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SUMMARY  
OF  
BRIEFING ON HEALTH FINANCING

MAY 9, 1985

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for

Agency for International Development  
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## SUMMARY OF BRIEFING ON HEALTH FINANCING

May 9, 1985

### Purpose of the Briefing

For about a year there has been informal discussion among the World Bank, WHO, and AID on the long-term economic and financial viability of the health sector in developing countries. This briefing was set up as an outgrowth of these discussions, as a means to maintain the dialogue and to develop closer coordination in the three agencies' activities in this area. It was intended to:

1. facilitate information sharing about views of health financing problems, approaches that have been used, and what has been learned from those experiences;
2. develop a plan for future coordination and information exchange, including input to WHO's preparations for the upcoming General Assembly meeting which will focus on financing Health for All.

### Background

Initially, the severe recurrent cost problems faced by many ministries of health in developing countries drew the attention of donors to the area of financing of the health sector. As this problem is explored, a complex situation emerges.

Many countries find themselves in the throes of deteriorating general economic conditions, with national debt burdens and reduced overall resources placing strong pressures on the government to reduce spending. National health budgets are especially vulnerable and have been experiencing relative declines in the proportion of the GNP earmarked for health.

AID, WHO, and the World Bank are all focusing more attention on health financing issues through a range of mechanisms such as policy dialogue, publications, country projects, identification of financing as a keynote issue for the World Health Assembly, etc. The three donors all recognize increased donor coordination on financing issues to be an important element for progress.

WELCOMING REMARKS

JOHN ERIKSSON

AGENCY FOR INTERNATIONAL DEVELOPMENT

After welcoming the representatives of the World Bank and WHO to the meeting, Dr. Eriksson noted that the timing of this workshop is particularly opportune.

At the same time that health budgets of donor agencies and LDC governments are increasing, there is growing concern over the cost-effectiveness of basic health programs. Next year at this time, the World Health Assembly will be directing its attention to questions of resource allocation within the health sector. We at AID are already being asked to give greater priority to encouraging cost-recovery and cost-reduction in our health programs for several reasons:

- neither donors nor LDCs have the resources - human or financial - to invest in wasteful, inefficient, and inequitable health care systems;

- people are already paying for personal health care; communities are already investing in water, sanitation, and "drug store" schemes to improve local health conditions. It would be foolish not to take advantage of the motivation and willingness that is already there to take responsibility for personal health care;
- there is a subtle reluctance to tackle some of the most difficult health problems in LDCs as long as the basic service delivery is seen as wasteful and inefficient.

In its health policy, AID has stressed, as an initial step, examination of health policies and practices in the particular country and the effects these may have on the economic and financial viability of health programs. Some of the barriers commonly found include the following:

- a commitment to provide free health services for all;
- a willingness to expand existing health programs at a rate that is far beyond the government's management and financial capacity;
- failure to allocate limited public sector funds efficiently between urban and rural health programs;
- failure to acknowledge and take advantage of the important role played by private sector health care providers and private resources;
- restrictive regulations and licensing requirements that discourage use of indigenous practitioners.

With regard to costs, AID would encourage countries to look at the proportion of health costs recovered by various mechanisms, such as fees and insurance. The various cost-recovery avenues currently used and an appraisal of their potential as well as other alternatives for cost-recovery ought to be analyzed. New mechanisms may be needed in addition to traditional fee-for-service payments, even in the area of preventive health. Right now AID is struggling with this controversial topic. We are asking ourselves (1) what kinds of interventions might be covered by local contributions of some form, perhaps through community financial support if not individual coverage of costs, and (2) at what stage in the development of services these mechanisms might be introduced. For example, health insurance schemes may be appropriate where record keeping and information systems are functional. In most developing countries, however, health cooperatives and other innovative community-based financing schemes may be necessary. AID is prepared to assist countries to document health expenditure patterns and government and private financing and to experiment with alternative financing schemes.

Another question we are discussing, particularly as a result of AID's commitment of substantial funds to child survival programs, is whether approaches that stress only one or two interventions are less costly in terms of the health infrastructure required than multi-intervention systems. How do the financing implications of these two systems compare?

Is there a strategic sequence to introduce health interventions that would eventually lead to a more multi-faceted system over time and be financially viable?

We at AID feel fortunate to have the considerable expertise represented here with us in order to explore these issues in a greater depth, which have only been touched on in a general way in this welcoming introduction.

GENERAL INTRODUCTION TO FINANCING ISSUES

DAVID DE FERRANTI

WORLD BANK

What the problem is

There are three basic dimensions to the health financing problem: revenue mobilization, efficiency, and equity. In our dialogue with countries, donors should be interested in making governments aware of these other issues -- equity and efficiency -- besides just revenue-raising. There are lots of options in addition to, or in place of, fees collected at government facilities. Donors and governments need to pay attention to these other options because there is a lot more going on than just a transaction between a government provider and users (who pay taxes or fees). It would be a mistake to concentrate on only one option, ignoring what is going on in the other dimensions.

The revenue mobilization issue refers to the perceived inability or failure of a government to raise enough revenue to meet perceived needs.

Efficiency has two different aspects: operational efficiency refers to getting the most product in quantity and quality from the resources available, and allocative efficiency refers to the distribution of resources according to the needs-- where they would have the most net social benefit. Allocative efficiency is a central factor in the health financing situation.

Equity is concerned with how cost recovery schemes would affect the poor, and how other policies, such as free care, can have disadvantages for certain parts of the population (i.e. when "free care" results in some care for part of the population and no care for the rest).

Several alternative approaches are listed in the handout. (See below for list of options or See attachment 1 for complete handout.) I will comment briefly on each one and then address the option of fees more extensively.

## OPTIONS

1. Change the level of government spending on health services, through:
  - i. adjusting health's share of total public expenditure, and/or
  - ii. raising or lowering total expenditure.
2. Revise the level or content of external assistance.
3. Use the resources already available to the health sector more efficiently (e.g., improve the allocation of resources and strengthen institutions).
4. Alter the structure of public subsidies, as manifested in
  - i. government budget allocations to public health facilities;
  - ii. grants and other support to private and quasi-public facilities;
  - iii. reductions in the costs of health services inputs such as drug prices or medical staff salaries.
5. Adopt new policies on "risk coverage" (social insurance, employer health plans, community-based pre-paid plans, HMOs)
6. Alter the organizational makeup of the sector (e.g., change the public/private mix).
7. Expand or contract activities in other sectors that affect health conditions (e.g., increase investment in water supply and sanitation in lieu of or in addition to extending health facilities).
8. Reorient health sector goals to conform to resource limitations (e.g., reduce targets for facility construction).
9. Improve the pricing of services.

## COMMENTS

(1 and 2) To think of increasing government expenditures on health or increasing external assistance is probably dreaming. Few countries are going to solve their problems by these means. These are probably not viable long-term solutions.

(3) Better use of the resources at hand should always be done, as another option.

(4) Altering the structure of public subsidies, that is, how to reimburse providers and the extent they are subsidized, is another option. Probably this set of options has not been addressed with the attention it requires. Examples of approaches are diagnostic related groups (DRGs), reimbursement on actual or average cost, and capitation. Questions on relationships among providers, users, government, and insurance intermediaries need attention.

(5) Risk coverage is an important area to review for financing of health care.

(6) The organizational make-up of the sector, although complex and controversial, should be considered.

(7) On a pragmatic basis, activities in other sectors don't give us immediate options that are going to produce major changes, but they must be kept in mind. In some countries, they may arise as a better solution than pouring money into the health sector and concentrating on fees. Donors may need to become more modest about what can be accomplished.

## Fees

There is a growing perception in many quarters (both donors and country governments) that government systems that do not have fees now should have them and some, which do have them, need to set them higher. There seem to be two views about what can be expected in terms of additional revenue generation using fees and how high fees should go. The first is that fees should be small, nominal amounts and that they won't contribute much to cost recovery. The second view is that fees should be set at levels consistent with basic economic principles (i.e., marginal cost pricing, which generally implies higher fees) and that fees should make a substantial contribution to cost recovery. Our conclusion is that, if you do the basic economics right, both approaches will in the end probably come pretty close to the same results. We feel that the first view probably will be more nearly correct, that is, fees should exist, they will probably be modest, and they will not contribute much to cost recovery.

By doing the economics right I mean that you start from marginal cost pricing but recognize social benefits and costs rather than private benefits and costs. Marginal costs refer to the additional cost at the margin of an additional unit of service, and it will be less than the average cost in cases where there are scaled economies and/or large fixed costs.

Thus, fees won't be the great solution. Fees will make some impact, and they will deter overutilization. That in turn will free up some resources for use elsewhere and add a little revenue, but it won't relieve the great discrepancy between funds coming in and funds that have to be spent. Thus, the options of risk coverage, the structure of public subsidies, and the private sector are probably the things to look into.

## DISCUSSION

Questions were asked about the role of educational activities as a cost-saving measure, the possibility of setting fees higher than the available data on costs might suggest, and setting fees for different types of services.

Dr. de Ferranti said:

With regard to public health education, I do not feel confident about the achievements of such programs and their cost-benefit potential because conveying the desired changes in knowledge, attitudes, and practice is difficult. But, if it were possible to do so, educational programs offer the possibility of tremendous savings.

"Doing the economics 'rights' in developing countries is difficult. Rather than setting fees higher than would be justified, if the social and public goods aspects of the services provided are taken fully into account, just in order to be able to provide those services at all, it would be preferable to make a good guess as to where the fees ought to be, taking into account the externalities and not biasing them high or low. Setting fees at a level believed to be too high would introduce more distortion into an already distorted situation and make it harder to move the system toward efficiency and equity.

In setting fees, distinctions need to be drawn between curative and preventive services. Basically the cost recovery problem relates to curative care. Pragmatically, countries concentrate first on getting the policy right on curative care before tackling the preventive side, which involves a number of tricky issues.

One might want to change fees for outpatient visits, which are essentially curative, and not charge for immunizations on the basis of several principles. Similarly, in some cases fees ought to be negative, that is incentives used, for reasons of principle.

Inherent in the problem of setting fees is the practical difficulty in obtaining the needed information on both public and private expenditures. These data are needed to determine fees, and the figures in the tables in the handout are guesses due to the poor quality and incompleteness of what data can be pieced together.

Whether a facility could generate enough revenue from fees to cover its costs would depend on the type of facility and the services offered. Maybe the few highly specialized hospitals, which provide specialized care for a relatively small number of people, ought to be parastatal operations and finance themselves. But basic district hospitals, which usually have a small number of beds and may be the only level of service for the population above the health post, can hardly be expected to recover all their costs from fees.

PRESENTATIONS ON EACH DONOR AGENCY'S ACTIVITIES IN HEALTH CARE FINANCING

MICHAEL MILLS

WORLD BANK

Mr. Mills spoke first about the Bank's policy on financing recurrent costs and then made some personal observations on the complex, real-life situation and problems that arise and how to be pragmatic about these things in the real-life context.

The problem of recurrent costs is basically that there are insufficient recurrent budgets to maintain capital investments. The Bank's policy can be considered at three levels: economic and sector work, project design, and lending policy. Sector work is increasingly addressing these sorts of economic and financial questions in the macroeconomic context and individual sectors. The question of cost recovery also comes into the design and selection of appropriate projects, in which we try to minimize incremental recurrent costs, get cost savings when possible, and identify increased sources of finance.

There are two cases in which the Bank finances recurrent costs of health projects in its lending policy. The first case is when there is a serious shortage of budget resources for recurrent expenditure financing, but steps are being taken to make adjustments, and there is a plan to take over the costs as well as an acceptable policy framework. These qualifications may be similar to AID's four points put out last year. The development impact of these recurrent costs should be larger than financing simply the development side itself.

The second case is when specific recurrent expenditures are necessary for the success of the project, and some Bank financing is needed to be sure funds are available on time. The project may be something innovative, new, and of high priority. It is likely to be an experimental or pilot project, e.g., a home visitor program. Such bank financing would normally be done in a low-income country on a declining basis as the country takes over costs. An example is Pakistan's population project, which the Bank cofinanced with USAID.

The problems that arise include definitional issues, exceptions in cofinancing situations, actual administrative implementation of funding recurrent costs on a declining basis, and the variety of countries involved.

First, the definitional issues: what are meant by recurrent costs and by incremental? With regard to recurrent costs, one can take a broad or narrow definition. The narrow extreme is: capital is infrastructure, that is, the Bank makes a big investment, which is done quickly and should not include salaries. The other extreme is that all parts are capital

(including human capital). There is a whole range in-between that may or may not be recurrent expenditures.

Deciding if items are capital or recurrent is not always easy. Varying justifications have been given to include or exclude a certain item as a capital investment in different projects. Three examples can be given:

1. innovative activities, such as support to non-governmental organizations, may be regarded as a capital expenditure, but in fact the funds may be going towards support of recurrent-type operations.
2. revolving fund for drug supplies -- setting it up is a capital expense but then it continues in a "recurrent" way.
3. consumables -- e.g., contraceptives, new stocks of drugs, (especially rehabilitating existing services and putting in new stocks of drugs).

The second definitional problem is what is meant by incremental. Incremental assumes that you know what would happen if you didn't have the project, but there may be questions about that, too. For example, a project may be intended to strengthen the existing health system and more intensive use of vehicles is needed. Would the extra cost of running those vehicles be considered a capital expense?

Bank policies on financing recurrent costs can differ when the Bank itself is financing a project and when cofinancing is involved. The Bank policy may not apply to what other donors finance (they may be paying for recurrent costs in their part of the cofinancing of a project). Bank policy implies the funding of incremental recurrent costs on a declining basis, but there may be administrative reasons why that is not appropriate. It is very hard to find out how much has been spent on those items and the percentage of all costs that are recurrent.

In some cases, the Bank follows a different approach. One is to fund only certain costs for the length of the project, but none of the other ones; another is to fund all recurrent costs for a shorter time.

Finally, the different types of countries one is dealing with may require different approaches. Some countries don't want to fund recurrent costs through World Bank loans, depending on the interest rate. (IDA loans have a lower interest rate than IBRD loans). For the worst off countries, both basic and incremental recurrent costs need to be funded, because of their difficult, extreme, and important situations, and such costs probably will be funded through projects for some time.

Such situations point to the issue of donor coordination. Underwriting the basic recurrent costs of a program requires strong donor coordination, a clear understanding among them about what is being done, and perhaps even collective responsibility, because providing such funds could create dependency and questions about what happens at the end of the program. Donors also need to identify those countries that, for the foreseeable future, are unlikely to be able to afford to run those services regarded as critical to its socioeconomic development.

HOWARD BARNUM

WORLD BANK

This presentation will focus on the question of resource allocation and on the need for financial planning and management. I will start with the proposition that resources are allocated correctly when the marginal benefit of the last dollar spent in each project is roughly equivalent. That implies that the marginal benefit, the additional value to society of the last dollar spent on development capital expenditures, would be equal to the last dollar spent on recurrent expenditures, providing we do proper pricing and many other provisos.

However, resources tend not to be allocated to maximize the value of the allocation of resources. Despite planned phasing out of initial support of recurrent costs, an optimistic plan to phase out this support over time leaves the country with a primary health care program that it really can't support.

Why do we continue to have white elephant projects when the problem is so obvious? Several reasons may be proposed. It may be due to lack of donor coordination. But white elephants aren't always capital expenditures for hospitals in urban areas; they may be training and retraining of PHC workers whose attrition rates are very high, or payments of incentives to get people to move into rural areas, etc.

Actually, the roots of the problem are complex and not so obvious. First of all, analysis from game theory might suggest that recipient countries wish to keep donors uncoordinated; by doing so they can play one donor off against the other, and so can get larger amounts of money for politically attractive projects than they could otherwise. Neither the politically attractive projects nor the large volume of funds

may be warranted in the big picture. Possibly a collusive solution, following game theory approach, of donor collaboration could be found to achieve some sort of control. Second, recurrent cost problems slip in, and we tend to overlook some of the subtle aspects of recurrent costs. For example, maintenance costs are often underestimated. The Digfa hospital in Mogadishu is now in such a bad state of repair that they are considering tearing it down and building a new one. This has happened because recurrent costs were not taken care of. Third, the unexpectedly high cost of primary health care programs has added to the recurrent cost problem. The use of inappropriate technologies is still another problem. In Somalia a new pharmaceutical factory was recently built, but there is no one in the country to run the factory, they don't have foreign exchange to buy the required inputs, and they don't have either the facility to train people, to run the factory or the appropriate engineering expertise.

Recurrent costs are not coordinated with a coherent plan informed by adequate financial management. Recurrent costs of planned projects are not gathered together for a plan period and added to recurrent costs of services already existing, and then compared with the stream of potential revenues.

It seems that regular meetings of donors may not be enough to solve the types of problems that I have just identified.

So what are some of the possible solutions? The solution for donor coordination and planning for recurrent costs does not lie totally within the domain of the donors. Developing countries themselves need to develop procedures and the capacity for planning, financial management, and analysis; then donor discipline follows that. Thus, the focus of donor coordination would then fall onto the government; it can't come solely

from meetings like this and donor interaction. Recent sector work and projects have been trying to build in the development of such capacity. I am not sure we can "move in" fast enough to meet the problem, however.

Long-range, medium term, and annual plans related to health financing are needed. We need longterm planning for health sector development in terms of diseases, MCH/FP, types of delivery systems, and urban/rural needs. We need medium term (3-5 year) plans with geographical and functional distributions of program expenditures and the recurrent cost implications of capital expenditures. Priorities, including what to cut first should be included, and the plan should be updated on an annual basis, consistent with the long-term strategy. Finally, we also need an annual plan, including estimated revenues for the coming year, in accordance with the medium-term and long-term plans.

With regard to financial management, there need to be modifications to how countries handle revenue and expenditure data. Budgeting and accounting are usually two separate sections in ministries; this makes it very difficult to obtain and analyze expenditure and budget data. A major problem is that, commonly, both a development and a regular budget exist; both contain capital and recurrent costs. Sorting out expenditures is not easy. Furthermore, budget categories are not functionally meaningful -- often they are only highly aggregated line items. Expenditures need to be identified by function because recurrent cost/capital ratios, etc. for various functions are quite different.

In conclusion, perhaps donor coordination from the country is a solution, with appropriate reforms in planning and financial management. Donors need to assist countries to build management and financial accounting capacity before providing other loan support. Perhaps there could be some donor collusion to press for this reform, and countries will be better off for it five years or so from now.

## DISCUSSION

Comments centered around cost-benefit analysis and recurrent costs. Michael Mills observed that:

the benefit side for health projects sometimes ends up being credited to another sector rather than to health. Onchocerciasis control programs, for example, tend to be thought of in terms of acres of land brought under cultivation rather than persons saved from blindness and loss of income due to blindness. Furthermore, some development projects result in health costs-- for example, irrigation projects and factories, which pollute the environment,--that may not be accounted for in cost-benefit analysis of these projects. But awareness of these costs and benefits has led to the channeling of more resources into the health sector.

In response, it was noted that for example the Bank has financed river-blindness projects that are actually recurrent cost programs. So, all the problems that have been brought up in this meeting have been faced in projects like that, and the Bank will continue to fund such projects.

I would estimate that roughly 10 to 20% of the total health resources in health projects were put into recurrent costs.

Exceptions would be very large projects, such as Bangladesh, where recurrent cost would be a higher percentage. Thus, there is a big variance in the percentage among the different projects.

Recurrent cost financing is likely to increase in the coming years. As more countries will have built their basic health infrastructure through major capital projects, the programs that will be developed for financing will become more service-delivery oriented, and thus more recurrent-cost intensive. In financing recurrent costs, one has to be certain (at least implicitly, since it is so hard to quantify) that the impact from that expenditure would be greater than from funding more conventional types of development activity.

David de Ferranti commented:

Even though the difficulty of valuing things in cost-benefit analysis is not going to be solved soon, we should not give up entirely. Cost-benefit analysis is all right for very large undertakings where it is possible for someone to take the time to do the necessary sensitivity analysis. However, for ongoing decision-making, when one already has an objective, cost-effectiveness analysis is useful to tell which is the least-cost way to achieve that objective. In China, for example, it is being used to decide whether they will use freeze-dried vaccines for their immunization program.

Denning pointed out that:

The practical question of how health services will be financed in the coming period may be more of a concern than the benefit and value of health services. There is a stark contrast between middle-income and poorer countries in what is practically feasible. In the middle-income countries there are economic prospects for growth, albeit with

difficulties and the need to make great adjustments still, but at least technical answers to health financing problems can be envisioned. In the poorer countries, there have been declining per capita incomes over the last 10 or 15 years and neither we nor these countries seem to be able to devise any clear growth paths. There are signs of disintegration of the public sector, but some other sectors (such as public power companies) seem to be managing better than health, which is essentially grinding to a halt without funds for fuel, salaries, and so on. It might be expected that the situation in the public sector in these countries will become even more difficult in the years ahead.

H. HELLBERG

WORLD HEALTH ORGANIZATION

This meeting is of particular importance for WHO because we have identified financing as one of the major constraints in implementing Health for All. Since identification of this constraint comes as a result of the monitoring and evaluation process, it gives us a certain authority and legitimizes our efforts in this area. We recognize that WHO is weak in terms of expertise in this area, as our representation here today by two consultants and a public health generalist illustrates. WHO is getting involved in different ways and looks forward to collaboration with the agencies here and others as well.

The first line of action by WHO is to demonstrate the priority and urgency of the issue by giving it visibility. Regional committees will have this subject on their agendas this fall. A document is being prepared for the Executive Board meeting in January 1986, and then it will go to the World Health Assembly in 1986. The May 1987 technical discussions may focus on this area as well. As a result of these actions to draw attention to financing, we feel enough countries will deal seriously with these matters.

The second line of WHO action is direct support to countries for long-term and medium-term planning. The Health for All strategy states that countries should have a financial master plan describing what they are going to do, how much it is going to cost, and how to finance it. WHO needs to overcome its tendency to mirror the developing countries weaknesses in this area.

The third line of action is to gather material that will go into documents for our governing bodies. These will include case studies, do's and don'ts, etc. The recurrent cost issue is one that will receive attention, but it is also part of a much larger picture including policy

analysis to the technology of program budgeting. For example others mentioned earlier, the whole line budget mess in many countries that makes it impossible to know how much you are spending on what.

As part of this information gathering process, we want to make an inventory and assessment of financing technology. What is the technology in this area? How are we using or not using it? Who is working on it? What else do we need? There are technologies that we still need to develop for application in the poorest countries, the not-so-poor, intermediate countries, and so on.

WHO sees a need to strengthen country ability in the health sector, so that the health ministry can be a serious partner in intersectoral discussions about resource utilization intended to result in positive health outcomes. We would start with the ministries of finance and planning departments, but then work with the social welfare, agriculture, education, and other ministries, also. We need to learn more about intersectoral action and to find a common language so we may overcome obstacles to serious multisectoral action. So far, efforts have been isolated. We need to develop a systematic process to support countries over a number of years, carefully defining our roles in that process.

The fourth area for action is training. We would like to look at

- existing institutions, including schools of public health,
- the need for new courses, and
- different lengths of study.

For example, the London School of Economics and the London School of Hygiene and Tropical Medicine are starting a new course in health planning and financing, an attempt at integrating the issues. We want to look at how health economics and financing are taught. Recognizing that there are many schools of thought in this area, what changes ought to be made?

A fifth area for action will be a focus on financing in WHO publications.

We expect all of these efforts to result in increasing numbers of requests from developing countries for people to come and help them sort out these matters. However, we foresee that there will be a problem in finding enough qualified people who are able to provide such technical assistance. A critical mass of consultant capability is needed. Some parts of training programs could be directed this way, and we could send out learning-by-doing teams to help develop the consensus of what the priority actions ought to be. We can also strengthen the knowledge of general public health consultants in the area of financing so that they can do a better job.

To summarize the points that have been mentioned, WHO has two main objectives in the area of health financing. The first is to strengthen the capacity of countries to function in this area and to coordinate the external inputs. It is in everyone's interest to do this, rather than a situation where donors are played against each other. As countries become better able to decide what they want to do in the health financing area, they should also become better able to tell the donors what they expect us to do.

The second objective is to define donors' roles in providing support to countries. Realizing common interests but also different procedures and governing bodies, and the need to have separate identities for different reasons, what coordination can really be accomplished? We in WHO know this from our own experience. In Africa, one of WHO's weaknesses has been the capacity of the national coordinators' offices. The new regional director has made strengthening this as one of his first priorities.

The development community, in general, and countries, too, need to counteract the "development defeatism", that pervades discussions and action in development these days and influences our consideration of health financing as well. Always emphasizing comprehensive development as the approach to take is just as undesirable as pursuing isolated vertical development. To get away from either/or thinking, it might be better to have a basic master plan, that would initially include the strategic introduction of certain programs and then build on them incrementally. This would result, in the end, in a comprehensive process. Such thinking would inject a note of realism into both development discussions and the development process. It would also help in coping with the pendulum swings of policy, to use them to advantage in the context of a master plan. This type of thinking would, in addition, help us to get away from the tendency to respond to isolated events and crisis situations and to shy away from the difficulties of long-term development.

We feel that countries can use their commitment to Health for All to give them a more prospective outlook. We have seen it work this way, usually in countries which are better off. Unfortunately, those countries who need this perspective most are, however, least capable of using Health for All this way.

The 164 member countries represent a broad spectrum that might be classed into three groups: those who speak based on their experience, those who speak based on their plans and dreams, and those who join the bandwagon because everyone else is there. WHO is trying to widen the first group. In each region WHO is looking at certain key countries where there happens to be a set of positive factors -- for example, good people in the right place-- to create examples and realistic success stories.

As a follow-up activity to this meeting, those of us here today could probably agree on several of these countries where it might be worthwhile to put in a special effort in economics and financing. WHO is ready to do so and through its relationships with governments, WHO could improve the receptivity to issues of financing and improve country capabilities.

BRIAN ABEL-SMITH

WORLD HEALTH ORGANIZATION

There are three important areas where all agencies are involved--and and for which exchange of information and cooperation are clearly beneficial. These are: training and education, data collection and analysis, and advice to countries.

- 1) We can do better a job about training courses if we do it together rather than separately, so that we do not find ourselves duplicating our efforts in one country.
- 2) With regard to data, David de Ferranti has taken the lead in this for a long time. Having withdrawn from this area 10 years ago, WHO has to catch up, and its Statistical Division is now taking this on.
- 3) To be able to give guidance to countries about what is reasonable for them to expect to be able to spend in 5 or 15 years, we need to examine some basic questions, such as: have health expenditures gone up or down since Health for All was announced?, how is public/private health expenditure related to per capita income?, do richer countries spend more?

We could set up mechanisms to exchange information that each agency has. Some of the best information comes out of sector reviews. WHO has good information in 3 CLU's. By putting together studies as we come across them, we could make use of them eventually.

I share David de Ferranti's view concerning the importance of considering the range of options in advising countries on financing, management, efficiency, equity, etc. He pointed out that although it is

important for donor agencies to think through the issue of recurrent costs, those amounts (and we are talking about perhaps 1-2% of total costs) won't pay for entire programs in 5 or 15 years' time. Furthermore, governments are probably not going to pay for them by getting more taxation; therefore, all the financing options are important.

In giving advice to countries, there will be minimal differences from what has been said here. However, it would be useful to let each other know what missions have learned about a country's preferences and positions on specific financing approaches. Subsequent missions could then focus on the options in which the government has already expressed interest and avoid those that would not be worth discussing again.

We want all options to be explored in the process of developing a financial master plan for health; otherwise the money won't be there to make progress towards equity, which is, after all, what Health for All is about.

MARGARET THOMAS

WORLD HEALTH ORGANIZATION

There is a substantial body of research produced by the Club de Sahel and OECD; these documents are available to all the organizations here. Furthermore, we are willing to assist in any study the organizations represented here may put together. OECD has investigated the idea of a coefficient, a percentage for estimating what recurrent costs will be as a percentage of capital expenditure.

At a February meeting between WHO and AID, a study of the problems related to recurrent costs of health sector projects in about 7 countries was proposed. Such a study would look at a mix of experience, and consider questions such as:

- What procedures are countries using to estimate recurrent costs?
- How are they meeting recurrent costs?
- What was the experience of cost-sharing?
- What happens to the use of services when user charges are instituted in countries?

The effect of user charges on women in poor economies, who rarely have control over income for themselves, particularly women in the subsistence sector, should also be examined. It would certainly not be desirable for user charges to have a detrimental effect on the use of health services by women.

Another idea that came out of that meeting was to produce a practical document to assist those involved with policy-making and political

decision-making. This report would preferably be an analysis of factors:

--Why does a particular system of financing work in one country? Is it related to the public/private mix? Is it related to GNP per capita?

--What are the options the government sees as politically feasible?

It should also be mentioned in this meeting today that the issue of user charges is an area of great political sensitivity, and they should be seen as only one option among many.

Perhaps a working group among Bank, AID, and WHO could be set up to take these ideas for studies further.

I am currently preparing a paper on issues arising from recurrent costs in the health sector. I would be happy to share the paper when it is finished which should be June or July.

ANNE TINKER

AGENCY FOR INTERNATIONAL DEVELOPMENT

AID's main goal in the health sector is to reduce infant and child mortality and fertility rates, with an emphasis on low-cost, community-based technologies, such as ORT, immunization, nutrition monitoring, and family planning. Policies and strategies with regard to financing health sector programs involve recurrent cost issues and also the following:

- complementarity between public and private health systems
- development of payment systems for personal health services
- applied research on aspects of health financing
- examination of country policies and programs that hinder viability of health systems
- policy dialogue to improve those policies and practices.

AID faces a dilemma in its two goals of reducing infant and child mortality and financial self-sufficiency. Currently AID is grappling with how to reconcile the self-sufficiency goal with accelerated action programs in child survival in the poorest countries.

AID is also re-examining what has been primarily a focus on revenue generation, with little attention to resource allocation and cost containment. AID is also trying to increase attention beyond the supply side in efforts to expand the delivery of health services. We recognize the need to be concerned with demand including quality, pricing, and incentives.

AID is financing projects through bilateral programs (government-to-government agreements), centrally funded projects, and regional-bureau sponsored projects.

AID welcomes the opportunity to begin a dialogue together and try to coordinate, to the extent possible, our stances in financing with governments, and to see our comparative strengths and areas where we may be able to develop some coordinated approaches to countries. For example, high-technology institutions funded by some donors clearly have serious resource allocation and recurrent cost implications. To the extent that the World Bank and WHO can discuss this type of situation with other donors beyond ourselves, it would be very useful.

Types of financing activities AID is engaged in

In-service training

Several months ago, the Latin America and Caribbean Bureau conducted a workshop for the region's health officers, with the participation of a number of other donor organizations. The workshop was a response to the lack of knowledge of and experience in health financing, both in Washington and in the field. It was successful in helping health officers know how to engage in policy dialogue on financing issues with their host country counter-parts and to help identify potential projects and needs for expert assistance.

Another workshop this summer for health officers from worldwide posts will build on experience from this first one. AID is prepared to share the methodologies used and approaches we have been taking with other organizations and to discuss the possibility of collaboration on in-service training courses at the field level.

#### Studies and assessments

- 1) The S&T/H PRITECH project, which focuses on ORT, has developed an ORT planning module, which identifies a set of economic and financial questions and approaches to answering these questions, to aid in planning and reviewing ORT programs.
- 2) Sometimes financing studies have been undertaken as a part of country health sector assessments, such as a recent assessment in Peru in collaboration with the World Bank.
- 3) The Latin American Bureau has focused particularly on social insurance, social security mechanisms, and development of HMOs. The Latin American context points up so well the need to consider differences between middle-income and low income countries in dealing with financing issues.
- 4) Recently AID has supported quite a number of studies in the demand area, particularly through our centrally funded operations research (PRICOR) project. For example, in Honduras we completed a household expenditure study and assessed capacity and desire of communities to pay for local health services. There have been studies on the use of fees and prepayment mechanisms in Senegal (user fees in primary health care) and in Honduras (user fees in hospitals).

### Testing financial alternatives

Large scale and small scale projects have tested various financing mechanisms as alternatives to direct payment by governments. For example, in Benin and Zaire fee-for-illness episode approaches are being studied. In Zaire, this fee approach will be compared against fee for visit, fixed fee for consultation and variable fees for drugs. Revolving drug funds are being studied in Thailand and Dominica. The Philippines primary health care financing project, a bilateral program, takes a somewhat comprehensive approach to financing of primary health care technologies. It includes provisions to test a variety of health financing schemes in both the public and private sectors with a view toward recurrent cost sharing and sustainability.

### Testing cost-effectiveness of interventions

A number of studies are examining the cost-effectiveness of intervention strategies, this is being done in the Philippines in the context of a major bilateral program. In Africa, our other main project in this area is through CDC's Combatting Childhood Communicable Diseases Project. This project is dealing with high-priority health goals and trying to validate the costs and ultimately the cost-effectiveness of these programs. The project takes a systematic approach of designing country projects with phased-in proportional absorption of costs by governments and carefully monitoring the process.

## Policy dialogue and the private sector

Dialogue about health financing and policies affecting it depend on our Mission personnel dealing with host-country officials on a regular basis. We often look at specific types of requests for a service, such as interest in health insurance, as an opening wedge to larger discussion of the range of economic and financial issues. We can bring in consultants to assist our Missions, who do not normally have strong training or background in health economics.

In the Near East, for example, AID has been involved in policy dialogue on financing and the private sector role. This has occurred in Morocco after high-level directives to all ministries were issued to reduce the burden on government and to involve the private sector more fully. Assistance in social marketing is being explored.

In Zaire, AID is working with private mission hospitals to develop alternative financing schemes. The private sector is more viable there at this point than the public health system in delivering primary health care services. In Bolivia, cooperatives are being considered as an alternative to public sector delivery.

A common thread running through these projects is the need not only to look at the governmental program, but at the private sector and the balance between private and public components of the overall health system. Ministries of Health should really be able to deal with "public health" and not principally personal and curative services as is now the case.

Last year in Burgenstock, Switzerland, AID met with private sector representatives and donor organizations active in the Near East to look at public-private sector coordination. The hope is to encourage private sector organizations and donors to help establish an organization that would engage policy makers in health financing discussions and initiate some studies of public-private ventures.

#### Large-scale financing alternatives

A number of countries have expressed interest in mechanisms such as HMO's and other prepayment schemes. AID has provided assistance in countries such as the Philippines, Yemen, Tunisia, Turkey, and others in the Latin America/Caribbean region.

#### Financial management

AID has also helped address cost-containment and fiscal management needs in certain countries. For example, hospital cost-containment has been a focus of technical assistance in Dominica, Haiti, and Honduras.

#### Conclusion

In conclusion, we share concern about the need for more information on financing issues and how different financing approaches affect the various segments of the population, how much governments and private sector are spending in health, for what, and so forth. We are developing a couple of projects that should be onstream at the end of this fiscal year (by September of 1985). These projects will help provide technical assistance to support international efforts. Progress in the development of sustainable, cost-effective health systems will require considerable donor coordination. AID hopes to continue this dialogue on financing and looks forward to planning and sharing our activities collaboratively in the months ahead.

## DISCUSSION

The main question raised about the presentation on AID's health financing activities was how to make information on the many projects available.

Most of the information presented here had not been assembled prior to planning for this meeting. PRICOR is expected to disseminate information on the results of their studies, some of which are just beginning to be completed. A conference will be held to talk about those results, probably in June, 1986, and WHO and the Bank are invited to participate. AID will share whatever information it obtains with the other agencies. If appropriate, AID could establish an information center, which could gather resource materials at least on AID projects. Even within AID it is hard to know what possible windows are opening for specific types of activities in the many parts of the Agency.

To the list of AID projects presented in Table 1, more were added: research by John Aiken in Thailand, Jamaica, and the Philippines, cost-price responsiveness in health and income elasticities; and recently some other similar work, perhaps in Thailand and Jamaica, for family planning.

Some Current Activities in Health Financing Supported by A.I.D.

<u>Health Financing Concern/Strategy</u>	<u>PRICOR</u>	<u>Regional Bureaus (bilateral programs)</u>
Health expenditures and care-seeking behavior, utilization--surveys	Bolivia	Antigua St. Lucia Dominica St. Kitts Ecuador Jamaica Mali Peru Panama (demand & utilization)
Fiscal Management/Cost Containment		Costa Rica Dominica (hospital cost containment) Haiti Honduras (cost containment)
Analysis of Financing Issues, Sector Assessments	Senegal (Sine Saloum) Honduras Mali	Philippines (variety of studies) El Salvador (recurrent cost alternatives) Africa Bureau (review) Latin America & Caribbean (review) Morocco (HMOs) Colombia (case study) Peru (sector assessment) Egypt (sector assessment) Guyana (community financing)
User fees (fee-for-service, fee for illness, registration/inscription fees)	Benin Zaire	Senegal (Sine Saloum) OCCD Eastern Caribbean countries Honduras (hospital fees)
Developing funds	Dominica (drugs) Thailand (drugs, mixed funds-drugs, PHC, nutrition, sanitation)	Haiti (drugs)
Drug Sales	Philippines	Senegal (Sine Saloum) Eastern Caribbean (regional drug project)

<u>Health Financing Concern/Strategy</u>	<u>PRICOR</u>	<u>Regional Bureaus</u> <u>(bilateral programs)</u>
Staff compensation	Haiti (analysis)	Senegal Niger (self-supporting VHWs) Mauritania (self-supporting VHWs) Lesotho Guatemala (analysis)
Private-sector focus		Zaire Jamaica Morocco Honduras Egypt Latin America/Caribbean Reg Peru Burgstock Initiative (Near East)
Fixed Financing Schemes	Liberia Bolivia Brazil	Dominican Republic Philippines
Repayment capitation		Eastern Caribbean countries Haiti (operations research)
Health Insurance-private		Ecuador (through coops) Jamaica
Regional, national health insurance-studies		Jordan Dominican Republic Egypt Latin America/Caribbean Reg:
Risks (interest in)		Philippines Morocco Turkey Tunisia Yemen Latin America/Caribbean Reg:
Resource allocation (dialogue)		Honduras Peru

### Summary of General Discussion

In the final discussion period, there was general consensus on the timeliness of this meeting and the readiness of all agencies present to work together to make something useful happen with regard to health financing. The priority WHO is giving to this issue was welcomed as a positive development, and both AID and the World Bank stand ready to support WHO's efforts and together take advantage of the momentum their efforts will create. There was concern that uncoordinated efforts by donors could result in collapse of some public and private health institutions in a country because of the heavy demands donors sometimes make on the small number of policymakers and key persons there.

The PAHO representative welcomed the possibility of strengthening donor coordination in the area of financing. He cited a few examples in the region where this has already proved useful with AID, the World Bank, and the Inter-American Bank. He thought the ILO should be added to the list of donors. PAHO and ILO have worked together on strategies for reorganization of health services in social security institutions. PAHO has also collected information from 7 countries and expects to complete 13 remaining countries in the next couple years. PAHO would want to share this information with other organizations.

Donor coordination was proposed for many different areas:

- exchanging information about -
  - o education and training programs,
  - o reports on research and project results,
  - o data on public expenditures and health expenditures,
  - o projects and studies planned,
  - o upcoming missions to countries,
  - o completed missions,
- conducting studies of financing issues;
- establishing common "ground rules" about types of advice for policy dialogue with country governments;
- communicating at the country level by representatives of the various donor organizations;
- assessing and developing training in financial management and health economics to improve developing country capability;
- preparing for 1987 World Health Assembly;
- identifying countries for improvement of financial management capability and for special focus on financial issues.

It was felt that sharing information could be started right away on an ad hoc basis by each agency without developing policies or planning a big meeting sometime in the future. A person from each agency volunteered to serve as their organization's "mailbox" for such information:

Anne Tinker, AID

Dr. Hellberg, WHO

Tony Measham, World Bank.

There was a consensus among those present that donors should form a consultative group on health financing to pursue the other points listed above, which would become items on the agenda for the group.

The group agreed that this process of donor coordination should be done in stages. A small group with representatives from WHO, AID, the Bank, and perhaps OECD, would meet first to draw up some mechanisms and suggestions for the agenda. A certain degree of informality at this stage was thought desirable to facilitate participation by the various organizations.

There was concern about those donors who needed to be involved in these discussions because they fund projects that carry heavy recurrent costs, such as hospital construction, thus adding to the burden in countries and complicating the problems. Although it would be beneficial to involve many participants eventually, it was suggested that, if the group were enlarged at an early stage, it might get bogged down by the many factors that would come into play. Instead, it was decided that a mixture of meetings of a small group with an occasional larger forum would prove to be a better mechanism, as WHO has found in its own experience. Through OECD, the group would have an entry point into a wider network, which would include some other donors who are interested in health financing issues (e.g. CIDA, SIDA, the Germans). Furthermore, WHO has links with many other organizations already. To the extent that WHO can get information from other groups, it will then share it with the Bank, AID, and OECD.

WHO agreed to organize the subsequent meeting within the next three (3) months either in Washington or Geneva. WHO will need to know who will represent each organization. Both WHO and AID indicated they would rely pretty heavily on consultants for their technical representation.

Some additional comments about possible agenda items should be noted.

Africa: at several points in the meeting the financing situation in African countries was raised. Dr. Hellberg mentioned the new subregional structure WHO is instituting there, which could be used for research and studies, training in management, including financial management, etc. The three subregions will be West Africa, (Cotonou), Central Africa (Yaounde), and Southern Africa (Harare). In addition to the normal country coordinators there will be a subregional coordinator and a subregional health development center/health development network. It was suggested that improving MOH financial management capability in Africa could be given immediate attention. Cameroon, Senegal, and Zimbabwe were mentioned specifically.

Studies: The working group could identify areas for which research, studies, or particular initiatives should be recommended back to the leadership of each member organization or otherwise funded. An agenda of studies could evolve and both feed into the World Health Assembly and go beyond that.

Training: WHO would like to share information about three courses in England, a new course in Australia, and proposals for France and Colombia.

The main concern was to exchange information about each agency's activities and experience with training, although development of training programs would clearly also be an area for donor coordination. It was recognized that the agencies may not all attach the same importance to such courses, but at least information and experience about training in health economics and financial management should be shared.

Coordination at the country level: Several people raised the possibility of coordination at the country level. This could take several forms: sharing information about upcoming missions and projects and status of ongoing projects for specific countries, exchanging documents about country activities, identifying countries for coordinated programs (for example, in financial management), sector work, and sector analysis. It would be especially useful to determine in which countries more than one organization may be working on the same topic. Although some of this type of coordination could start immediately by exchange of documents and direct contact with the appropriate department in each agency, there was some feeling that developing these activities needs to be part of the work of the consultative group.

It was suggested that a simple way to get started on this work would be to draw up a list of proposed missions to countries, including purposes and possible dates, for circulation. Projects coming up in the next few years could also be shared. Doing this now would make it evident where there might be overlap of plans. Steps could be taken either to combine the teams for the two organizations, so that the country is imposed on only once, or, when only one organization was planning an assessment in a given country, to include representatives from the other relevant organizations on the team. Right now inter-donor groups for missions happen from time to time, but it could be done more systematically. Such an approach would also stimulate positive relationships and communication, which are essential in order to accomplish the things suggested during this meeting.

This interagency communication about assessments, coordination, and so on would also need to occur at the country level among agency representatives. The importance of high level signals being set through the different systems encouraging representatives in-country to coordinate was stressed. Country representatives' need for support in their efforts to bring up these issues in dialogue with governments was also emphasized.

Finally, the consultative group was seen as an appropriate forum to discuss the financing issues themselves and what recommendations donors should make to countries. Despite the fact that all may not agree on what to advise, it would be useful to examine the issues and the implications of various strategies. Some common ground would emerge that could guide the dialogue with countries.

DAVID DE FERRANTI's Summary of the Briefing

In the beginning of the meeting we heard some questions that urged us to look aggressively beyond the conventional answers to some of the questions. We need to provide a framework for discussion, with multiple objectives-- not only raising revenues, but also efficiency and equity-- and multiple options-- and all combinations need to be considered carefully rather than almost automatically choosing one option.

The remarks on user fees ought to be interpreted as saying that user fees are both necessary and good. However, we should be careful not to jump on the bandwagon so fast and so far that we wind up some years from now finding that we gave the wrong advice by pushing just this one solution in our urgency to find solutions to health financing problems.

The complexities of donor financing of recurrent costs and recurrent costs in general were then reviewed. The Bank's attempts to deal with recurrent costs were described.

Financial management and planning as a prerequisite for progress on donor coordination was emphasized in Howard Barnum's presentation.

WHO representatives told us about the increased priority that they are assigning to this area, particularly in: (1) helping countries to strengthen their capabilities to tackle health economics,

(2) focusing on the subject as WHO prepares for the World Health Assembly sessions in 1987, which will deal with financing, and (3) exchanging information and coordinating efforts in training and education, data on public expenditures, and advice to countries. Club de Sahel studies and progress on planning a recurrent cost study were also mentioned to the group. All of this evidence of strong interest and strong input from WHO is a welcome development in comparison to the last five or six years.

AID's representatives first reviewed what the Agency is doing in the area of health financing. Some of the activities mentioned included in-service training, studies and assessments, testing alternative financing mechanisms, cost-effectiveness studies, policy dialogue, and financial management. AID faces a dilemma inherent to its goals right now: between strengthening infant and maternal health status and strengthening self-sufficiency of health care systems. AID also recognizes a need to devote more attention in its programs to resource allocation issues, digging deeper beyond cost-cutting and cost-recovery. Finally, some suggestions were made about how we could work together, along with some admonitions that we should set aside to some degree our parochial interests, if that is possible.

There seemed to be general agreement that a working group of some sort be established with WHO's leadership, so that we can realize the possibility of very constructive coordination in the area of health financing.

Attachment 1

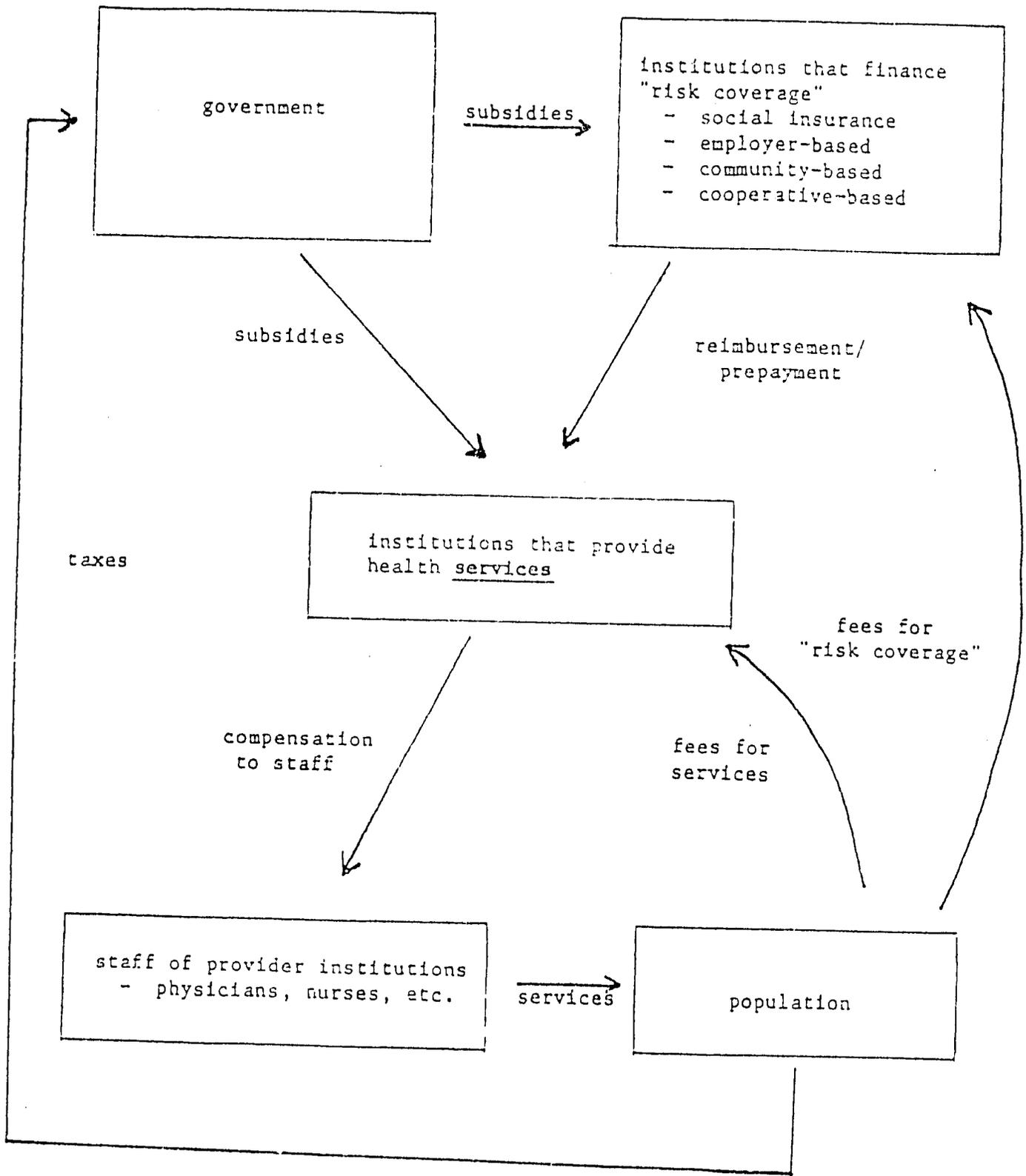
David de Ferranti's  
Handout For AID/WHO/World Bank Working Session  
on May 9, 1985

## SHORTCOMINGS OF EXISTING POLICIES

- A. On revenue generation, crises arise with respect to
1. meeting country goals for improving health (Now have growing gap between resource requirements and projected availability from public budget sources);
  2. resolving current underfunding of existing services (Now leads to low quality; also, to insufficient spending on maintenance--requiring added investment cost to replace capital items prematurely);
  3. avoiding institutional crises that can burden government finances (e.g., social security agency with deficit needing to be bailed out by treasury);
  4. reconciling goals of maximizing investment for economic growth with the demands of health programs for public funds.
- B. On efficiency
1. present allocation of resources is poor (not enough for the most cost-effective services);
  2. operational efficiency also is low, due to problems in management, logistics, etc. (I.e., the "output"--quantity and quality--of services is low, given the levels of inputs used);
  3. existing financial policies, with heavy reliance on tax sources, hinder efficiency in economy overall
    - some taxes used are highly distortionary
    - some are costly to collect
- C. On equity
1. huge disparities exist presently in distribution of resources from budget sources (e.g., across provinces, urban/rural);
  2. advantaged groups benefit most (e.g., emphasis on hospitals aids higher income groups);

OPTIONS

1. Change the level of government spending on health services, through:
  - i. adjusting health's share of total public expenditure, and/or
  - ii. raising or lowering total expenditure.
2. Revise the level or content of external assistance.
3. Use the resources already available to the health sector more efficiently (e.g., improve the allocation of resources and strengthen institutions).
4. Alter the structure of public subsidies, as manifested in
  - i. government budget allocations to public health facilities;
  - ii. grants and other support to private and quasi-public facilities;
  - iii. reductions in the costs of health services inputs such as drug prices or medical staff salaries.
5. Adopt new policies on "risk coverage" (social insurance, employer health plans, community-based pre-paid plans, HMOs)
6. Alter the organizational makeup of the sector (e.g., change the public/private mix).
7. Expand or contract activities in other sectors that affect health conditions (e.g., increase investment in water supply and sanitation in lieu of or in addition to extending health facilities).
8. Reorient health sector goals to conform to resource limitations (e.g., reduce targets for facility construction).
9. Improve the pricing of services.



LIST A: QUESTIONS TO BE CONSIDERED WHEN POLICIES INVOLVING USER CHARGES ARE EXAMINED

- A. How would households respond to increased user charges?
1. Ability to Pay. Would households have enough income/resources, especially lower income groups, to pay the charges? Would they be able to convert their resources to whatever form—cash or in kind—is required for payment? If special allowances (e.g., exemptions) were made for the poor, how would that affect conclusions for other questions below?
  2. Willingness to Pay. Would those who can pay want to pay? How sensitive would household choices be to fee increases (i.e., what is their fee elasticity of demand)? Would they react differently with respect to (i) choices on whether to seek a service or not and (ii) choices on which provider to go to (e.g., public or private)? Would the fact that fees are only a part of the total cost of households of obtaining services (private costs, e.g., for travel or time, can sometimes be the major share of the total) be important?
  3. For those who cannot or choose not to pay, what would be the consequences? For their health status? For their productivity and income?
  4. For those who can and do pay, what would the effects be? (When they pay more to receive the same amount of services, their consumption of other items must decrease. What would they not consume and would there be any significant adverse impact—e.g., from lowered food intake?)
- B. How would the supply of services be affected?
1. How much in additional resources would become available (both through (i) revenue from fees and (ii) the freeing up of resources that results when those who choose not to pay reduce their utilization of services)?
  2. What would the added resources be used for? Would they be assigned to optimal alternative uses within the sector or be diverted elsewhere?
  3. Would reductions in utilization when charges are raised be offset by increases resulting from improvements in the supply of services? Under what conditions might the user population as a whole, and various subgroups (e.g., the poor relative to the not-so-poor), be better off overall in a welfare sense?
  4. Would changes in how resources are controlled and allocated be required to bring about efficient use of the added resources (e.g., abolish the practice of having all fee revenue go straight to the Treasury)?
- C. Would there be special reasons for not increasing charges (concerning (i) divergences between private and social costs and benefits and/or (ii) the feasibility of administering charges)?
1. What externalities do these services have? How large are they? Is their presence a rationale for not raising fees?
  2. Does the fact that households may have limited information or understanding of either their needs or the potential benefits of some health services make a difference? (E.g., when providers largely determine what services are required, as in inpatient medical care, are charges desirable?)
  3. Are some services essentially "public goods," for which charges would not be workable? (E.g., for environmental interventions like draining malarial swamps, it may not be possible to exclude "free riders").
  4. Would the collection cost or the administrative difficulties be too great.
- D. Overall, would there be net benefits, and would they be large enough to warrant urging governments to assign high priority to developing and implementing new policies?
1. What would be the net effect on:
    - efficiency
    - equity
    - the gap between resource requirements and availability in the social sectors
  2. In which of these three areas would the effect of greatest? Hence, what would be the main justification for the new policies?

Table 1: COMPOSITION OF THE HEALTH SECTOR

Services <sup>a/</sup>	Percent of total expenditure on health <sup>b/</sup>
Curative care 1. Personal services (care of patients) by health facilities and independent providers, including traditional practitioners 2. purchases of medicines	70 to 85
Preventive services: patient related <sup>c/</sup> 1. maternal and child health clinics, at health facilities 2. community health programs (e.g., home visiting)	20 to 10
Preventive services: other 1. disease control programs 2. sanitation 3. education and promotion of health and hygiene 4. control of pests and zoonotic diseases 5. monitoring disease patterns	10 to 5
TOTAL	100

a/ From list in Table 1, exclusive of water supply.

b/ Public plus private. Rough estimates.

c/ The principal services offered in this category (through the outlets listed--maternal and child health clinics and community health programs) are: immunization, oral rehydration therapy, growth monitoring, and promotion of breastfeeding and improved weaning practices. Another likely to be increasingly important in future is hypertension control. Oral rehydration therapy although strictly speaking a curative activity (treatment for diarrhea), can also be considered preventive--and will be here--because it has similar delivery system requirements and is essentially intended not to cure diarrhea but to prevent death from dehydration during diarrheal illness.

Table 3. REVENUE FROM USER CHARGES AS A PERCENT OF EXPENDITURE ON GOVERNMENT HEALTH SERVICES

Country <sup>1/2/</sup>	% of Total Expenditure	% of Recurrent Expenditure	Notes <sup>3/</sup>
Botsiana, 1978	2.5	2.8	
Burundi, 1982	3.3	4	For Health Ministry only.
Colombia, 1980	17.3	28.4	
Ghana, 1976/77	n.a.	3	Total health as a percent of recurrent expenditure. Down from 5% in 1966/67.
Indonesia, 1982/83	12.9	15.5	All levels of government, excluding government employees' insurance scheme.
Jordan, 1982	10.9	13.2	Excludes Royal Medical Service sponsored by Defense Ministry, due to lack of data.
Lesotho, 1980/81	5.2	6	Down from 16% in 1974/75
Malawi, 1982	2.8	3	
Pakistan, 1980/81	1.5	2.5	
Peru, 1981	7.2	8	Percent of total (recurrent plus capital) expenditure. Down from 12%
Philippines, 1981	6.4	6.8	Health Ministry only. Down from 14% in 1978.
Rwanda, 1982	5.7	7	
Sri Lanka, 1982	0.6	0.7	Down from 3.0% in 1974.
Sudan, 1980/81	0.9	1.4	Central government only.
Togo, 1979	n.a.	6	
Tunisia, 1982/83	1.8	2	
Zimbabwe, 1980/81	2.0	2.2	All levels of government, excluding Parirenyatwa Hospital. Down from 10% in 1974/75.

Source: Ainsworth (1964), de Ferranti (1982a), Laurent (1982), World Bank sector reviews and project documents.

n.a. = not available.

1/ For several countries not listed, insufficient data exist to compute a percentage, but other evidence implies that the figure must be either (i) zero because no fees are charged or collection is not enforced, or (ii) very small (e.g., under 2%) because fees are minimal or, again, collections is poor. Countries in this category include Angola, Bangladesh, Bolivia, Cameroon, Egypt, Gabon, Guatemala, Honduras, Jamaica, Liberia, Libya, Mali, Morocco, Nigeria, St. Lucia, Yemen (PRY) and Zambia.

2/ In China, relatively high levels were found in reviews of the following selected areas: Shanghai County (26% for 1980); Yedian County, County Hospital (74% for 1981). See Prescott and Jamison, 1983.

3/ Figures exclude quasi-public institutions (e.g., social insurance schemes).

Table 3. HEALTH SERVICE FEES AND AGRICULTURAL WAGE RATES

Country	Year	FEES <sup>a</sup>				Daily Agricultural Wage <sup>c</sup>	RATIO OF FEE TO DAILY AGRICULTURAL WAGE					
		Outpatient Visit Adult	Outpatient Visit Child	Hospital- Inpatient	In-hospital Delivery		Outpatient Visit Adult	Outpatient Visit Child	Hospital- Inpatient	In-hospital Delivery		
Botswana, 1977		\$ .30	free	N/A	\$ .37							
Burundi, 1983 <sup>j</sup>		\$ .22	\$ .22	\$ 2.20 <sup>e</sup>	N/A	Pula 7.4	\$8.78	.034	0	N/A		.0412
Cameroun, 1983		CFA 600,-	CFA 600,-	CFA 500,- <sup>8</sup>	CFA 5000	F 100	\$1.11	.198	.198	1.98		N/A
China, 1982		Y 1.5-3 <sup>h</sup>	Y 1.5-3 <sup>h</sup>	Y 27-46 <sup>d</sup>	N/A	CFA 600	\$1.83	1.0	1.0	.23		8.333
Indonesia, 1987		\$ .36	\$ .36	N/A	N/A	Y 2/\$1.17	\$1.17	.75-1.50	.75-1.50	13.5-23.0		N/A
Lesotho, 1980		\$ 1.20	\$ .60	\$ .60 <sup>n</sup>	N/A	Rp 400-450	\$ .60-.68 <sup>l</sup>	.529-.6	.53-.6	N/A		N/A
Malawi, 1981 <sup>k</sup>		free	free	free	K 1-3	R 2.8	\$3.60	.33	.167	.167		N/A
Mali, 1982 <sup>l</sup>		MF 0-2500 <sup>e</sup>	MF 0-2500	MF 200 <sup>e</sup>	MF 0-300	K .59	\$0.52	0	0	0		1.695-5.085
Niger, 1981 <sup>j</sup>		free	free	free	N/A	MF500-1200	\$ .74-1.77	.0-5.0	.0-5.0	.157-.4		0-1.6
Pakistan, 1982 <sup>k</sup>		Rs 1.-	Rs 1.-	Rs 5.-	N/A	CFA 712	\$2.17	0	0	.416		N/A
Philippines, 1982 <sup>m</sup>		Pesos .25-5	Pesos .25-5	free	N/A	Rs 12.02	\$1.01	.083	.083	0		N/A
Rwanda, 1977		RwF 20.-	RwF 20.-	RwF 10-100	free	Pesos 18.53	\$2.35	.013-.270	.01-.270	0		N/A
Togo, 1979		N/A	N/A	\$ .50-.70 <sup>n</sup>	\$1.40-2.33	RwF 92	\$1	.22	.22	.11-1.09		0
Upper Volta, 1982 <sup>l</sup>		free	free	CFA 75.-	CFA 100	CFA 337	\$1.67	N/A	N/A	.299-.410		.328-1.395
						CFA350-500	\$1.03-1.18	0	0	.15-.214		.20-

Source: For fees, World Bank Sector Reports and Economic Memoranda. For wages, World Bank country economists and projects staff, except in the case of Malawi and Pakistan, for which ILO data were used.

- <sup>a</sup> Official fees for public facilities, except as noted. Actual charges may differ depending on enforcement and local practice.
- <sup>b</sup> First consultation only; fees for follow-up consultations may differ.
- <sup>c</sup> Estimate of actual minimum wage for agricultural labor, except as noted. Wide intra-country variations exist.
- <sup>d</sup> Average patient charge in selected commune Health Centers in Shengong Province.
- <sup>e</sup> Consultations at public facilities are free of charge; fees are levied by traditional health workers.
- <sup>f</sup> Weekly fee, which includes all services.
- <sup>g</sup> Registration fee
- <sup>h</sup> Daily fee.
- <sup>i</sup> Estimate based on wages paid to workers in the Padat Kenya Program.
- <sup>j</sup> Wage data are for 1982.
- <sup>k</sup> Wage data are for 1980.
- <sup>l</sup> Wage data are for 1983.
- <sup>m</sup> Wage data are for 1981.

Attachment 2

PRICOR Project  
Interim Reports on Country Studies

6. Stevens, C. M. Implementation of Health Care Financing Schemes  
Component of Primary Health Care in the Philippines, un-  
published report (mimeo), American Public Health Associ-  
ation, September, 1983.
  
7. Stinson, W. Community Financing of Primary Health Care, American  
Public Health Association, Washington, 1982.

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Table 2. PRIVATE AS A PERCENT OF TOTAL HEALTH EXPENDITURE

<u>Country</u>	<u>Percentage/1</u>	<u>Country</u>	<u>Percentage/1</u>
<u>Developing Countries</u>			
Afghanistan, 1976	88	Pakistan, 1982	71
Argentina, n.d.	69	Philippines, 1970	75
Bangladesh, 1976	87	Peru, 1982	53
Botswana, 1978	48	Rwanda, 1977	37
China, 1981	32	Senegal, 1981	39
Colombia, 1978	33	Spain, 1976	39
Ghana, 1970	73	Sri Lanka, 1982	45
Haiti, 1980	65	Sudan, 1970	41
Honduras, 1970	63	Swaziland, n.d.	50
India, 1970	84	Syria, n.d.	76
Indonesia, 1982/83	62	Upper Volta, 1982	19
Jamaica, 1981	40	Tanzania, n.d.	23
Jordan, 1982	41	Thailand, 1979	70
Korea, South, 1975	87	Togo, 1979	31
Lesotho, 1979/80	12	Tunisia, n.d.	27
Malawi, 1980/81	23	Upper Volta, 1981	24
Mali, 1981	54	Venezuela, 1976	58
Mexico, 1976	31	Zambia, 1981	50
		Zimbabwe, 1980/81	21
<u>Industrialized Countries</u>			
Australia, 1974/75	36	Norway, 1976	4
Canada, 1975	25	Portugal, 1976	24
France, 1975	24	Sweden, 1975	8
Germany, West, 1975	23	Switzerland, 1975	34
Italy, 1975	9	United Kingdom, 1974/75	7
Japan, 1976	10	United States, 1974/75	57
Netherlands, 1974	29		

Source: Table A-3.

/1 Because sources use different definitions of "private," data for some countries are not directly comparable. See Notes to Table A-3.

Attachment 3

Selected Bibliography of Materials  
at AID, S&T/Health on Health Financing

1. A Joint Government of Senegal, Ministry of Health and Government of the United States, Agency for International Development, End of Project Evaluation of the Sine Soloum Rural Health Services Development Project (No. 685-0210), The U.S. Team Report, 87 pp., July, 1982.
2. Parlato, M., and M. N. Favin, Primary Health Care: Progress and Problems, An Analysis of 52 AID-Assisted Projects, American Public Health, 101 pp., August, 1982.
3. Philippines Primary Health Care Financing Project, Project Paper, 492-0371, July, 1983.
4. Robertson, R. L. et al. Cost Study of Expanded Program on Immunization in the Gambia, unpublished paper (mimeo), 34 pp., January, 1982.
5. Stevens, C. M., Alternatives for Financing Health Services in Pakistan, unpublished paper (mimeo), December, 1983.

Table 2. RECENT TRENDS IN PUBLIC EXPENDITURE ON HEALTH SERVICES

Countries	Public expenditures on health services									
	Per Capita Index (1976 = 100)/1					As Percent of Total Public Expenditure				
	1973	1975	1977	1979	1980	1973	1975	1977	1979	1980
<b>Low-income</b>										
Ethiopia	36.3	116.9	73.9	....	....	2.1	5.9	4.9	....	....
Nepal	53.1	68.3	83.1	91.5	....	4.9	5.9	5.5	5.1	....
Burma	133.1	106.2	103.7	....	....	6.1	6.6	5.9	....	....
Malawi	100.9	104.6	71.3	127.3	136.5	6.9	5.7	4.1	5.3	5.5
Burundi	80.0	103.3	88.5	....	....	6.0	7.2	4.7	....	....
Upper Volta	88.7	72.6	78.8	85.4	....	8.2	6.6	5.3	4.9	....
Rwanda	86.3	103.3	101.5	....	....	5.7	6.5	4.8	....	....
India	....	81.2	80.0	80.6	81.4	....	2.4	2.0	1.7	1.7
Somalia	124.0	108.2	107.2	....	....	6.9	5.9	4.9	....	....
Tanzania	89.2	110.6	106.9	113.9	....	7.0	7.0	7.1	5.4	....
Sri Lanka	89.2	77.4	112.9	....	....	13.0	10.5	11.7	....	....
Niger	....	....	83.1	120.8	128.3	....	....	4.5	4.7	4.1
Sudan	229.6	83.4	94.1	75.8	63.1	5.1	1.6	1.5	1.5	1.4
Ghana	96.3	130.9	60.4	34.2	28.4	7.9	8.3	7.4	6.0	7.0
<b>Lower Middle-income</b>										
Kenya	91.2	98.3	102.3	110.7	111.5	7.4	8.0	8.2	7.2	7.5
Yemen Arab Rep.	....	81.3	115.9	283.8	351.8	....	2.7	2.3	3.4	4.0
Liberia	....	94.3	101.6	116.2	68.1	....	9.3	7.9	6.1	3.2
Honduras	61.1	77.9	66.4	72.8	....	11.7	12.3	8.5	8.0	....
Bolivia	66.7	83.4	104.7	115.4	....	7.8	8.4	8.0	8.6	....
Zambia	103.9	95.0	72.6	81.4	69.5	5.5	4.4	6.2	5.6	4.6
Egypt	....	89.9	109.7	....	....	....	2.7	3.2	....	....
Thailand	68.7	71.6	112.8	131.2	125.6	3.4	3.7	4.7	4.5	4.1
Philippines	54.0	83.7	101.6	89.9	79.2	2.9	3.9	4.6	4.2	3.5
Papua N. Guinea	....	80.4	100.2	104.5	114.0	....	5.3	8.3	4.0	8.7
Morocco	71.2	90.4	93.1	82.0	....	4.7	3.6	3.0	3.0	....
Nicaragua	....	71.2	100.7	82.3	134.2	15.7	3.4	9.6	10.3	14.6
Nigeria	42.0	97.9	86.2	....	....	2.6	2.2	2.2	....	....
Cameroon	....	105.3	90.6	92.1	114.5	....	5.4	4.8	4.3	5.1
Guatemala	101.9	94.7	106.9	111.5	131.1	3.2	8.6	7.6	7.6	10.9
Peru	87.7	88.6	96.6	89.5	86.7	3.5	5.1	5.9	6.1	4.5
Ecuador	94.7	93.2	100.7	139.2	160.5	7.5	7.2	8.2	7.6	8.7
Tunisia	57.5	67.3	120.3	....	....	6.7	6.1	6.9	....	....
Costa Rica	49.7	73.5	75.1	76.3	157.2	3.3	4.5	3.3	2.4	5.1
Syrian Arab Rep.	35.1	103.3	78.2	151.1	157.8	.5	.7	.5	1.3	.9
Jordan	....	92.0	97.9	125.1	....	....	4.1	3.6	4.2	....
Paraguay	96.2	90.6	101.1	139.5	....	3.3	2.8	2.7	2.7	....
<b>Upper middle-income</b>										
Korea	69.1	74.7	168.0	140.6	153.3	1.3	1.0	1.7	1.1	1.2
Malaysia	93.4	103.6	148.3	128.2	....	7.1	6.9	7.4	6.4	....
Paraguay	99.5	108.6	105.9	123.7	....	15.1	14.5	14.5	12.5	....
Brazil	62.6	79.3	113.0	124.0	....	6.8	6.5	8.0	8.5	....
Mexico	90.3	93.6	105.9	115.9	80.6	4.9	4.2	4.4	3.9	2.4
Argentina	74.0	70.9	56.3	37.6	40.5	3.4	2.5	2.7	1.7	1.7
Chile	112.2	100.5	120.2	....	....	8.0	6.9	6.4	....	....
Uruguay	105.9	99.9	103.4	115.5	....	4.8	3.9	3.8	4.7	4.8
Venezuela	77.9	92.6	102.0	89.2	89.7	11.6	9.1	8.0	8.6	8.7
Israel	92.0	104.8	134.9	182.2	125.3	3.3	3.7	4.3	5.1	3.5
Singapore	71.3	90.4	103.2	109.1	121.6	7.3	8.5	7.4	7.0	6.9

/1 Computed as follows. Per capita public health expenditure for each year in local currency was first adjusted by that country's consumer price index to remove the effects of inflation. This result was then divided by the 1976 value to create an index.

Source: International Monetary Fund, Government Finance Statistics.

Table A-1: HEALTH EXPENDITURE INDICATORS

Country	GNP per capita (LSI 1981)	Expenditure on health services					
		Public Only			Public and Private		household
		per capita (US\$)	% of GNP	as % of all Government Expenditures <sup>a</sup>	per capita (US\$)	% of GNP	as % of household income
<b>Low Income</b>							
Kampuchea	...	1.00 (1976)	.3				
Laos, PDR	81	1.00 (1978)	.9				
Chad	110	2.07 (1978)	1.2	4.2			
Bangladesh	141	1.00 (1981)	1.0 (1980)	5.7 (1980)	1.98 (1976)		2.5 - 4 (n.d.)
Ethiopia	140	1.00 (1978)	1.2	4.9 (1977)			
Nepal	150	1.00 (1980)	.6	3.9 (1979)			2 - 5 (n.d.)
Burma	190	1.00 (1979)	.8 (1978)	5.3 (1977)			.8 - 3.1 (1973-74)
Afghanistan	...	1.00 (1978)	.6	4.8 (1980)			
Mali	190	1.17 (1982)	.8	3.1 (1980)			
Malawi	200	2-3.00 (1980)	1.0 (1978)	5.5 (1980)	3.41 (1981)		
Zaire	210	3.00 (1978)	1.0	4.0 (1977)	7.00 (1981)	4.0 (1980)	.2 - .3 (1968)
Uganda	220	4.00 (1978)	1.1	6.1 (1980)			1.1 - 2.0 (1967-72)
Surinam	230	1.00 (1978)	1.0	4.7 (1977)			1.0 - 1.9 (1964-65)
Upper Volta	240	2.50 (1981)	1.4	4.9 (1979)	3.45 (1982)	1.5 (1982)	
Kenya	250	1.00 (1978)	.9	4.8	5.95 (1981)	3.2 (1981)	
India	250	2.00 (1978)	1.2	1.7 (1980)			
Somalia	260	2.00 (1978)	.9	3.2			
Tanzania	260	3.00 (1979)	2.0 (1978)	5.4 (1979)	5.00 (1977)	3.0 (1977)	2.1 - 2.3 (1973-74)
Vietnam	...	1.00 (1978)	.7				
China	300	4.50 (1980)	2.5 (1979)	6.9 (1980)			
Guinea	300	3.00 (1976)	1.2		3.3 (1981)		
Mali	300	5.40 (1981)	.8 (1978)	11.0 (1981)	15.00 (1981)		8.6 (1970)
Sri Lanka	300	5.00 (1979)	1.7 (1978)	4.2 (1977)	14.95 (1982)	5.1 (1982)	1.6 (1973)
Benin	320	3.00 (1978)	1.4				
Central Afr. Rep	320	3.00 (1978)	1.5	7.1 (1977)			
Sierra Leone	320	3.00 (1979)	1.7 (1978)	4.1 (1979)			
Madagascar	330	4.00 (1978)	1.9	8.1			2.2 (1981)
Niger	330	2.00 (1978)	.9	4.6			.4 - 2.8 (1966-69)
Pakistan	350	3.19 (1981)	.9	1.5 (1980)	11.28 (1981)		1.3 (1961-62)
Dominique	...	2.00 (1978)	.6				1.8 - 2.1 (1971-72)
Sudan	380	3.00 (1978)	.9	1.7			
Togo	380	7.00 (1978)	2.1	4.6			
Ghana	400	4.00 (1979)	1.2 (1978)	7.0 (1980)			
							4.2 (1976)
							3.6 - 4.7 (1967-68)
<b>Lower-Middle Income</b>							
Kenya	420	5.00 (1979)	1.9 (1978)	7.8 (1980)			
Senegal	430	6.20 (1981)	1.1 (1978)	5.2 (1981)	14.50 (1981)	3.7 (1975)	.9 - 1.6 (1970-71)
Mauritania	430	3.00 (1979)	1.7 (1978)	2.8 (1979)			2.2 (1981)
Y.R.	450	4.00 (1978)	.7	3.9			
Y.P.D.R.	460	12.00 (1982)	2.6	6.0 (1981)			
Liberia	520	7.00 (1979)	2.4 (1978)	6.1 (1979)			
Indonesia	530	5.00 (1978)	1.0 (1980)	2.5 (1980)	4.00 (1976)	2.8 (1980)	3.2 (n.d.)
Lesotho	540	1.00 (1978)	1.0	7.1 (1981)			
Bolivia	500	8.00 (1978)	.9	6.6 (1979)	5.00 (1974)	1.6 (1979)	1.4 - 2.6 (1972-73)
Honduras	600	7.00 (1979)	2.1 (1978)	8.0 (1979)			
Costa Rica	600	11.00 (1978)	2.5 (1981)	4.6 (1980)			
Egypt	650	4.00 (1978)	1.7 (1977)	3.6 (1978)	13.60 (1981)	5.6 (1981)	.3 - 4.8 (1967-68)
El Salvador	650	6.00 (1979)	1.5 (1978)	3.7 (1980)			.5 (1966-68)
Thailand	720	3.00 (1979)	1.2	4.1 (1980)			1 - 1.5 (1974-75)
Philippines	790	7.50 (1982)	.7 (1978)	3.5 (1980)	15.88 (1976)	4.2 (1975)	2.3 (n.d.)
Angola	...	7.00 (1978)	1.1				2.7 - 5.7 (1971-72)
Papua N.G.	840	7.00 (1978)	1.1				1.8 (1971)
Morocco	860	7.00 (1979)	1.2 (1978)	2.7 (1980)			
Nicaragua	860	13.00 (1978)	1.4	3.1 (1979)			
Nigeria	870	4.00 (1978)	.5	14.6 (1980)			2.9 (1970-71)
Zimbabwe	870	21.20 (1980)	3.4	2.2 (1977)			
Cameroun	880	3.00 (1979)	.8 (1978)	6.4 (1982)	25.25 (1980)	4.2 (1980)	2.5 (1959-60)
							1.9 - 2.5 (1960)
Cuba P.R.	-	41.00 (1978)	3.2				
Congo P.R.	1110	10.00 (1978)	2.0	4.2			
Guatemala	1140	5.00 (1979)	.3 (1978)	10.9 (1980)			
Haiti	1170	32.00 (1981)	2.4	4.5 (1980)	59.00 (1981)	4.5 (1981)	>2.5 (1966)
Ecuador	1180	6.00 (1979)	1.0 (1978)	6.7			3.0 (1977-78)
Jamaica	1180	3.00 (1978)	3.5 (1980)	7.8 (1977)			2.5 (1967-68)
Ivory Coast	1200	14.00 (1978)	1.6				
Dominican Rep.	1260	12.00 (1978)	1.4	9.0 (1979)			1.2 - 3.2 (1957-58)
Togo	-	10.00 (1978)	1.4		14.00 (1974)		4.3 (1969)
Colombia	1380	26.00 (1978)	1.5	6.7 (1980)	51.53 (1977)		
Turkmenia	1420	22.00 (1978)	2.7 (1979)	7.3 (1978)	26.00 (1978)	4.0 (1978)	
Costa Rica	1433	7.00 (1979)	1.2 (1978)	3.1 (1980)			
Korea D.R.	-	3.00 (1978)	.3				
Turkey	1540	8.00 (1979)	2.0 (1979)	3.6 (1980)			
Syria	1570	3.00	.4 (1978)	1.0 (1979)			
Jordan	1620	13.00 (1979)	1.4 (1978)	4.1 (1979)	29.00 (1976)	2.3 (1975)	2.5 - 3.2 (1971-72)
Paraguay	1630	3.00 (1979)	2.5 (1981)	4.5			
							2.1 - 4.6 (1963-64)

Source: Compilation by author from Bank and non-Bank country studies.

<sup>a</sup>Year, if not shown, is same as in previous column.

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## Primary Health Care Operations Research

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Interim Report

No. 1  
October 1984

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PHILIPPINES: Community Financing of Health Services

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### PHILIPPINES PROJECT TRIES COMMUNITY DRUGSTORES

This study in Iloilo Province, Philippines, was designed to: (1) help villagers decide what PHC services they would support financially and how they would raise the necessary funds; (2) help them organize stable, long-term management and accounting systems; and (3) encourage them to use part of their financial resources for preventive and promotive activities. Following a baseline survey, six barangays (villages) were asked to specify what health services they would finance as a community and what kind of financing they would use. Five opted to establish boticas sa barangay (small community-run drugstores); the sixth chose to set up an emergency hospitalization loan fund.

To raise funds, the barangays favored a per-person or per-household fee, to be collected monthly, quarterly, or after each cropping. The fee was usually 1 peso/month (then, P 14 = US \$1); a small amount was sometimes added the first month to generate working capital more quickly. Other approaches included sales taxes on animals and produce, fundraisers such as raffles and community events, and sale of donated commodities. One barangay decided to use a graduated tax based on estimated ability to pay. Fundraising goals ranged from 500 to 2700 pesos, or 0.53 to 3.41 pesos per barangay resident.

All six funds are now active, although none of the barangays collected as much initial capital as anticipated. Nevertheless, the five boticas are in operation, and the hospitalization loan fund has made several loans, all of which have been repaid approximately on schedule.

The boticas are interesting case studies. Stocks are bought at 3% below retail from a drugstore in a nearby town. Each botica carries its own selection of about a dozen, non-prescription drugs, all chosen by the villagers. Although the project staff had suggested cooperative (larger discount) buying, each barangay prefers to buy independently. Because markups are only a few percent, residents can buy stocked items in their communities at about the same prices as in town. Even so, all five barangays are making enough profit on drug sales to meet the inevitable increase in prices each time stocks are replenished. No charge is being made for transportation costs or travel time--trips for purchasing drugs are combined with trips for other purposes.

Although project staff feared that credit sales would deplete working capital, no losses have resulted from such sales.

Stock and financial records are kept by the botica manager, who is the barangay health worker (BHW) or a volunteer. The PRICOR study monitor recently examined the records of several of the boticas and found well-detailed recording of stock inflow and outflow, costs, and profit margin. At the start of the study,

project staff delegated bookkeeping and auditing tasks to barangay residents, such as a teacher or the treasurer of a barangay development committee. However, these people have seemed reluctant to assume these tasks, and project research assistants are serving as auditors until staff can assess the situation.

While the barangays have been successful in meeting the first two objectives of the study, they have shown little inclination to use profits from drug sales to meet the third: financing of preventive and promotive activities. Project staff are therefore encouraging them to raise funds for these activities through other means, at the same time recognizing that such fundraising efforts must be initiated by the barangays themselves. One of the main reasons the barangays have been successful in meeting the first two objectives of the study is that they regard their self-financing system as being under their control rather than something imposed or handed over from outside. For example, the right to select their own stock lists, including specific brands, is very important. Anecdotes suggest that earlier attempts by the MOH to help barangays start boticas failed because the assistance came in the form of donated drugs that the people did not use; they chose instead to travel outside the barangay to buy the brands they preferred.

After the funds have been operating for about 12 months, data will be collected for before/after comparisons of health-seeking behavior and expenditure patterns. This will be done to see if, as hypothesized, community financing of health services results in a more effective and efficient use by the community of the financial and human resources available to them.

\*\*\*\*\*

This study is being conducted by the University of the Philippines in the Visayas Foundation, a non-profit organization affiliated with UP-Visayas, with the cooperation of the National Economic Development Authority (NEDA) through its USAID-assisted Panay Unified Services for Health (PUSH) Project. Further information on the study is available from the principal investigators, Professor Ida Siason and Dr. Trinidad Osteria, PRICOR Project, University of the Philippines in the Visayas, Iloilo City, Panay, Republic of the Philippines, or from Dr. Stewart Blumenfeld, PRICOR staff monitor for the study (Chevy Chase).

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HONDURAS: Community Financing of Basic Health Services

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SURVEY SHOWS COMMUNITY WILLINGNESS AND ABILITY TO PAY FOR HEALTH CARE

Last year the Honduran Ministry of Health (MOH) conducted a household survey in the capital city and in four health regions as part of an operations research project designed to identify alternative means of financing basic health services. The stratified sample survey of 1,017 households (6,353 people) showed that

- o almost 90% of households had reported an illness in the previous 15 days, with an average of 1.8 illnesses per family;
- o almost 50% of the illnesses were treated in the family and of those that were not, 62% were treated through MOH services and 38% through the private sector;
- o the mean expenditure for each illness was \$US 7.50 (median = \$US .75), half of which was spent on drugs;
- o the mean expenditure for illnesses treated only in the family was \$US 2.50 (median = \$US .50), drugs accounting for most of that amount, and
- o costs related to illness constituted 11.4% of total monthly household expenditures.

The survey also gathered information on families' attitudes toward the central government's role in providing and financing health services. Ninety-six per cent of the families surveyed expressed willingness to pay for all consultation and drug costs if the money were kept in the community to improve health services. Two-thirds of the respondents felt that the community should assume a more active role in health services, either independently or in conjunction with the MOH, and nearly three-quarters felt that the community should be responsible for managing its health services funds.

The household survey was supplemented by intensive observation of 25 families, by case studies of existing community financing or cost sharing programs in Honduras, and by interviews with decisionmakers in the community and the MOH.

The household survey and supplementary data have clearly shown that Hondurans are willing and able to assume increased management and financial responsibility for health services within the community, as long as they have a voice in the process.

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As a result of an extensive analysis combined with discussions with MOH officials, four financing alternatives have been identified: (1) quotas (a set fee for services); (2) payment for drugs, (3) contributions of labor for construction and maintenance of health centers; and (4) a "community revolving fund" managed by health committees. A field test of one or more of these alternatives is being planned for 1985.

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This study is being conducted by the Ministry of Health of Honduras and by Management Sciences for Health, a non-profit organization based in Boston, Massachusetts. Further information on the project is available from the principal investigator, Dr. A. Frederick Hartman, Apartado Postal No. 7, Colonia Kennedy, Tegucigalpa, Honduras, or from Dr. Jack Reynolds, PRICOR study monitor (Chevy Chase).



## Primary Health Care Operations Research

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Interim Report

No. 3

November 1984

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### LIBERIA: Community Financing of Basic Health Services

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#### LIBERIAN VILLAGES ORGANIZE TO FINANCE HEALTH CARE

Hard pressed economically, the government of Liberia has found it difficult to ensure that adequate primary health care is available to all its citizens. In Kolahun district in northwest Liberia three villages are participating in an operations research study to help them find ways to pay for part or all of their own primary health care needs. The study is designed to help develop financing schemes which will:

- 1) generate a substantial share of the costs of primary care;
- 2) enlist the participation of a high percentage of village households;
- 3) reach a high proportion of children under five, pregnant women, and lactating mothers;
- 4) be sustainable over the long run by the villagers themselves.

Financial resources and revenue generating potential of the 167 households (1080 persons) in the 3 villages are limited. Data from a baseline survey show that households are moderately large, with an average of close to 6 persons per household. The great majority of households are headed by older males; approximately two-thirds of the household heads are aged 55 and over. Most (72%) have had no formal education; 76% are farmers. Household incomes are low; 70% report an annual household income of less than \$200, and 41% report receiving less than \$100.

On the other hand, the villagers have a tradition of providing a certain amount of labor to the community. Every year, in addition to working their own family plots, farmers in each village donate a portion of their labor to the village communal rice farm; proceeds from these farms are used for community projects. Moreover, the local Gbandi Farmers' Cooperative has already established a district-wide Revolving Drug Fund, and is willing to sell essential drugs at discount prices to villages which set up their own revolving drug schemes.

During the months of April, May and June of 1984 at least four meetings were held with leaders in each of the three villages to introduce and explain the concept of community financing for primary health care. Eight different financing schemes were presented: 1) fee for services, 2) drug sales, 3) personal prepayment, 4) production-based prepayment, 5) income generating schemes, 6) community or individual labor, 7) donation and ad hoc assessments, and 8) festivals, raffles, etc. After discussion of

the advantages, disadvantages, and constraints on each, the eight schemes were compared using a preference matrix. The leaders from each of the villages selected a combination of the same four schemes: 1) drug sales, 2) community labor, 3) production-based prepayment, and 4) ad hoc assessments.

Revolving drug schemes are now being established in each of the villages; initial capital to purchase drugs from the Gbandi Farmers' Cooperative are being raised by assessment. A portion of the proceeds from the communal rice farm will be designated to support PHC activities, and part of the compensation for the trained Village Health Worker in each village will be in the form of community labor on his farm. Moreover, participating households are to contribute a portion of the harvest of their cash crops (mainly coffee and cocoa). From time to time ad hoc fund-raising activities will also be undertaken.

The principal investigator writes: "The whole concept of a community actively taking part in planning how to finance its own health care is new in this area. Government, [religious] Missions or the individuals have always done this exercise. It is particularly exciting to see the zeal with which the concept is grasped by the people. However, the key to success lies in constant supervision (monitoring) during the field testing of these schemes."

A test of the implementation of these financing schemes in the three villages is being monitored by project staff. After the schemes have been operating for about 12 months, data will be collected to assess their progress toward achieving project objectives with respect to revenue, participation, coverage, and sustainability.

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This study is being conducted by staff of the Liberian Ministry of Health in cooperation with the Christian Health Association of Liberia (CHAL), a private voluntary organization based in Monrovia, Liberia. Further information on the project is available from the principal investigator, Dr. Andrew Cole, in care of the Christian Health Association of Liberia, P.O. Box 1046, Monrovia, Liberia, or from Dr. Jeanne Newman, PRICOR study monitor (Chevy Chase).



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Interim Report

No. 4

December 1984

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THAILAND: Community Financing of Primary Health Care

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### PHC REVOLVING FUNDS NUMEROUS AND WIDESPREAD IN THAILAND

Revolving funds have been seen as one way that communities can generate revenue to support primary health care. A PRICOR-funded study is examining existing funds in Thailand to identify characteristics of success and to recommend models that could be replicated throughout the country.

The Ministry of Public Health (MPH) sent a letter to all Tambons (the lowest administrative unit, consisting of a number of villages) asking health officials to identify PHC funds in their jurisdictions. Seventy percent of the Tambons responded and identified a startling 12,010 ongoing funds. Statistical analysis of the data that 4,631 (39%) of the funds provided on follow-up questionnaires, plus case studies of 73 of the funds, showed the following results.

- PHC funds are numerous and widespread. At least 40 percent of the Tambons have PHC funds operating in one or more villages, with many villages having more than one fund. The average ranges from about 3 in the south to 8 in the northeast.
- There is significant regional variation. More funds were identified in the northeast (52%) and north (32%) than in the central (11%) or southern (7%) regions.
- The most common are drug funds (64%), followed by nutrition (25%) and sanitation (12%) funds.
- Most of the funds are relatively young (2-19 months).
- A significant number of funds have diversified and added other PHC activities. For example, many drug funds have added nutrition activities; some nutrition funds promote agricultural production.
- Most PHC funds were established by a District Health Officer, and most are managed by an 8-10 member committee.
- A significant number compensate the fund manager, either with cash or in-kind contributions.
- Most funds operate with a modest working capital (\$70-500), which is often raised by the sale of shares to individuals and households (at \$0.50-\$2.50/share).
- Drug funds are the most profitable. Over 90% reported making a profit, compared to 40-50% of the nutrition and sanitation funds.

- Household contributions to and benefits from the funds are extensive and varied. For example, in the north, 49% of the households contribute to the nutrition fund and 49% receive some benefit from it.

The study identified five types of funds, each of which has somewhat different characteristics.

1. Single-purpose profitable PHC funds, mostly drug funds, tend to enroll and serve large numbers of households and to be profitable.
2. Single-purpose subsidized PHC funds, mostly small, undercapitalized nutrition and sanitation funds, provide services to a limited number of households, and depend on government subsidies.
3. Comprehensive PHC funds, mostly drug funds that added other PHC services (nutrition, sanitation), enroll and serve large numbers of households, have diverse sources of income and are profitable.
4. Multipurpose funds, funds that provide a great diversity of PHC and other services (agricultural loans, retail sales), tend to have high enrollment, activity, service, and profitability.
5. Health Care Funds, prepaid curative health insurance schemes, usually have high levels of household participation and health service utilization. A single annual payment (about \$10) per household entitles family members to medical care at government health posts, clinics and hospitals--up to eight illness episodes per household.

Successful funds appear to have certain common characteristics:

- |                            |  |
|----------------------------|--|
| ● strong leadership        | ● high profit rate                       |
| ● a compact village        | ● diversified sources of income          |
| ● compensation of managers | ● diversified services                   |
| ● active health officer    | ● high levels of household participation |
| ● some external assistance |  |

Although a final report on this phase of the study has not yet been prepared, the study has already had a policy impact. Citing the findings on the relative success of drug funds and diversification, the MPH is now encouraging existing profitable drug funds to diversify. Also, the Thai Cabinet is debating the possibility of using community funds as a central mechanism for financing health care and other services in rural areas.

The second phase of this study calls for field testing of one or more model revolving funds in each of the four regions of the country.

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This study is being conducted by the National Economic and Social Development Board (NESDB) in collaboration with the Ministry of Public Health, and with the assistance of a health economist from the Harvard Institute for International Development. For more information on this project contact Ms. Orathip Tanskul, Director, Social Programs Division, NESDB, 962 Krung Kasem Road, Bangkok 10100, Thailand, or Dr. Jack Reynolds, PRICOR study monitor (Chevy Chase).

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Interim Report

No. 6  
February 1985

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NIGERIA: Community Health Workers

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### STUDY EXPLORES WHY VHW'S DROP OUT

In January 1984 the Christian Reformed Church of Nigeria (CRCN) began a 2-year operations research study to find out why so many workers were dropping out of the CRCN village health worker (VHW) program in Gongola State. Of the 70 workers who had been trained and placed in 12 villages since 1967, only 4 were still on the job in 1982.

The first part of the study was a survey of 42 of the VHW's trained before 1983, most of whom had left their village posts. Preliminary results show that:

- The median length of service among those now working as VHW's is 5 years.
- The median length of service of all VHW's was 3 years for men and only 1.5 years for women.
- Among those who dropped out, nearly one-half left to work as health professionals elsewhere, while the rest returned to farming or housework.
- Those who found better health jobs elsewhere tended to leave somewhat sooner than those who returned to farming or housework (2 vs. 2.5 years).
- Education does not appear to have influenced the duration of service, for either men or women. However, among the dropouts, the workers with more education tended to find better health jobs elsewhere, while those with less education tended to return to farming or housework.
- Earnings appeared to be a major factor in retention: the median duration of service among those earning less than N10 (about \$13 U.S.) per month was only 2 years for men and 1 year for women.
- The presence of any other health facility, (i.e. pharmacy or dispensary) within 6 kilometers of the village health post reduced the median duration of VHW service to only 2 years.

Some of these results were unexpected. For example, the investigators had expected that women would tend to remain on the job longer than men. Instead, the average length of service among the women was only one-half that of the men. Those with more education were expected to drop out more rapidly. In fact, almost as many of the less educated workers also dropped out. These findings suggest that it is not necessarily better to choose candidates with fewer opportunities to advance in the health field, i.e. women and/or the less educated.

Other results point to the importance of incentives to encourage VHW's to stay on the job: among the workers interviewed, earnings of less than N10 per month appeared to be insufficient. Moreover, a competing source of drugs or health care nearby also tended to increase the dropout rate.

The investigators plan to again interview a smaller group of the dropouts to clarify their reasons for leaving village health work. Special attention will be given to those who returned to farming or housework, since it might be easier to retain those workers than the better educated ones. Interviews are also planned with village health committees and female village leaders, and with participants in several other church-related village health programs in rural Nigeria. After the investigators have determined the key factors that account for VHW retention and have identified possible solutions to the problem, they will evaluate those solutions and field test the most promising ones.

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This study is being conducted by the Christian Reformed Church of Nigeria (CRCN) Rural Health Program, a non-profit organization based in Wukari, Nigeria. Further information on this study is available from the principal investigators, Mr. James Ciroma and Dr. Herman Gray, P.O. Box 30, Wukari, Gongola State, Nigeria, or Dr. Jeanne Newman, PRICOR study monitor (Chevy Chase).



Primary Health Care Operations Research

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Interim Report

No. 7  
March 1985

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EGYPT: Commodity Distribution

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### STUDY REVEALS DEMAND PROBLEM IN ORS DISTRIBUTION

Contrary to expectations, a PRICOR study in Egypt has found that the problem in a government oral rehydration salts (ORS) distribution system is one of demand rather than supply. In January 1984 the Egyptian Ministry of Health began a 21-month operations research study of their system for distributing ORS to rural communities in two widely separated districts. The study examined the flow of ORS from importation or production to the distribution of the packets to villagers from both government and commercial outlets. In addition, a survey was conducted of knowledge, attitudes, and practices of health providers (physicians, nurses, pharmacists) and caretakers of children under 5 about the treatment of infant and child diarrhea and dehydration.

Preliminary data show that supplies of ORS are adequate in both government village health facilities and village commercial outlets. However, demand for ORS is quite small. This results in unused government stocks of ORS in the villages and, in the private sector, reduced production for commercial distribution. The findings suggest that supply is not a problem, but demand and inventory control are.

Demand. The Ministry of Health has already initiated educational and social marketing programs to stimulate demand for ORS. Preliminary results of the PRICOR study show that such activities are important and can be successful. For example, the study found that in the district where health center staff had received special education about ORT, 95 percent or more of the diarrhea cases registered at these centers had been appropriately treated with ORS. On the other hand, in the district without such an educational program, only 60-70 percent of the diarrhea cases had been treated with ORS. Moreover, none of the pharmacists surveyed in either district recommended ORS for diarrhea, although all reported selling ORS when physicians had prescribed them. Because many mothers seek advice from pharmacists, these results suggest the importance of adding special ORT educational programs for pharmacists along with those for health center staff.

Inventory control. Stocks of ORS have been piling up in many of the village facilities, in some cases for periods exceeding the shelf life of the packets. To monitor inventory more closely, the management information system needs to be strengthened. An improved system would help government distributors keep better track of existing inventories, reduce wastage, and

meet existing demand more efficiently. It would also make it easier to plan for expansion of inventories as additional educational and social marketing efforts lead to increased demand.

Beginning in April 1985, the Ministry expects to field test one or more of the alternative strategies that emerge from the study findings. Final results should be available by September 1985.

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This study is being conducted by the Strengthening of Rural Health Delivery (SRHD) Project of the Egyptian Ministry of Health. Further information is available from Dr. A. Nagaty, SRHD Director, and Dr. Y. Tawfik, principal investigator, Nutrition Institute Building, 16 Kasr El Aini Street, Cairo, Egypt, or from Dr. Jeanne Newman, PRICOR staff monitor for the study (Chevy Chase).



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Interim Report

No. 8

May 1985

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DOMINICAN REPUBLIC: Oral Rehydration Therapy

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### PRICING STRATEGY FOR ORS DEVELOPED

The Public Health Secretariat in the Dominican Republic has provisionally accepted a pricing policy for packets of oral rehydration salts (ORS) based on the recommendations of an economic pricing study funded by PRICOR. As part of a larger study of ORS distribution in the Dominican Republic, a study was undertaken to determine the best price to charge for ORS packets. The study included two parts: a theoretical pricing model, which assumed a two-tier pricing system, and a statistical section describing how actual data were used to determine the best pricing strategy. The principal operational problem was to determine a price that was high enough to cover most costs and a small margin for the retailers, yet low enough to be affordable.

The study recommended a price of R.D. \$0.25 (approximately \$0.08 in U.S. currency) for the low and moderate income market, and a price of R.D. \$1.00 (approximately \$0.30 in U.S. currency) for the high income market. Approximately 6.5 million packets would be made available each year. This would be enough to provide universal coverage in the Dominican Republic, assuming four ORS packets per episode of diarrhea. The private pharmacies would provide about 25 percent of the packets and the government 75 percent. The Public Health Secretariat has made tentative plans to import a limited number of ORS packets, selling them through a special system of public pharmacies at the lower of these two prices. At the same time, locally produced packets, which have higher production costs, are now selling at or above the higher of the recommended prices in commercial establishments in the larger cities. Thus, the pricing system to be adopted would be similar to what the pricing study recommended.

The recommended price would require an annual subsidy from the government of R.D. \$730,000 (U.S. \$234,000) but would yield a profit for the private sector of R.D. \$90,000 (U.S. \$27,000). By raising the lower price to R.D. \$0.30 the deficit would be reduced to R.D. \$400,000 (U.S. \$120,000) and the private sector profit would reach R.D. \$830,000 (U.S. \$249,000). The author of the pricing study recommended taxing some of the lower priced, imported packets, which would then be resold in the higher-priced market. The tax proceeds could help finance the ORT program and reduce the deficit. The administrative problems in carrying out this recommendation were so great, however, that it was rejected as impractical. The Secretariat also decided to distribute packets free of charge to indigent families so that they would not be cut off from access to treatment with oral rehydration salts.

The pricing model described in this study can be run rather quickly to test the effects of different assumptions and prices. However, it requires sophisticated computer programs, as well as data on past consumption, income, and prices of ORT envelopes.

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This study was conducted by the San Juan consulting firm of Clapp and Mayne, Inc. in cooperation with the Secretariat of Health and Social Assistance in the Dominican Republic. Further information is available from José A. Herrero, Km. 25, Autopista Duarte, Santo Domingo, R.D.; from Alan Udall, principal investigator, Clapp and Mayne, Inc., 1606 Ponce de León Avenue, San Juan, P.R. 00909; or from Jack Reynolds, PRICOR study monitor (Chevy Chase).



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Interim Report

No. 9

May 1985

### MEXICO: Commodity Distribution/Oral Rehydration Therapy

#### PROFAM DECIDES TO PRODUCE AND MARKET ORS PACKETS NOT TABLETS

As the first phase of a larger study, PROFAM of Mexico conducted a market survey to determine the feasibility of marketing and distributing oral rehydration tablets in Mexico. To encourage more widespread use of oral rehydration therapy (ORT), Mexican health agencies have heavily promoted the use of oral rehydration salts (ORS) packets as a more practical alternative to the traditional pre-mixed liquid form that has been on the market for many years. PROFAM conducted a survey of pharmacy owners to gauge sales of ORT products throughout the country and to obtain their reactions to the possible acceptance by the consumer of an inexpensive, easy-to-use oral rehydration tablet, produced according to the WHO formula.

The survey was conducted in Mexico City (55 pharmacies) and in cities in both the hot region (30 pharmacies) and the temperate region (31 pharmacies) of the country. Analysis of the survey results shows that

- o almost all the pharmacies (99 percent) sell oral rehydration products and report good sales volume;
- o oral rehydration products are prescribed by private doctors (according to 33 percent of the respondents), but over half the pharmacies sell the products without requiring medical prescriptions;
- o buyers, most of whom are women, use the products correctly to treat diarrhea in babies and children;
- o there is confusion among pharmacy personnel as to how the products should be used; only one supplier provides this information;
- o prices for the products are probably too high for many consumers who need them: 110-141 pesos per 500 ml bottle; or US\$ .73-.94 (at the July 1983 exchange rate);
- o demand is higher in the spring (57 percent of replies) and in summer (42 percent);
- o liquid is the best seller (representing 99 percent of demand);
- o existing products could be improved, e.g. by adding flavoring;

- o the advantages of tablets are their ease of use and lower cost; the disadvantages are the high probability that they would be used with contaminated water, and the difficulty in dissolving them;
- o 48 percent of the respondents said that granule packets are better suited to consumer needs than tablets (33 percent); 19 percent had no opinion on this question.

The investigators emphasized that these results are the opinions of pharmacy owners and do not necessarily represent those of consumers.

Based on the study results and subsequent discussions, PROFAM decided not to proceed with the production of such OR tablets, for two reasons: cost and suitability. The cost of producing tablets is higher than that of producing granule packets. And since the PRICOR study did not show that tablets are better suited to consumer needs than granule packets, PROFAM decided to produce and market ORS packets instead of tablets. For convenience they will prepare packets which can be dissolved in an 8-ounce glass of water rather than in a 1-litre container (for which the existing granule products are packaged). PROFAM will begin manufacturing the packets as soon as they receive Government approval.

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This study was conducted by Promotora de Planificacion Familiar, A.C. (PROFAM), a non-profit Mexican private association. Further information on the study is available from Ing. Luis de la Macorra, President, PROFAM, Apartado Postal 34, El Pueblito, 76900 Villa Corregidora, Queretaro, Mexico, or Dr. David Nicholas, PRICOR study monitor (Chevy Chase).

### BRAZIL: Oral Rehydration Therapy

#### TRADITIONAL HEALERS DELIVER ORT

In rural northeastern Brazil, mothers of children with diarrhea seek out traditional healers as the first source of care. A PRICOR study is finding that these healers could form the most important element in preventing and treating dehydration. The objective of the study, conducted by faculty from the Maternidad of the University of Ceara and the University of Virginia, is to determine how best to mobilize and integrate traditional healers into the official health system to clinically manage diarrheal illnesses and to deliver oral rehydration therapy (ORT).

Phase I of the study (problem analysis) is based in part on data from a baseline community study of knowledge, attitudes and practices regarding diarrhea; an ethnographic analysis of the health service system; a baseline mortality survey; in-depth diarrhea illness episode interviews, and an analysis of traditional teas used to treat diarrhea. The analysis has revealed some interesting findings on the incidence of diarrhea in the region and the potential of using the traditional healers to deliver ORT:

- Mothers in Ceara stop breastfeeding early either because they go back to work or because they believe that formula milk is better.
- The infant mortality rate is almost 150/1,000, with half of the deaths due to diarrhea.
- There is a 5 percent case fatality rate for children with diarrhea who are brought to a typical regional health center.
- Mothers experience serious problems with the modern health care system: long waits, extensive travel, expensive and improperly prescribed drugs. Often they are not advised to use oral rehydration therapy.
- Each healer generally serves 50 to 100 households in his or her neighborhood; this is shown by carefully drawn village maps color-coded to identify the homes of the traditional healers and the homes that report that they regularly seek help from those healers.
- Seventy-six percent of mothers seek out the traditional healer as their first source of care.

The practice of the traditional healers (resadeiras) is based in folk Catholicism, herbalism, and Iberian and African traditional healing. The healers do not charge for services, believing it would be wrong to charge for

saying healing prayers that come from God. They are dedicated, available 24 hours a day, 365 days a year and display a warmth and love for their clients that could be an example for modern medical practitioners.

The diagnosis of diarrhea by mothers or traditional healers is straightforward. Because they consider diarrhea a manifestation of "fright disease," "evil eye," or "disease of childhood," they believe that traditional remedies are as necessary as ORT. Researchers and traditional healers held group meetings to discuss the signs of dehydration. The healers emphasized that, when dehydrated, the child becomes weak or "soft" (i.e. loses muscle tone), a sign not strongly stressed in pediatrics although it is an early symptom even before loss of skin turgor or dry mouth.

The healers have traditionally used herbal teas to treat diarrhea. The electrolyte content of the traditional herbal teas has been tested, none of which showed any significant salt content. One very popular herb is being tested in the University of Virginia labs for anti-secretory and anti-bacterial activity.

During Phase II of the study (solution development) the research team worked with the traditional healers to develop a strategy to involve them in the promotion and use of ORT. Phase III, the testing of the strategy, began in October 1984. Study team members taught traditional healers to prepare glucose/salt solutions and gave them water filters and measuring devices. The first "curing room" was completed for one of the healers and construction begun on others. The healers are now managing diarrhea with ORT. Electrolyte testing of glucose/salt solutions that healers prepared showed the solutions to be extremely accurate and salt and sugar concentrations close to ideal.

Experience to date has shown that the healers are conscientious, dedicated, and very willing to work with the modern health sector. They are meticulous in preparing the glucose/salt solution and promote its use with strong, quiet zeal. It would appear that healers of this kind can play a very significant role in presenting and treating dehydration. PHC program managers might consider the feasibility of using traditional healers for many types of village health work.

Over the next 10 months this study will continue to test and modify the strategy for involving traditional healers in ORT. In addition, the researchers will evaluate the percentage of diarrheal cases treated by traditional healers with ORT, the prevention of dehydration, and the changes in mortality rates. They will also develop a management plan for expanding the program elsewhere in the State of Ceara.

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This study is being conducted by the Division of Geographic Medicine in the Department of Medicine of the University of Virginia in cooperation with the Maternidade Escola Assis Chateaubriand, Federal University of Ceara, Brazil. Further information is available from Dr. Marilyn K. Nations, principal investigator, Box 485, School of Medicine, University of Virginia Medical School, Charlottesville, VA 22908, Maria Auxiliadora de Sousa, Caixa Postal 1674, Aldeota 60.000 Fortaleza, Ceara Brazil, or from Dr. David Nicholas, PRICOR study monitor (Chevy Chase).