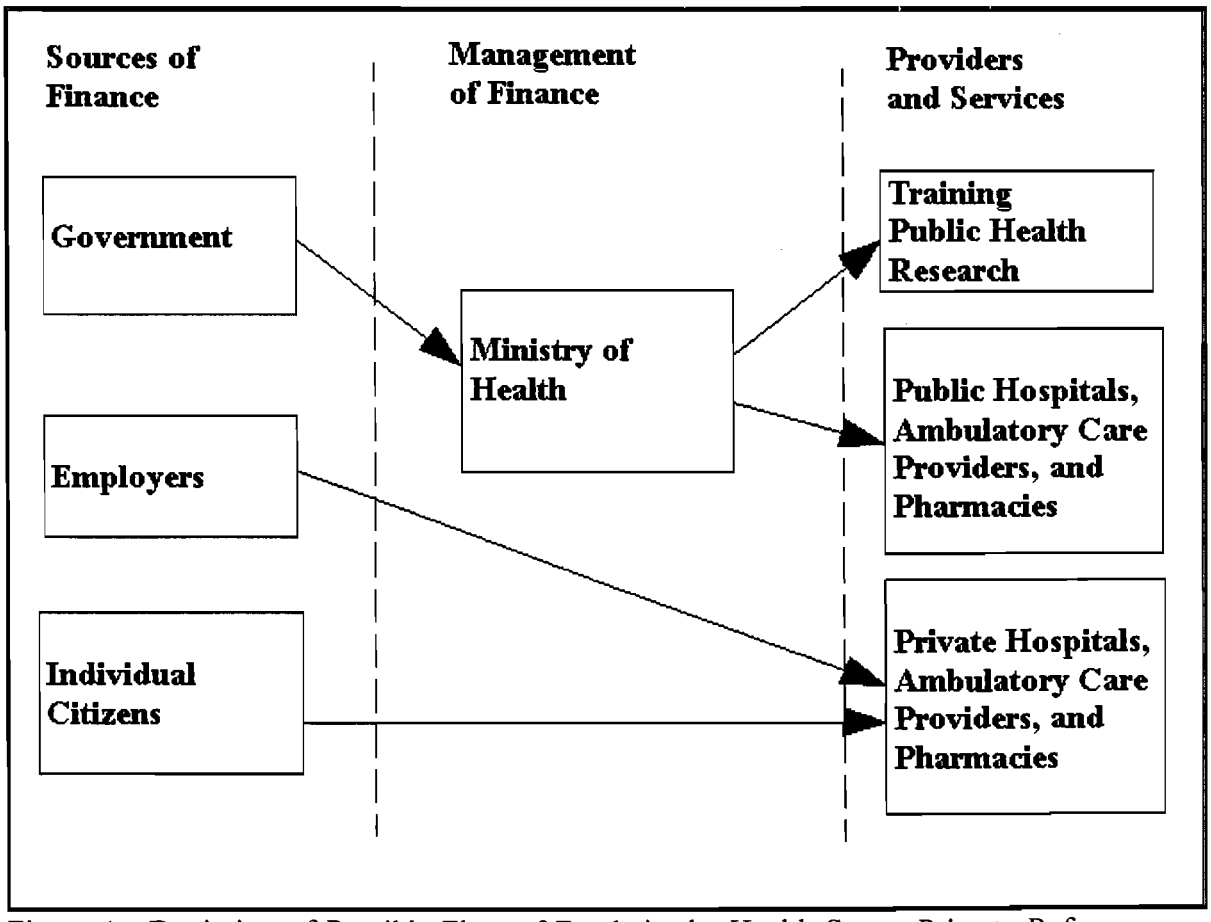

Figure 1: Depiction of Possible Flow of Funds in the Health Sector Prior to Reform

Make an assessment of the efficiency with which government and, where possible, private resources are allocated. Useful data would include levels and trends in expenditures by type of facility or program (e.g., tertiary hospitals, secondary hospitals, health centers,

[3] This figure (and Figure 2 below) and the associated discussion are derived from a lecture on health financing reform given by Howard Barnum at the Second Workshop on Health in the Newly Independent States (NIS) at the World Bank on 15 December 1993.

vertical programs, central administration, etc.) and by type of expenditure (e.g., personnel, pharmaceuticals, other consumables, etc.). Have costs been rising rapidly? Do resource allocation patterns give sufficient support to cost-effective public health and clinical interventions? Does there appear to be an excess supply and use of high-cost medical technologies?

Incentives. The discussion of finance policy and institutional issues should lead to an assessment of the incentives in the health sector prior to the implementation of reform. The incentives to three categories of actors in the sector--providers, consumers, and (where they exist) fund holders--should be described. A number of questions could be addressed to get an understanding of these incentives and their effects.

How do the existing organizational arrangements and provider payment methods affect provider behavior with respect to the quantity of cases, intensity of services provided per case, choice of diagnostic and therapeutic technologies, avoidance of patients likely to require extensive care, and quality? What are the incentives generated to consumers by these arrangements and cost sharing obligations for access to care and the type of service and facility selected? What are the incentives for fund holders to be prudent purchasers of services for their beneficiary population, including their incentives to monitor closely the behavior of both providers and consumers? Do fund holders have any incentive (and capability) to avoid covering persons who are likely to consume a large amount of health care resources (i.e., incentives and ability for risk selection)? To what extent is each of these actors at financial risk for health service costs?

1.2 Epidemiological and demographic profile and service utilization patterns

The epidemiological and demographic stage of a country may go a long way toward explaining the motivation and specific nature of reform. Information on levels and trends in dependency ratios and disease profiles could help put reforms in context. In particular, trends in diseases with potentially important financial implications for the health sector, such as HIV/AIDS, should be identified where relevant. In addition, the demographic features of a country may facilitate or hinder the success of specific financing reforms. Thus, for example, it may be important to provide information on variations in population density within a country, especially when considering financing alternatives in sparsely populated areas.

Try to determine the use of health services by different population groups (e.g., income, age, gender, urban/rural) relative to their need for such care. Ideally, this assessment would be based on survey data on illness prevalence and service utilization for different population groups. Survey data comparing self-reported illness and service utilization and/or treatment costs for different population groups would also be useful.[4] In the absence of survey data, information on the distribution of health professionals, services,

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[4] Wagstaff, Adam and Eddy Van Doorslaer. 1993. "Equity in the Delivery of Health Care: Methods and Findings." In Eddy Van Doorslaer, Adam Wagstaff, and Frans Rutten, Eds. *Equity in the Finance and Delivery of Health Care: An International Perspective*. Oxford University Press.

and expenditures (by region and facility type compared to the distribution of the population, for example) could give an indication of equity in service availability.

1.3 Macroeconomic and other extra-sectoral conditions

Conditions outside the health sector can have important implications not only as a motivation for reform but also as part of the enabling environment for reform. Evaluations should identify those conditions in the macro environment that have such implications and indicate the extent to which these conditions can be affected by policy (health or otherwise).

Macroeconomic conditions. This includes, where data permit, information on employment and the labor market that might be relevant to the ability of people to pay user charges or to participate in formal insurance systems. This could include information on the extent of the population working in the formal sector, the extent of unemployment, labor migration patterns, the seasonality of cash incomes, gender patterns in employment, and levels of absolute and relative poverty and income inequality. Broad economic conditions with implications for health sector financing also include inflation (both general and within the health sector), exchange rate changes, trade and budget deficits and the debt burden, and structural adjustment policies, if any.

Other extra-sectoral conditions. Specific institutions must be available for certain financing measures to function effectively. For example, rural facilities that charge fees need a means to store collected revenues safely and to ensure that the potential benefits arising from use of these revenues are not lost due to inflation. Thus, there is a need for a rural banking and investment structure, and the availability of such institutions should be described in evaluations of financial reforms in rural areas. Other factors that may be critical to the success of reforms, especially in rural areas, are the quality and cost of transportation and communications systems. Assessment should also be made of the general capacity of the population to understand the changes being implemented. Thus, a measure of the education level of the population, such as literacy rates, can help establish the context for what is feasible. Another important contextual factor is a country's political system and the level of development of its political institutions. Local level organizational development may be a critical input into reforms aimed at expanding community management of user fee revenue, for example. Moreover, the extent to which a government can introduce reform without fear of political consequences can strongly influence the type of reform or the speed of its implementation.

1.4 Systems for policy making, policy analysis, and use of information

The objective of this activity is to improve policy decisions by injecting analytical information into the policy process. Therefore, it is important to have a clear understanding of how policy is made and the basis for policy decisions. Is information on utilization, expenditures, and coverage routinely generated for both public and private health services? What institutions are involved in generating this information? How accurate is the information believed to be? How is this information organized and presented to decision makers in the ministry of health? To what extent does such information serve as a basis for health financing policy? To what extent is this

information used for routine monitoring and for management decisions at various levels of the health services?

1.5 Initial assessment and major perceived problems in the health sector

Based on all of this contextual information, the evaluation should include an initial assessment of equity, efficiency, acceptability, and sustainability in the health sector. Based on this assessment and pronouncements made by national decision makers, the evaluation should identify the major problems facing the health sector and the principal motivations for implementing health financing reform.

Part 2. Type of Health Financing Reform

2.1 Description of the specific reform(s) being implemented

The evaluation must include a detailed description of the policy change that has been or is about to be implemented. Two broad categories of reforms will be considered in this activity: user charges and health insurance. Does the reform involve user charges, health insurance, or both? If user charges, what has changed? Is it just a change in price levels, or are there other elements of the change, such as exemption criteria, retention and use/management of fee revenues, procedures for changing prices, the types of services or facilities to which fees apply, etc.? Similarly, if insurance, what has changed? Do the changes involve the role of the insuring institution(s), mechanisms for provider payment, services covered by insurance, the extent of the population covered by insurance, cost sharing requirements, fund holding arrangements, merging of different public insurance schemes, etc.? Does the reform involve the changing the mix of public and private financing and delivery of care?

2.2 Intended changes in health finance institutions, financial flows and incentives

Next, the planned reforms to the institutional structure of the health sector should be described. This includes planned changes in existing institutions and any new institutions to be created as part of the reform that relate to the sources of finance, management of finance, and provider institutions. Based on this, a depiction of the intended financial flows in a reformed health system can be presented, such as the example shown in Figure 2. In comparison to the baseline financial flows shown in Figure 1, the new flows shown in Figure 2 will arise from a reform to establish a social insurance fund. The ministry of health will continue to finance public health, training, and research, but it will no longer pay for personal health services directly. Personal health services will continue to be provided by a mix of public and private providers, but these will be paid primarily by the new social insurance fund. The fund will be financed by contributions from employers and employees (the arrow from "individual citizens" to the fund), as well as receiving a subsidy from central government. Individuals will face copayments when seeking care from private providers, and they may continue to purchase services directly from the private sector.

The description of the planned reforms in institutions and financial flows should allow for an assessment of the incentives to be created by the new arrangements. The same questions raised in the corresponding part of the **Context** section should be addressed here. For example, how will provider payment methods change, and what are the expected consequences of this change? How will the incentives facing providers, consumers, and fund holders described in the **Context** section change?

2.3 Description of other relevant reforms being implemented

The financing change may be implemented by itself, or it may be part of a package of reforms being introduced simultaneously. If the latter holds true, it will be important to understand the potential effects of the other reforms. These concurrent reforms could have

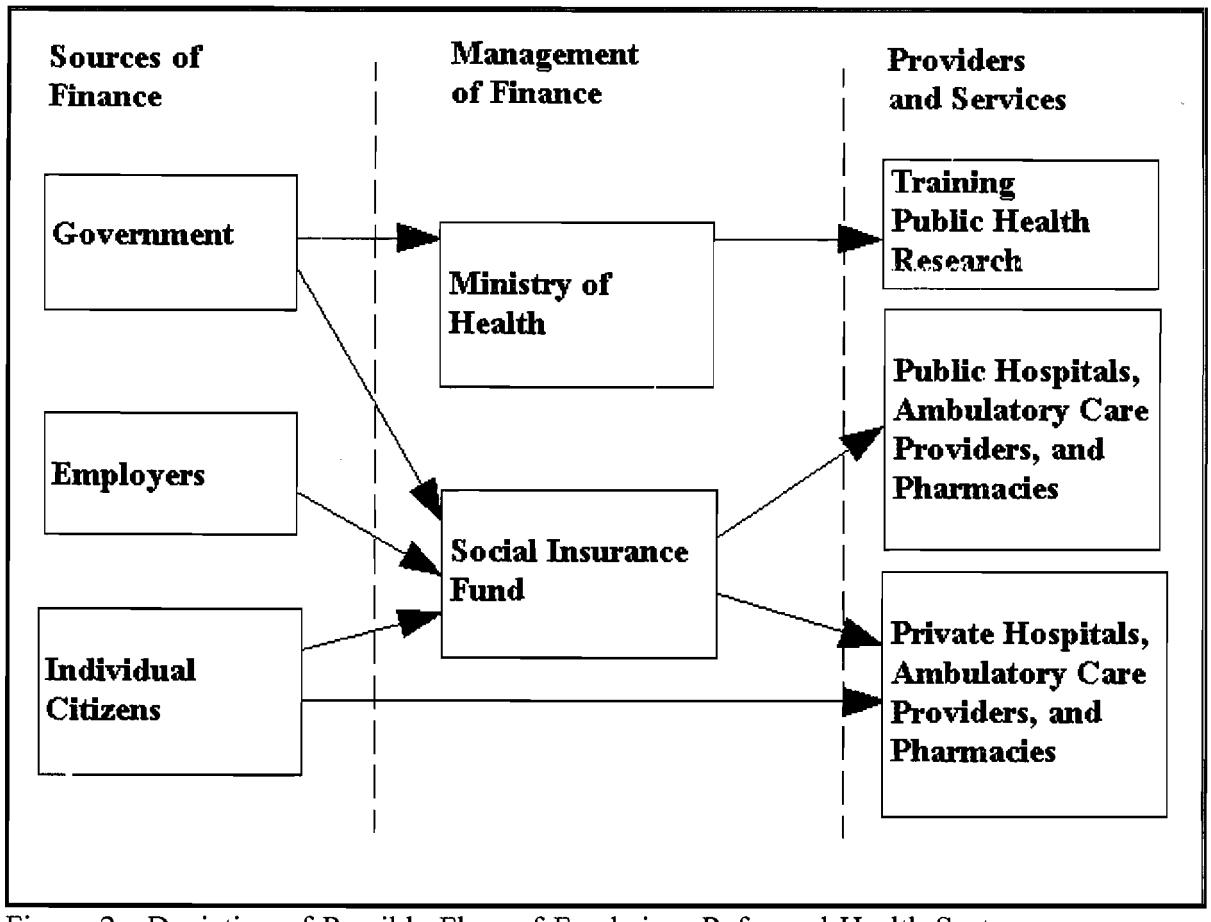

Figure 2: Depiction of Possible Flow of Funds in a Reformed Health Sector

important consequences for the success of the health financing reform being assessed. In addition, the degree to which changes in outcome and process indicators are attributable to the financing reform vis-a-vis other reforms may be difficult to determine without a good understanding of the likely effects of these other measures. Therefore, concurrent reforms that are likely to have important implications for incentives and health sector performance should be described.

2.4 Expectation of how the reform(s) will address identified health sector problems

The **Context** section concluded with an identification of the major problems and issues facing the health sector and the motivations for health financing reform. Here, the objectives of the reform should be described. What are the explicit, and to the extent that it is possible to determine, implicit objectives of the change? Objectives might be defined in general terms, such as increasing revenues, improving quality and efficiency, or improving equity. Alternatively, they may be specified in quantified terms, such as expanding insurance coverage to 20 percent of the population or increasing cost recovery in public facilities to 15 percent. Based on the information presented in both the **Context** section and the **Type** section to date, describe how the reform will address the problems that have been identified in the health sector.

Part 3. Process of Implementation

3.1 Description of the actual process of implementation of the reform(s)

The previous section dealt with the intended form of policy change. This section should describe the process of how the financing reform is actually implemented. Therefore, it must be prepared after the reform has been implemented and address whether the changes described in Part 2 have been implemented as intended. Because it takes time to fully implement reforms, and because reforms are subject to modifications, this description of the reform process should be revised periodically as needed.

This analysis of the process of reform implementation should indicate the extent to which the objectives of the reformers have been realized. This should include a discussion of the roles played by different stakeholders (e.g., professional groups, private insurers, civil servants, politicians, consumer groups) in the sector and in the reform process.

3.2 New health finance institutions, financial flows and incentives

The same issues raised in Part 2.2 of the framework should be addressed here. Have the intended institutional reforms in the sources and management of health finance and in the provision of services actually occurred? Are the new financial flows as depicted in Figure 2, or has something different evolved (if so, a new figure may be useful for descriptive purposes)? Are incentives to providers, consumers, and fund holders functioning as expected? It is often the case that health policy reform leads to changes and consequences that were not intended by the reformers. What unexpected changes or unanticipated consequences of the reform process have occurred, if any? What problems are these likely to cause?

3.3 New systems for policy making, policy analysis, and use of information

Have these systems changed from those described in Part 1.4? What is new in the policy making process? Has government's capacity to analyze policies been strengthened? How? Have incentives to use information changed? Have systematic measures been implemented to feed health information to policy makers and managers at different levels of the system? What kinds of health information (e.g., utilization, expenditure, or cost recovery data) have proven to be most useful for influencing policy and managerial decisions? What have been the initial costs of setting up these new systems, and what will be needed to sustain them over time?

Part 4. Assessment of the Effects of the Health Financing Reform

Reforms in health financing are a means to achieve sectoral objectives. These objectives were described above in the **Introduction** section, and it was suggested that they can be operationalized as criteria by which financing reforms could be assessed. The remainder of this section suggests possible indicators for each of these criteria. This is not meant to be an exhaustive listing, and evaluators are encouraged to develop additional or substitute indicators based on the availability and limitations of data.

While focusing on the specific objectives of health policy discussed below, the evaluations should address a number of broad questions. What changes have occurred with regard to health sector performance since the implementation of the reform? To what extent are changes in health sector performance attributable to the reform? To what extent has the reform achieved its objectives and addressed the perceived problems of the health sector? What are the incremental administrative costs of implementing the reform and monitoring its effects? What new problems have arisen that may be attributable to the reform?

Evaluation of the effects of reform requires identification of performance indicators, systems for data collection, and a methodology to attribute changes in indicators to changes in policy. To improve confidence in the attribution of changes to specific policy measures, methodological approaches should be employed, where feasible, that take advantage of "natural experiments" or are otherwise able to use control groups where no policy change has occurred.[5]

4.1 Equity

Equity in finance. This aspect of equity reflects a comparison between an individual's or household's level of income (ability to pay) and its actual direct and indirect payments for health services. Indirect payments include taxes paid to government, some of which are used to fund health services. As suggested in the discussion of the sources of finance in Part 1.1, an attempt should be made to determine the progressivity of different funding sources and whether finance has become more or less progressive as a consequence of the reform. In general, has the distribution of contributions to sources of finance by income levels changed? How much, and in what direction? For tax-funded services, an assessment should be made of any changes that may have occurred in the progressivity of taxation, preferably with the assistance of the ministry of finance or a national taxation authority. This would help to answer the question of who is paying for government health services. Other methods might be employed to try and answer the question, "who is paying what for health care?" To examine part of the equity impact of exemption

[5] A good example of this is an evaluation of the introduction of user charges with revenue retention in the health centers of one province of Cameroon. The change was implemented gradually, which enabled the researchers to compare utilization in three health centers before and after the policy was introduced with utilization during the same time periods in two other health centers in which the policy had not yet been phased in. Such an approach controls for the effects of underlying factors affecting utilization in all centers so that the different experiences in the "experimental" and "control" health centers can be more clearly attributed to the policy change. See Litvack, Jennie I. and Claude Bodart. 1993. "User Fees Plus Quality Equals Improved Access to Health Care: Results of a Field Experiment in Cameroon." *Social Science and Medicine* 37(3):369-383.

mechanisms, for example, a facility-based survey might help to determine if, and the extent to which, the income and asset levels of paying patients are greater than for non-paying patients.

Equity in utilization relative to need. Assessment of this aspect of equity seeks to determine the extent to which utilization of health services reflects the need for those services rather than the income level of patients. For government-funded services, the evaluation should seek to determine the impact of the reform on the capture of government health subsidies by different population subgroups. A comparison should be made with the information reported in Part 1.2 to see if there have been changes with respect to equity in utilization since the implementation of the health financing reform. Service utilization data can make an important contribution here. How has the distribution of morbidity (disease burden) by population subgroup, such as income class, gender, age, employment status, insurance status, urban/rural residence, etc., changed since the reform was implemented? To what extent does the distribution of service use reflect the disease burden of these different subgroups? This will require population-based data on disease incidence and prevalence by subgroup in addition to service utilization figures. Other potentially useful indicators of geographic equity in service availability and use are measures of the distribution of health sector personnel, facilities, budget, and utilization per capita for different regions of the country. Patient origin surveys can be another source of data on equity within a geographic area by providing information on the percentage of visits/admissions to persons living within a given radius of a health facility.

4.2 Efficiency

Allocational efficiency. This aspect of efficiency concerns the extent to which health sector resources are distributed to their most cost-effective uses. Health systems are often characterized by inefficient patterns of resource allocation, and the evaluation should assess whether the reform has either improved or worsened these patterns. The description of the allocative efficiency of the sector prior to reform (as per the discussion of health finance flows, provider payment, and incentives in Part 1.1) should serve as a point of comparison for the period after reform. Several issues indicative of allocative efficiency could be addressed here. For example, has the share of tertiary hospitals in total health expenditure increased or decreased? What has happened to the shares of government spending on preventive vs. curative services, or, if possible, to the shares of spending on services of high vs. low cost-effectiveness. Have there been changes in the rates of use of specific medical technologies? One indicator of allocational inefficiency is a poorly functioning referral system wherein patients crowd hospitals for services that could be provided in a less expensive setting. To get a sense of whether this pattern has changed over time, a comparison could be made of the case mix of patients in health centers and hospital outpatient departments. Similarly, changes in facility bypass and referral rates should also be tracked, not only for purposes of broad policy evaluation, but also because this information can be potentially useful for resource allocation decisions facing district or regional health sector managers.

Technical efficiency. As with allocative efficiency, there should be an attempt to assess the impact of changes in financing institutions and provider payment incentives on technical efficiency. This aspect of efficiency concerns the management and use of

resources that have been allocated within the health sector. Technical inefficiency exists when the costs of providing a unit of a given quality of service are higher than necessary. While an absolute level of technical efficiency can not be easily defined, assessments of relative efficiency can be made by comparing different facilities or the same facility at different periods in time. Thus, one way to examine changes in technical efficiency is to compare the unit costs of service provision. For such comparisons to be valid, however, they must account for any possible differences in quality or the mix of patients treated. For inpatient care, hospital service statistics (bed turnover rate, bed occupancy rate, and average length of stay), within and across various types of hospitals and specialties, are useful indicators of the relative technical efficiency of patient management. As with unit cost comparisons, the validity of conclusions drawn from this analysis depends on the extent to which variation in quality and case mix has been incorporated.

4.3 Sustainability

Financial sustainability. This refers to the capacity of the reformed health system to provide a sufficient level of finance to enable it to function effectively over time without needing a substantial injection of external support. This implies that the mix of funding sources provide stability in finance over time and that there are adequate mechanisms in place to contain the growth of costs within the availability of finance. Possible indicators for evaluating the impact of the reform on financial sustainability include: changes in cost-recovery ratios in government health facilities, changes in the mix of funding sources for health services and patterns of expenditure of revenues from these funding sources, comparison of a health/medical price index with the general consumer price index, the share of total health spending in GDP and of government health spending in total government expenditure, and per capita utilization rates for specific services, such as high-technology diagnostic and therapeutic services and drugs.

Institutional sustainability. This aspect of sustainability relates to the capacity of health system management to develop and implement measures to support effective reform and is thus related to the managerial capacity of the ministry of health. An important aspect of the institutional sustainability of a reform is the cost of administering it effectively. Thus, for example, a relevant indicator would be the financial costs or staff-hours used to administer a fee or insurance reform at both the facility and ministry levels. Similarly, the costs of monitoring and evaluation of the reform should be assessed as well. If the capacity to implement a reform effectively does not exist, then cost is not the relevant factor, at least in the short run. Thus, the evaluation should assess not only the administrative costs of implementing and managing a reform but also the skills and systems needed for the reform to be effective.

4.4 Acceptability

Quality. The acceptability of health services to both clients and providers of care is closely related to the quality of services available. Evaluation should seek to determine whether the reform has led to improvements in indicators of quality. Possible indicators include the availability of drugs (measured, perhaps, by the frequency of stockouts), assessments of prescribing practices or other evaluations of service protocols, and changes in staffing patterns.

Consumer satisfaction and choice. Improving service quality is an important factor in improving client satisfaction with the health services, but there may be other aspects of satisfaction that quality indicators may not reveal. One factor that is likely to contribute to satisfaction is expanded opportunities for choice by consumers. Thus, reforms that generate expanded choice are likely to be more acceptable. Consumer satisfaction can be assessed directly by surveys or focus group studies of user perceptions. More objective indirect measures of satisfaction include rates of facility bypass, rates of participation in voluntary insurance schemes, and, in fund holding schemes, rates at which patients change their principal purchaser, general practitioner, or health center.

Acceptability of reforms to providers. This can be critical to the political viability of reform. Evaluators should review the role of professional provider organizations in the reform process and whether this role has changed over time. In addition, providers at different levels of the health system can be surveyed periodically to determine their levels of satisfaction with the reforms.

Part 5. Policy Feedback

The principal objective of the evaluations is to improve national policies. Therefore, this component of the evaluation process is the most important, and the success of this activity hinges on whether periodic evaluation is integrated into the policy making process. If policy makers perceive that their decisions are improved through the information generated by evaluation and that it can provide answers of importance to them, the process of evaluation is more likely to be incorporated into the routine operations of ministries of health rather than being tied to specific external projects or studies. This incorporation is important because the full effects of any financing change are unlikely to be observed during the planned period of WHO support. Thus, the evaluation process needs to be institutionalized within each country so that findings can be used to periodically fine-tune policy implementation. In addition, because reform is a process rather than a discreet event, continuous evaluation will be needed as financing policies evolve.

5.1 Systems and processes for transmitting evaluative information to policy makers

The evaluations should report on the methods that have been used to inform policy makers of relevant findings. Were special meetings or workshops arranged, or were pre-existing ministry meetings used for this new purpose? This section of the evaluation should update the information presented in earlier parts of the framework (1.4 and 3.3) that described information systems, the policy process, and the use of information for policy purposes.

5.2 Integration of evaluation into the policy making process

The importance of fully integrating and institutionalizing evaluation into the policy process was discussed above. An assessment should be made regarding the extent to which the evaluation has been integrated to date, and the likely prospects for this integration to continue. The way in which the evaluations were used as well as the process by which this use occurred should also be described. Was analytical information provided by the evaluation used to change policies? If so, how? Do policy makers perceive evaluation to be useful, and are they willing to commit human and financial resources to continue and strengthen this process?

Part 6. Synthesis of Conditions with Consequences for the Effects of Reform

It is hoped that each evaluation will suggest reforms that will lead to improved outcomes. However, many of the conclusions reached will involve considerable judgment because financing changes do not occur in a vacuum, and thus it may be difficult to clearly attribute changes in outcomes to changes in health financing policy. Indeed, organizational reforms that occur as part of a financial reform (or vice versa) should be considered as elements of the financing change being studied. There may also be other factors, such as overall trends in government budget allocations, epidemiological shifts, or macroeconomic changes, that influence health sector performance. Because of the difficulty of controlling for each of these factors in a systematic manner, investigators will need to rely on their judgment to attribute changes in outcomes to changes in policy and implementation.

Based on an analysis of the process and outcomes of the change in health financing policy, investigators should attempt to identify the conditions associated with the success or failure of the reform relative to the achievement of sectoral objectives. These conditions include the characteristics of the specific reform, other health policies or reforms, institutional features of the health sector, managerial capacity within the health sector, and factors outside of the health sector.

6.1 The financing reform(s)

First is the nature of the specific policy itself. For example, experience to date has shown that for user charges to lead to improved quality and thus to the potential for improvements in efficiency and access to better quality services, some or all of the revenues collected must be retained and used by the collecting facility to improve quality. Experience with health insurance indicates that unregulated fee-for-service reimbursement of providers leads to rapid escalation of health sector costs and excessive use of profitably priced technologies. However, less is known about the effects of other features of policy in different contexts, and each evaluation should identify the critical aspects of the reform that affected health system performance.

Empirical issues related to the specific reform should also be addressed here. For example, it is known that it is possible for an increase in fees to improve access to care of acceptable quality if the revenues are retained to improve quality in local facilities, enabling those who previously did not seek care because of high transport costs to do so. However, the objective circumstances under which such a policy will succeed are not known. At what point does the level of user charges create the same barriers to access previously generated by the time and transport costs to the more distant facility where the same level of quality care was available? Empirical questions such as these need to be addressed, even in a qualitative manner, because the same policy measure is unlikely to yield the same results in different country settings.

6.2 Other health policies

It is common for reforms to user charges or health insurance to be implemented in conjunction with other sectoral changes. Important examples of these other reforms

Timing of Country Activities

Each evaluation plan should include a schedule indicating when activities will be implemented and various parts of the country reports completed. The example provided in Table 2 suggests that certain activities can begin immediately, that is, once the reform to be implemented has been identified and the decision to evaluate it has been taken. Three main activities can begin at this time: preparation of the report section on the **Context** for reform, preparation of the report section on the **Type** of reform, and preparation of the protocol for evaluation of the reform. The protocol should indicate the process and outcome indicators to be monitored, so collection of baseline data should begin when the protocol is complete. The **Context** and **Type** sections of the report do not depend on this data collection, and so they can be completed within the first few months after the decision to evaluate reform has been taken. Description and assessment of the **Process of Implementation** should begin shortly after the reform is implemented and be revised periodically as needed, given that the reform process is likely to change over time, with modifications to the current reform or the introduction of new reforms.

Table 2. Indicative Schedule for Health Financing Evaluations

Timing	Activity	Reports
Immediate	**Context**; **Type**; development of evaluation protocol, data collection systems, and reporting processes; collection of baseline data	Draft: **Context**, **Type**, and evaluation protocol
Shortly after implementation of reform	**Process**; establishment of systems for data collection and reporting of findings to policy makers	Final: **Context**, **Type**, and evaluation protocol Draft: **Process**
6-12 months after implementation of reform	ongoing assessment of **Process**; data collection, analysis, and feedback to policy makers (initial **Assessment of the Effects of Reform** and **Policy Feedback**)	Revised draft: **Process** Draft: **Assessment of Effects**, **Policy Feedback**
12-18 months after implementation of reform	ongoing assessment of **Process**; ongoing **Assessment of the Effects of Reform**; ongoing **Policy Feedback**; **Synthesis of Conditions**	Final: **Process**, **Assessment of Effects**, **Policy Feedback**, **Synthesis of Conditions**
Ongoing	process assessment, data collection, analysis, and feedback to policy makers	

The protocol should include plans for process and outcome indicators, data requirements, new data collection tools (if any), analytical methodology, and mechanisms to transmit findings of the evaluation to policy makers. After the protocol is complete, work should begin on developing any needed data collection systems and on establishing channels to transmit findings to policy makers. Baseline data should also be collected at this time. A

few months after the reform has been implemented, collection of new data should begin, and a first draft report on the **Process of Implementation** should be completed.

Enough data should be collected by the period between 6 and 12 months after the implementation of reform to allow for an initial assessment of the effects of the reform, or at least the direction of these effects. The evaluators should have reported to decision makers on their findings to date and recommended if any changes in the reform process appear to be indicated. By the end of the first year after the implementation of reform, a draft report on the **Assessment of Effects** and the methods and consequences of **Policy Feedback** should be completed. Over the next 6 months, evaluation of process and outcomes should continue, as should the feedback of findings to policy makers. Based on this further analysis, the evaluators should attempt to **Synthesize the Conditions** with the most important implications for the effects of reform. This synthesis should be included in a final report, along with revised versions of the sections on the **Process of Evaluation**, **Assessment of Effects**, and **Policy Feedback**.

The evaluation work will be supported by WHO for a 12-18 month period following the implementation of reform, but it is hoped that evaluation will have become integrated into the national policy making process by that time, and that countries will continue to evaluate reforms beyond this period. Therefore, collection of outcome and process data, analysis of these data, and the transmission of analytical findings to decision makers should become ongoing activities within ministries of health.