Health Sector Reform and Priority Services

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PHR seeks to improve people’s health in low- and middle-income countries by supporting health sector reforms that ensure equitable access to efficient, sustainable, quality health care services. PHR advances knowledge and methodologies to develop, implement, and monitor health reforms and their impact, and promotes the exchange of information on critical health reform issues.

In partnership with local stakeholders, PHR promotes an integrated approach to health reform and builds capacity to support:

△ policy decisions made on the basis of more effective policy processes in health sector reform;

△ more equitable and sustainable health financing systems;

△ improved incentives within health systems to encourage agents to use and deliver efficient and quality health services; and

△ enhanced organization and management of health care systems and institutions to support specific health sector reforms.

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sector-wide health reforms that many countries around the world are undertaking pose both challenges and opportunities for priority health services that strike at major causes of maternal and child mortality, inadequate family planning practices, rapid spread of HIV/AIDS, and other infectious diseases. Reforms can affect many aspects of the health system: the way that health service delivery is organized; whether central or local officials are in charge; how much competition exists; incentives and regulations facing health care providers in the public, private, and NGO sectors; whether or how much providers are paid for the preventive and curative health care they deliver; and whether priority services are in government-sponsored “essential care packages.”

For these reasons, providers and advocates of priority services need to understand, and cannot ignore, health reform in the countries in which they are working. Together, or one by one, these reforms can introduce new incentives and give a new impetus to expanding access to high-quality priority services, to broadening and institutionalizing advocacy groups, and to assuring a more diverse and reliable resource base to maintain and improve priority health care.

Shared reform goals. Most countries carrying out health sector reforms have the same goals for improving access, equity, efficiency, quality, and sustainability across all services that supporters of specific health services have always sought. Partnerships for Health Reform (PHR) has found that health sector reforms — when properly designed and implemented — can improve the performance of the health system so that it provides higher quality services for more people, both poorer and better-off households. This includes priority health care services that most reduce the burden of disease from maternal, reproductive, and child health problems, from HIV/AIDS, and from other infectious diseases. Sector-wide reforms can also improve efficiency and sustainability in ways that result in more affordable priority health services that can survive temporary shifts in a country’s economic or political situation.

Well-designed and executed health reform can achieve the following results:

- When services are delivered more efficiently, access can be expanded, health workers can serve more people and/or better quality care can be provided for the same resources.
- When sustainability is improved, the successes achieved today — the higher utilization or contraceptive prevalence rates or immunization coverage or expanded use of bednets — can be continued into the future instead of collapsing as soon as donor funding stops.
- When equity is improved, the poor and underserved can have the same access to priority health services (and use them as often as needed), as better-off households who face fewer obstacles to health care.
- When quality is improved, people have greater incentive to use priority health services and the services are more likely to improve health status.

Reforms can help priority health services through two main approaches, by focusing directly on strengthening the particular service and by creating an enabling environment in the broader health system. The first approach is the more traditional one and needs to be continued. But experience has revealed the second approach as an essential missing ingredient for the long-run effectiveness of attempts to improve specific services for specific target population groups.

**Health Sector Reform and Priority Health Services** is designed to show ways these two approaches can work in tandem to save lives, achieve desired family size, and stop the spread of infectious diseases threatening large majorities of the population in developing and transitional countries. The series will present examples of work that PHR is conducting through its technical assistance to countries and through applied research and special initiatives related to health sector reform and priority health services. It will illustrate ways health sector reforms that improve policy, financing, organization, management, and incentives can open new opportunities to improve priority health services. The series will also highlight key tools and methodologies that help frame the policy agenda, identify options, and craft solutions.

- Charlotte Leighton, Ph.D.
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Safe Motherhood
Reforming Maternal and Reproductive Health Care

Motherhood-related afflictions are the biggest cause of sickness and death among women between the ages of 15 and 44 in developing countries. Of the 585,000 women who die worldwide from complications of pregnancy and childbirth each year, 99% live in developing countries. Another 15 million women have chronic health problems after childbirth, and 64 million women suffer dangerous complications from pregnancy.

Recognizing the gravity of this situation, the United States Agency for International Development (USAID) has made sustainable reduction in maternal mortality one goal of its five-pronged approach to stabilizing world population and protecting human health. To reach this goal, its Center for Population, Health and Nutrition is promoting increased use of maternal health services, including safe pregnancy, care of newborns, women’s nutrition, family planning, and other key reproductive health interventions.

Expanding the Reform Agenda

PHR is working with the Center’s Office of Health and Nutrition to improve the policy environment for effective financing and use of resources for maternal and reproductive health. Activities under this Maternal and Reproductive Health (MRH) Initiative are gathering information about costs, financing, and effectiveness of maternal health services to help decision makers design and implement more efficient and better quality MRH services. PHR activities are also designed to enhance host-countries’ capacity to collect, analyze, and use information on costs and alternative financing mechanisms for MRH services.

Over the past decade, the world has made progress defining issues and clinical solutions to decrease maternal mortality and morbidity, but these rates remain high in many countries. One reason may be that past efforts have centered on clinical approaches alone such as life-saving skills training for physicians, nurses, and midwives or reduction of anemia. Combining clinical approaches with key health sector reforms — for example, new ways of raising and allocating financing and other resources, new organization and management methods — can improve the results.

PHR is working to expand the reform agenda for maternal and reproductive health to identify and remove financial, management, and policy barriers to effective financing, delivery, and use of maternal and reproductive health services. This approach combines basic reform with continued emphasis on improving both clinical knowledge and quality of care. By uncovering root causes of poor performance, the MRH Initiative addresses maternal mortality and morbidity comprehensively for sustainable results.

Removing Barriers to Providing and Using Services

Policies to increase availability and use of maternal and reproductive health services must be targeted to lower or eliminate barriers that both providers and consumers face.

All families want their mothers, newborns, and other members to be healthy, but not all of them use maternal health services. Some of the barriers they face include: limited income, earnings fluctuations in the absence of any family savings cushion, dissatisfaction with service quality, lack of decision-making power among mothers over health matters, and inability to reach service delivery points. Barriers that providers face include: inadequate resources, lack of knowledge about allocating current health resources efficiently, and
A Second Opinion on C-Sections Counts

A “second opinion” before a cesarean section can save money for the health care system. Contrary to long-held belief, a previous C-section does not always rule out a successful vaginal delivery.

The cost savings from reducing the number of C-sections performed have been proven in the United States, but this type of analysis has been limited in the developing world. That is why a study at the Isidro Ayora Maternity Hospital in Quito, Ecuador, in May 1996 is particularly interesting. Funded by the Canadian International Development Agency, the project was carried out by the Population Council and administered by the World Bank. At the request of the World Bank, PHR analyzed the cost data.

Estimating the Costs of C-Sections
Estimates for each patient were based on the costs of the second opinion and delivery stages. Costs of the second opinion were based only on labor costs — the number of minutes each type of personnel spent with a patient. For estimates of the delivery, costs of equipment and personnel were included. Data on supplies had not been collected for each patient.

Sixty maternity patients entered the hospital during the investigation. All of them were assumed to be at risk for a C-section, but only 46 of them received a second opinion. These 46 patients made up the sample group.

Cost Savings from a Second Opinion
Of the 46 patients who received a second opinion, 11 (24%) had undergone a previous C-section. Eighteen (39%) had a vaginal delivery, and 28 (61%) patients had a cesarean delivery after the second opinion.

The results speak for themselves. Screening 46 women cost $0.85 each, $39.10 for the group. The 18 C-sections avoided saved $14.70 each, $264.60 for the group. The net savings for the month thus amounted to $225.50, $2,706.00 over a year, assuming the utilization rate in May was representative. Avoiding C-sections also reduced patients’ recovery time; reducing time spent in the hospital and lowering additional health care expenses were not covered in this study.

Policy Relevance
Most people would agree that seeking a second opinion on any major decision counts. Before any major surgery, a second opinion has become routine in the United States. The cost savings documented at the Isidro Ayora Maternity Hospital could guide health care givers in other parts of the developing world. Whenever services are delivered in a more cost-effective manner, health workers can serve more people and provide better quality for the same resources.


uncertainty about cost-effective alternatives for delivering and combining services.

Some of the key cost and financing issues include:

▲ How much does it cost to deliver MRH services under different service delivery models in different settings? Could resources be used more efficiently and with better quality results?

▲ What is the cost-effectiveness of different approaches to reducing maternal mortality and morbidity in specific settings? What is the most cost-effective setting for providing the various maternal and reproductive health services?

▲ What are the key determinants of service use? How much does willingness and ability to pay for fees, medicines, transport and other costs influence mothers’ use of MRH services? How can use be encouraged through better financing policies?

▲ What combinations of financing methods — government budget, fees, insurance — are the best ways to pay for MRH services?

▲ What roles are appropriate for government and for private actors in providing and paying for MRH services?
Costing Services to Improve Value

Knowing the costs of MRH services is important for a number of reasons, including providing decision makers with information on how to make the best possible use of limited resources to improve maternal health results. PHR’s work is producing specific information on how and why costs vary between facilities; how much could be saved by more efficient use of staff and other resources; and what costs mothers and families face to use the available services (see “Ecuador: A Second Opinion on C-Sections Counts” on page 4 and Uganda article, page 7).

PHR is assessing costs in several countries with different health care systems and problems (for examples, see “PHR Focus on Maternal Health Services” below). Having a range of unit cost estimates for key maternal health services in a variety of settings across countries will expand the currently quite limited knowledge of what it actually takes to pay for maternal health care in developing and transitional countries, on the part of providers and users of the services. This cross-country information should contribute to the international discussions about the affordability of increasing access to quality maternal care around the world.

Finding Financing Alternatives

Most of PHR’s cost studies address financing policy issues as well. For example, knowing the costs of providing and using maternal health services can also help managers decide how to price services and to gauge how much of their costs they can recover through user fees, prepayment, or insurance without compromising maternal health care. Two of PHR’s maternal health activities focus specifically on financing reforms: National Mother Child Health Insurance in Bolivia (see page 19) and user fees and contracting incentives in Uganda (see page 7).

Building Local Policy Capacity

To ensure that PHR’s activities fit the local health policy context, local providers and policy analysts have been encouraged to join in the work. PHR meets with donors, local counterparts, and in-country research institutions to help shape the design of each cost and financing study, identify key beneficiaries of the analysis, and ultimately guide the development of policy recommendations based on study findings.


PHR Focus on Maternal Health Services

PHR’s work in maternal health care is designed to improve the policy environment for effective use of resources for key maternal and reproductive health services; provide state-of-the-art knowledge and tools in costing and financing; and increase understanding of costs and financing alternatives for action by the international health care community, local counterparts, and decision makers.

**Ecuador.** An evaluation of World Bank data on cost-cutting via a second medical opinion before a cesarean section. (See “Ecuador: A Second Opinion on C-Sections Counts” on page 4).

**Uganda** (see page 7), **Ghana, Malawi.** Three cost and three demand studies of maternal care delivered by western and traditional practitioners in public and private settings; and a synthesis of findings and their dissemination through workshops, policy dialogue, and involvement with research teams. In the process, PHR has hired, trained, and supervised three local research firms in the data collection and initial analyses of cost studies.

**Benin, Mali, Senegal.** Rapid analysis of three Safe Motherhood pilot projects in West Africa, focusing on cost, financing, and effectiveness of these projects.

**Bolivia.** A cost study of a maternal child health (MCH) insurance package and an evaluation of the National Mother and Child Health Insurance Program (known by its Spanish acronym SNMN). Also, work with the Bolivia Ministry of Health to modify its insurance system in light of study findings. In the process, PHR hired, trained, and supervised local researchers in data collection, analysis, and development of a strategic framework for improving SNMN. (See page 19.)

**Indonesia.** Analysis of Family Life Survey (FLS) data sets on financing and use of maternal health services.
Countries engaged in health sector reform often make significant changes in the way health services are organized and managed. Decentralization, introduction of managed competition, expanded use of private sector health providers, and establishment of hospital boards and local health committees are among the most frequent changes. At the same time, reform initiatives are strengthening other, more traditional efforts to improve supervision, drug supply and logistics, and local capacities to plan and implement cost-effective approaches. When well designed and executed, these organizational and management reforms can cut costs without compromising quality, provide more efficient service delivery models, and make more health services available to meet the priority health needs of households and communities.

This section highlights reforms designed to improve the organization and management of priority health service provision. The first article presents a study that reveals areas for improving efficiency and financing at Uganda’s best maternal health care facilities. The second describes a cost, financing, and cost-effectiveness study of Bangladesh’s Expanded Program of Immunization. Both studies provide evidence that management improvements might increase efficiency and sustainability without hurting quality.
The findings of a new PHR study shed light on several efficiency and financing issues that the Ugandan Ministry of Health (MOH) is facing in its efforts to strengthen maternal health services throughout the country. The issues are illustrative of many of those that ministries with limited resources and ambitious plans for maternal health are trying to tackle.

PHR compared provider and consumer costs of maternal health services provided by a public and a mission hospital, by a public and a mission health center, and by 17 private midwives and 20 traditional birth attendants (TBAs) in Uganda’s Masaka District. Six services were covered: antenatal care, normal deliveries, cesarean deliveries, post-abortion care, and complications from postpartum hemorrhage and eclampsia. The four health facilities are known to be among the best managed and well-stocked in the country.

**Costs of Maternal Health Services**

Total estimated (direct and indirect) operating costs of routine maternal health services in the four health facilities were less than $7.00 for antenatal care, ranging from $2.21 at the public health center to $6.43 at the mission health center. Normal deliveries ranged from $2.71 at the public health center to $33.90 at the public hospital. Costs were higher for obstetrical complications, reflecting the use of more materials and more highly trained personnel. A cesarean section, for example, cost from $73.10 (public hospital) to $86.48 (mission hospital). For comparison, the World Bank in 1993 estimated the costs of antenatal and delivery services at $90.00 per case.

Services provided at hospitals cost more than elsewhere, reflecting greater use of drugs and expensive equipment and higher employment of skilled personnel. The mission health center, however, had higher costs for antenatal care ($6.43) than either the public hospital ($4.18) or the mission hospital ($5.20) because a physician rather than a nurse midwife conducted antenatal clinics there.

In normal deliveries and eclampsia, the most important cost was personnel time. For the other four maternal health services, material costs accounted for more than half of direct costs. Indirect costs of support staff time, nonpatient contact time, and prorated shares of maintenance and utilities ranged between 20% and 60% of total costs.

**Provider Efficiency**

These case studies provide some indications of the relative efficiency of the various providers in the sample. Differences in their costs reflect different mixes of staff and medications, and other materials, in relation to the number of women using their services.

For example, the two mission health facilities had higher material costs than the two public health facilities, while the public hospital had higher personnel costs for four of the six services.

The number of deliveries performed per midwife at the various facilities reflected differences in utilization levels relative to staffing, and did not approach the institutional norm of 180 to 250 deliveries a year (15 to 20 per month) for three out of four facilities. Midwives at the public hospital delivered 39 babies per year. In the public health center, however, midwives delivered 116 babies a year and employed a second midwife to cover nights and leave time.

**Provider Quality**

In attempting to evaluate quality, the investigators found differences in available resources at the various facilities along with some differences in process. The public hospital had laboratory equipment, for example, but did not always run lab tests when needed. The two mission health facilities had more key drugs available and performed more lab tests than the public health facilities. While the public hospital had most key drugs and equipment, the public health center did not. Only about half the patients at the public facilities said they had received prescribed drugs at the public facilities,
while all mission clients said they had received the drugs prescribed for them. The study did not include observation of prescribing practices to see whether drug availability encouraged over-prescribing. The majority of private midwives had key drugs and equipment for antenatal care and normal delivery, unlike the public health center. The TBAs, on the other hand, had few drugs and little equipment.

**Consumer Costs**

Based on exit interviews, patients paid fees ranging from $3.00 or less for an antenatal care visit at the four health facilities, from $0.70 (public health center) to $18.26 (mission hospital) for a normal delivery, and from $6.09 (public hospital) to $48.80 (mission hospital) for a cesarean section. Such “user fees” were often lower than the patient’s other care-related expenses such as transportation, food, and outside drugs and supplies. For antenatal care, for example, typical transportation costs ($0.56 to $1.26) exceeded user fees at all facilities but the mission health center.

**Cost Recovery**

Because patients generally paid much higher fees, the mission facilities studied usually recovered a higher proportion of their costs than did public facilities. For example, the mission hospital recovered 55% of normal delivery costs, against recovery rates of 23% at the public health center and 13% at the hospital. The mission hospital recovered 56% for cesarean deliveries compared with the public hospital’s rate of 8%. Cost recovery rates were higher (16% to 346%) when compared with the costs of materials and medication directly related to the maternal health service — the cost component that user fees are most often designed to cover.

**Actions to Improve Maternal Health Care**

No simple conclusions can be drawn from these findings about relative costs of care, efficiency, quality, or financing issues. It is clear, however, that public and private providers alike could make better use of their resources by changing their drug supply practices, staffing patterns, and utilization rates. It is also clear that, in most cases, facilities do not seem to have set fees systematically in relation to costs, and consumers have to sort through a welter of fees. Alternative financing arrangements could provide more effective incentives to providers and consumers alike.

Following are some of the key actions that ministries might take for situations such as those this case study found. Where maternal health services are weaker than in the four facilities in Masaka District in Uganda, the actions become even more important to consider.

**Efficiency.** Facilities operating below capacity for maternal health services can:

- Encourage consumers to increase use of their services not only to increase efficiency but to ensure safe delivery. Alternatively, they should cut staff to the number needed to handle their actual patient load.
- Encourage mothers to use health centers rather than hospitals for antenatal care and uncomplicated deliveries if the supply of material and equipment can be improved at those facilities.
- Streamline staffing. For example, cutting the number of midwives at the public hospital in Masaka District from 25 to 7 would mean than each midwife would handle 142 deliveries a year instead of 39, reducing the cost per delivery by 40%.
- Improve drug supply and revise fee structures to cover more of their costs. This would save patients the time and expense of traveling to pharmacies to fill prescriptions.
- Use midwives rather than medical officers to handle routine care and reserve physicians for obstetrical complications.

**Quality.** Ministries seeking to improve cost-effectiveness can give attention to quality improvements by:

- Assessing the prescribing practices of mission providers and private midwives to see whether drugs are being over-prescribed.
- Establishing norms for time needed for antenatal visits, availability for deliveries, administrative activities, and personal time.

**Financing Policy.** Ministries wishing to adopt more effective financing arrangements to get more value for their money and improve care for mothers at the same time can consider several approaches:

- Assist districts and public health facilities to set fees more in line with needs so as to assure affordable supplies of medicine and materials.
- Consider contracting arrangements with mission and public facilities rather than providing general operating subsidies. Use costs only as a point of departure for negotiating fees with health providers so as to avoid locking in inefficiencies.
- Build in performance incentives to encourage providers to tighten their operations and align staffing with patient load while maintaining quality.
- Study current users’ incomes to see whether special contractual arrangements are warranted for the poor. Maternal health insurance might be offered as part of a package of general health services in prepayment or insurance schemes, thus providing better risk-sharing advantages for families.
- Conduct an in-depth study of the public’s willingness and ability to pay by income group before setting final guidelines for maternal health care fees.


Bangladesh
Actions for Sustainable Immunization Services

The Bangladesh Expanded Program of Immunization (EPI) is faced with diminishing donor support, growing competition for scarce resources, and a leveling off of immunization coverage rates.

As one part of a comprehensive program review spearheaded by the government of Bangladesh and the World Health Organization (WHO), PHR conducted a study of Bangladesh’s EPI costs and financing, from April 26 to May 14, 1998. The comprehensive review received support from USAID, the British Department for International Development, and the Swedish International Development Agency. As specified by WHO, these reviews will be done every three years to resolve barriers to attaining program targets and to reassess Bangladesh’s EPI’s strategy in a continually changing environment.

Policy Issues

Economic growth in Bangladesh has barely kept pace with population growth in recent years. Health status indicators have improved over the past 10 years, but most remain low and the gains are not equally distributed throughout the population. Poverty is still severe, with more than a quarter of the population considered extremely poor.

The EPI program has moved through several phases, including a strong community-led volunteer effort, which initially produced gains in coverage from 10% to 50%. Additional efforts involving NGOs and integrating immunization with primary care have further increased coverage. Currently 54% of Bangladeshi children are fully immunized by age one, and about 70% of all children are immunized, regardless of age (crude coverage rate). Current plans call for a new combination of fixed site and outreach services with the goal of increasing coverage to 90% by the year 2000. Some portion of the new World Bank Fifth Health and Population Project credit will be devoted to achieving these EPI goals.

At this juncture in the EPI program, the MOH is grappling with several key cost, cost-effectiveness, and financing issues. They need to know if their program could be more cost-effective, if cost savings could be achieved without hurting coverage or quality, and what options are available to fill the financing gap over the next five years as donors withdraw their funding support.

Costs of EPI

The PHR team estimated the annual operating costs of the Bangladesh EPI program (for example, personnel costs, vaccines, syringes, cold chain and other supplies, transport, maintenance and operations) and an annualized portion of capital equipment. They gathered cost data from the EPI Unit accounts, the Directorate of Health, EPI officials, and other individuals knowledgeable about EPI activities and resource use. Under the parameters the MOH and WHO set for this review, the estimates do not include private sector, community and out-of-pocket costs, or the indirect costs of related support items (for example, personnel working on related programs, utilities, overhead).
Nor do they include costs of the polio eradication effort or costs and effects of National Immunization Days (NIDs), since the purpose of the review was to evaluate the routine immunization effort under Bangladesh’s EPI program.

Government and donor spending for EPI in Bangladesh rose from $406,000 in 1985/86 to $16.3 million in 1993/94. For 1997/98, the base year for this cost review, expenditures were estimated at $18.3 million, covering 110,000 immunization sessions per month throughout the country. Basic operating costs represent 92% of these expenditures, with the value of annualized capital equipment making up the rest. The government of Bangladesh funded $8.3 million, 45% of these 1997 expenditures, with donors filling in the rest.

Cost Effectiveness

The PHR team estimated that EPI in Bangladesh has prevented at least 1.15 million deaths, and perhaps as many as 1.25 million, since the program’s inception in 1987 — an impressive record by either measure. In 1997/98 alone EPI with 37,000 vaccine doses, prevented an estimated 134,000 deaths. More than two-thirds of the savings came from tetanus prevention (through both tetanus toxoid and diphtheria-pertussis-tetanus vaccine). Counting disabilities prevented as well as deaths, EPI saved an estimated 2.8 million healthy life-years in 1997/98.

Cost and effectiveness estimates yield telling ratios: $0.70 per dose of vaccine given, $11.76 per fully immunized child, $9.08 per crude number of immunized children, $136 per death prevented, and $6.56 per healthy life-year saved.

Cost-effectiveness ratios in Bangladesh compare quite favorably with World Bank estimates, which are somewhat higher. The World Bank puts the average cost per fully immunized child at between $15 and $17 and the cost per healthy life-year saved at between $12 and $17. Further, the alternative not to immunizing a child is to treat the sick child, which bears a substantially greater cost — from $30 to $50 per disability-adjusted life-year saved, by Bank estimates.

Options for Closing the Funding Gap

If it is to pick up the costs donors have been funding, Bangladesh will have to fill the funding gap by some combination of additional resources from government and/or other domestic funding sources and containing costs. The PHR team identified several options for further study.

- The government could consider increases in the MOH budget funding for EPI. As an indicator of the country’s ability to finance EPI fully with its own resources, current EPI costs represent 0.06% of gross domestic product (GDP), 0.5% of all government revenue, and nearly 5% of the budget of the Ministry of Health and Family Welfare. One 1990 review showed that 13 Asian countries were spending an average of 6% of the MOH budget on EPI, and 28 African countries were spending an average of 12% of their MOH budget.
- The PHR team identified cost savings that could be achieved by cutting the number of immunization sessions, which would reduce vaccine wastage and could cut personnel costs 20% to 40%. Additional savings might come from reducing wastage in cold chain equipment and improved management practices that the PHR team noted in its full report, and others might be identified by further in-depth review.
- Community-based organizations and local leaders could be encouraged to conduct social mobilization activities at the community level, costing much less than similar activities carried out by government.
- A close review of the Vaccine Independence Initiative arrangements in Bangladesh may find areas that can be strengthened to increase financial sustainability of the vaccine supply.
- Modest user fees could be introduced for immunization to recover at least part of the costs. Currently, the total cost of EPI is equivalent to 4% of expenditures that Bangladesh households make for allopathic medicine, and 2% of total household health spending. One study in two rural areas of Bangladesh showed that willingness to pay for EPI services ranges from 93% in Rajhat Union to 71% in Dhum Union. Willingness to pay was consistent across all income groups.
- The government might also consider alternative funding mechanisms underway in other countries, such as including immunization in basic packages of services offered in prepayment and insurance plans, or cross-subsidizing EPI costs with fees for other health services.

Health sector reforms can draw upon a wide range of policy tools to improve priority health services, including changes in government policy statements, public health priorities, laws, regulations, taxes, and roles of ministries. These reforms can create an enabling environment for effective and innovative service delivery, remove obstacles to more effective clinical and medical practice, assure quality of care, and establish more participatory and open policy processes. Improved in these ways, health policy can expand target population groups’ access to and use of priority health services.

In this section, PHR provides two examples from recent experience that highlight how policy decisions can strengthen priority health services. The first article describes how a policy providing tax relief for public health commodities for family planning and child health, such as contraceptives, vaccines, and oral rehydration salts, can lower their cost and increase their availability. The second article discusses the use of a policy tool called stakeholder analysis to help Indian policymakers forecast and ensure the success of proposed reforms related to women’s and children’s health.
A number of developing countries use tax relief for three key public health commodities — vaccines, oral rehydration salts (ORS), and contraceptives — to achieve public health objectives, according to a PHR survey for the U.S. Agency for International Development.

Tax relief can take the form of exemptions, waivers, reductions, or some combination. The ultimate goal of using tax relief is to improve the health status of the population by increasing the use of public health commodities and associated services. More immediately, tax relief can help achieve policy objectives such as:

- Reducing buyers’ administrative costs and reducing health ministries’ budget needs, particularly in countries where the ministry of health provides the commodities free of charge or at subsidized prices
- Reducing consumer prices, making commodities more financially accessible
- Increasing the supply of products by enabling private providers to purchase them at lower prices

Because reducing taxes on any product cuts government revenues, however, tax relief is usually politically difficult. The experience of the countries surveyed provides evidence that some ministries of health have been successful in justifying the public health benefits of targeted tax relief.

Global E-Mail Survey

In late 1997, PHR collected information by e-mail from USAID missions and country offices of the United Nations’ Children Fund (UNICEF) to see whether countries granted tax exemptions for vaccines, oral rehydration salts, and contraceptives. If they did, PHR asked how the policies had been implemented. The survey covered only purchases of the three commodities. Donations are tax exempt almost everywhere.

Of the 44 countries queried, 22 responded: Bolivia, Brazil, Cambodia, Djibouti, Dominican Republic, Eritrea, Ghana, Guatemala, Indonesia, Jordan, Kenya, Madagascar, Malawi, Morocco, Mozambique, Nicaragua, Philippines, Senegal, Tanzania, Uganda, Zambia, and Zimbabwe.

Policy and Practice

Of the 22 respondents, 15 (68%) grant some kind of tax relief. Taxes paid directly by purchasers vary with the type of commodity, buyer, and transaction.

**Tax relief.** As a rule, countries that grant import tax relief also grant relief on value-added and sales taxes.

The public sector benefits from tax relief most often (13 out of 15 responding countries, 87%) for at least one of the three commodities. The private nonprofit sector benefits in 10 countries (67%) while the private for-profit sector benefits in eight countries (53%). The public sector benefits most often from exemptions and waivers, the most substantial forms of tax relief. Only four countries (Jordan, Nicaragua, Philippines, and Senegal)
accord the public sector, the private nonprofit, and the private for-profit sectors the same tax treatment. Two countries (Eritrea and Malawi) make private nonprofit entities tax exempt but tax other buyers. In Tanzania, private nonprofits are tax exempt, but data on tax treatment of other buyers were unavailable.

Tax status varies more by buyer than by product. There is little difference in tax treatment among the three commodities; if a country had tax relief, it nearly always had it for all the commodities.

**Waiver procedures.** The process for granting tax waivers varies greatly from country to country. Sometimes waiver procedures are so bureaucratic that potential beneficiaries do not even attempt to file. Countries as diverse as Cambodia, Indonesia, Malawi, and Philippines describe complex waiver procedures, including the mandated participation of several agencies, completing and maintaining many documents, and long response time, especially for private sector entities. In the Philippines, for example, private buyers, nongovernmental organizations, and for-profit providers have to contend with five different agencies or institutions to obtain import duty waivers on contraceptives. If all goes smoothly, the process takes between 9 and 13 working days. Tax exemptions rather than waivers, or at least minimizing the administrative procedures associated with obtaining waivers, provide the greatest benefit.

**Impact**

Besides red tape, many other obstacles can block or deflect the intended impact of tax relief. Moreover, the actual impact is hard to measure without good monitoring and evaluation systems. Even if goals are clear, poor structuring of tax relief can defeat the intended impact. For example, a tax waiver could fail to lower consumer prices if distributors and retailers pocket all the savings.

Additional public health benefits could be realized in all these countries if tax relief, now most generous to the public sector, were expanded to the private nonprofit and for-profit sectors with appropriate guarantees that at least some of the savings are passed on to the consumers. Tax relief for the private sector may be particularly important for countries that wish to expand health services to the poor and other income groups through this sector. Additional benefits also will be best realized if tax relief takes the form of exemptions, or at least administratively streamlined waiver procedures, rather than many current regulations that discourage filing.

"Stakeholder analysis" is one tool PHR uses to help avoid costly mistakes in health care reform (see box on page 17). One such analysis, in India’s Bhopal District of Madhya Pradesh state, played a key role in the U.S. Agency for International Development’s decisions about local management and leadership for their proposed Women’s and Children’s Health (WACH) project.

Stakeholder analysis helps planners identify groups that will be affected by proposed activities, their reactions to prospective changes, and the roles they might play in assisting or blocking them. With this information in hand, planners can develop strategies for involving relevant central and local officials and communities in reform. If roadblocks to consensus loom too large, funding can be postponed — or canceled — until conditions for success can be achieved.

To assess the bases for support of the proposed WACH project, PHR’s stakeholder analysis in Madhya Pradesh asked:

▲ Which groups should be involved in designing, implementing, managing, and monitoring program activities?
▲ What roles should be assigned to different stakeholder groups?
▲ Which aspects or features of the program should be changed to ensure the support of major stakeholders?
▲ What are the best strategies to use for enlisting community participation in planning and implementing the program?

Getting Stakeholder Views

The analysis involved nearly a hundred interviews of people identified as major stakeholders in the activities and organizational changes connected with the WACH project. These stakeholders included: state- and division-level government officials from the departments of health, social welfare, finance, and tribal welfare; state, division, and block political leaders; local community leaders; public health providers; physicians, pharmacies, and other private health providers; media representatives; nongovernmental organizations working in health and social services; provider associations; universities, and research groups.

Interviewers probed stakeholders’ views on:

▲ The current health system’s functioning and effectiveness
▲ The new roles that organizations and individuals involved in health care would have after changes in service delivery under WACH
▲ Their institutional capacity to handle their new roles

Controversy Over New Reform Roles

The stakeholder analysis confirmed the premises of the WACH project, but differences in opinion emerged on the way it should be set up and run. Nearly everyone agreed that:

▲ Primary health care, especially women’s and children’s health needs, deserve more attention
▲ A participatory approach is needed, linking communities to the health care delivery system

On the functioning and effectiveness of the existing health system, all stakeholder groups recognized that government, with its extensive infrastructure and network, was the predominant provider of services. Despite government’s nominally extensive reach, however, most people thought resource and staff shortages prevented it from providing services evenly. Weak outreach at the community level, low-quality service at the local level, and unsatisfactory referral procedures were among the systemic shortcomings most often mentioned.
Using Policy Tools to Analyze the Likelihood for Success

In addition to stakeholder analysis, a variety of tools are available to policy managers and health sector reform teams to better manage and influence the process of health sector reform. Although these tools have been developed and applied in a variety of policy processes for other sectors, they easily can be adapted and transferred to health sector reform.

**Stakeholder Analysis.** Identification and analysis of actors in terms of their interest(s) in an issue or policy, and of the quantity and types of resources those actors can mobilize to influence policy outcomes

**Institutional Mapping.** Identification and analysis of an organization’s structure, lines of authority, mandate(s), decision-making processes, links among different units, relations with its external environment and with other organizations involved in policy/program implementation

**Political Mapping.** Graphic display of sources and degrees of political support and opposition regarding government support of an issue and/or policy, arrayed by category of actor

**Interest Mapping.** Combination of stakeholder analysis and political mapping using questionnaires and tables to collect and systematically organize data. Includes graphic illustration of information on stakeholder importance, location, relationships, and position

Once these tools have been used to assess the situation for a specific aspect of the reform process, policy managers and reform teams should take other actions, such as advocacy/lobbying, conflict resolution, and communications skill-building, to clear the path for successful implementation.


Avoiding a Costly Mistake

Differences in opinions among the various stakeholders centered on allocating authority for managing and executing WACH, especially whether the state government should play the controlling role.

The government of Madhya Pradesh wanted to create a government-organized NGO, with a staff seconded from various government health agencies, to manage the WACH project. Other stakeholders had urged broader involvement, flexibility, and opportunity for capacity-building. Without consensus on these issues, USAID decided that WACH could not achieve its objectives and canceled the project.

Stakeholder analysis provided USAID with crucial information for evaluating community support for the WACH project and capacity to make it a success before making a heavy financial commitment.

Today many countries draw on an expanded set of options for financing and allocating resources for health care. Among these options are user fees, social health insurance, community-based insurance, or prepayment for rural populations and informal sector workers, global budgets, alternative ways of paying providers, performance budgets, and block grants for district-level health networks in decentralized systems. These reforms can mobilize more resources for priority health services, contain unnecessary cost increases, free resources through cost savings and reductions in waste, and assure a broader and more reliable financing base. Together with complementary provisions to protect the poor and incentives for improving quality, these financing reforms can broaden access, strengthen equity, and improve sustainability of priority health services.

This section focuses on identifying financing options that can improve the sustainability of priority health services. In Bolivia, PHR evaluated the program’s cost, service delivery, and administrative components and made recommendations to improve the National Mother and Child Health Insurance Program and better plan its expansion to include other basic services. This mid-course monitoring will increase the efficiency and effectiveness of the insurance program, ultimately providing increased access to maternal and child health services for everyone. Financing for immunization programs is the focus of the second article in this section. A review of current information on immunization costs and financing in 78 developing and transitional countries provides information that can be used to sustain and improve financing for immunization.
More and more mothers and young children are receiving health care under Bolivia’s National Mother Child Health Insurance Program. However, snags in program financing and management were threatening to leave treatment facilities short of cash. Caught in time, the deficit could be kept from swallowing up a promising program. This was a major finding of a multidisciplinary team of physicians, health economists, and management specialists who evaluated the insurance program, Seguro Nacional de Maternidad y Niñez (SNMN). The evaluation came at an important moment, just as the government was planning to extend the range of services covered by the insurance program.

The PHR team presented the evaluation findings to the Bolivian MOH Technical Council on September 29, 1998. The MOH made several policy changes as a result: the insurance program’s basic payment rates were altered, and an administrative unit will be created to manage program operations. The MOH will also examine several problematic issues: subsidized transportation in rural areas; different reimbursement rates for hospitals and health centers; a revised role for DILOS, a body that plays a redundant administrative role in the program; the shortage of working capital in health care facilities, owing in part to delays in reimbursements; and personnel incentives. The MOH asked that the evaluation results be communicated to Bolivia’s eight administrative departments, and resolutions were discussed in day-long planning sessions.

**Results of the Insurance Reform**

**Utilization.** After the program began, use of all covered services increased. The use of covered services grew much faster than did use of services not covered by SNMN and services provided by facilities not participating in SNMN. With the removal of price considerations, the largest increases in use occurred at the more costly general and specialized hospitals (tertiary facilities). Patients could go wherever they chose, because referral procedures among primary, secondary, and tertiary health facilities are virtually nonexistent. Although some providers thought the increased workload lowered the quality of care in social security health units, most consumers reported satisfaction with the care they received. According to patient exit interviews, many of the new users had previously received health care only at home. Utilization was strongest among the poor and relatively high for adolescents, a group not previously using formal health services.
**Financial sustainability.** Reimbursement rates are too low to pay for the actual costs of drugs, supplies, and hospitalization associated with the delivery of covered services and reimbursement mechanisms leave many facilities short of operating cash for drugs and other supplies. With more people seeking care at hospitals and inadequate reimbursement from government, hospitals faced a double financial burden from the reform. Despite increased use, secondary and tertiary health units still have plenty of beds, but data should be collected so that each facility can be evaluated on a case-by-case basis.

Facilities providing SNMN-covered services are not reimbursed by SNMN for personnel and other indirect costs, which comprise a large part of total costs, especially at tertiary units with their highly trained and specialized staffs. Continuation of this practice would hinder expansion of SNMN to non-governmental organizations and private providers who receive no government funds to cover personnel and indirect costs.

**Institutional capacity.** SNMN’s administrative process consists of four phases: registry of patients, preparation of a monthly insurance summary and invoice, external review and payment, and replacement of supplies. These and other aspects of administration make it a complex and duplicative process. It makes no provision for cross-regional transfer payments or for working capital to pay for supplies used in delivering services. This curtails facilities’ liquidity, complicates management, and increases costs.

The box summarizes the remaining challenges and programmatic recommendations made by the evaluation team.

**Policy Changes**

Coming as this evaluation did just before a planned expansion of the new insurance coverage, it gave policymakers experience-based data to consider before moving ahead. It focused on major aspects of the system — service utilization, financial sustainability, and institutional capacity — all of which must be addressed if reforms are to work. As a result of the evaluation, Bolivia took steps to modify SNMN to prevent the program deficit from widening and to strengthen the program prior to expansion.


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### Remaining Challenges and Programmatic Recommendations for Bolivia’s MCH Insurance Program

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<tr>
<th>Challenges</th>
<th>Recommendations</th>
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<td>The increase in clients has decreased health worker motivation.</td>
<td>Establish incentive system that rewards providers for efficiency and quality care.</td>
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<tr>
<td>Reimbursement rates do not cover facilities’ actual costs.</td>
<td>Adopt a cost accounting system to generate information for monitoring performance, promoting efficiency and reassessing reimbursement rates.</td>
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<td>Costs differ across facility type, but reimbursement rates do not.</td>
<td>Differentiate reimbursement rates across the different service delivery levels.</td>
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<td>Free services at all levels encourage patients to seek care at higher level facilities.</td>
<td>Establish a referral system that provides incentives for clients to initially seek services at primary level facilities.</td>
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<tr>
<td>Reimbursements are delayed, as well as insufficient.</td>
<td>Streamline the administrative process to reduce costs and speed up reimbursements.</td>
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<tr>
<td>Substantial changes in utilization rates and patterns are affecting central and municipal funding requirements and public-private mix.</td>
<td>Establish ongoing monitoring system for utilization, quality, capacity and public-private mix.</td>
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Despite tremendous gains in immunization coverage in the 1980s in nearly every developing country, coverage has evened out or declined in the 1990s. Donors have reduced their funding, and national health budgets have shrunk as economies have faltered and other health priorities such as HIV/AIDS have sapped limited health funds. The introduction of new vaccines has also been delayed in many countries, partly because of their high costs relative to the costs of the six traditional antigens: BCG (tuberculosis), DPT (diphtheria-pertussis-tetanus), oral polio vaccine, and measles.

Current Patterns of Immunization Financing

PHR is addressing these issues through its Special Initiative on Immunization Financing. The project began its initiative with a review of available information on immunization costs and financing in developing countries in order to inform planned field-based activities to increase sustainability of immunization programs. This information was gathered from the literature and from e-mail surveys of country offices of UNICEF and the Pan American Health Organization (PAHO). While the 78 countries that responded to the survey are not necessarily a representative sample, they provide useful examples of the wide range of current practices and knowledge.

Immunization program costs. Routine immunizations cost just pennies a dose. Newer vaccines — such as Hepatitis B, Haemophilus influenzae type B (Hib), and the new rotavirus vaccines — cost much more and the full costs of making them routine everywhere are not known. The unknown additional costs include: cold chain (everything needed to keep vaccines cold during storage and delivery); additional service delivery costs, and social mobilization (information, education, and communications (IEC)).

Government-donor shares of financing. Under pressure from multilateral agencies and other donors, more and more governments are picking up the bill for vaccines — even in poor countries. In the e-mail survey, 36% of the overall sample of countries and 72% of the Latin American and Caribbean countries reported paying for all their vaccines. Three-quarters of the countries responding said they have immunization program or vaccine line items in their national budgets. Although governments pay personnel costs and are paying more and more of their vaccine costs, few countries pay all non-personnel costs of their immunization programs (see figure). Countries like Panama, Nicaragua, and Honduras, which pay for all or nearly all their vaccine costs, still rely on donors to cover between 16% and 39% of their total recurrent non-personnel costs. The 10 respondents to the PAHO survey financed an average of 90% of their vaccine costs in 1997, but paid an average of only 37% of their training costs and less than 60% of the costs of cold chain equipment, disease surveillance, supervision, and social mobilization.
International Vaccine Funding Mechanisms

To help countries pay for the vaccines they need, PAHO, UNICEF/World Health Organization, and the European Union all have set up revolving fund and procurement mechanisms to help countries purchase low-cost, high-quality vaccines. No systematic information is available on the three programs’ impact on overall immunization program performance, other health program financing, or effective ways to phase out these temporary measures.

Cost recovery. One out of five respondent countries officially practice cost recovery for immunizations through user fees, cross-subsidization from curative care fees, prepayment plans, or social insurance. In most cases, respondents did not have data on cost-recovery rates; estimates provided were generally less than 5%. Two-thirds of the countries reporting cost recovery were in Sub-Saharan Africa, the world’s poorest region. No Latin American or Caribbean country reported using cost recovery.

Private and NGO delivery. Two-thirds of the respondent countries reported some participation of nongovernmental organizations and for-profit private clinics and pharmacies in the delivery of immunization services. Generally low private participation was reported (10% or less), but NGO and other private participation is higher in urban areas of India, Indonesia, Bangladesh, and Thailand. Governments in several countries are now providing for-profit providers with free vaccines as an incentive to deliver immunization services and a means to ensure vaccine quality and safety.

Decentralization. Throughout the world, health systems are decentralizing. Studies under way in Colombia, Zambia, and Uganda, for example, suggest that decentralization is improving resource mobilization and allocation of resources. In the short run, however, some information suggests that not enough resources are being allocated to maintain or expand immunization programs.

Strategies to Sustain Immunization Gains and Add New Vaccines

PHR’s Special Initiative on Immunization Financing will provide field-based evidence on several policy issues and information gaps. PHR is conducting country case studies in Morocco (in collaboration with WHO), Bangladesh (in collaboration with the BASICS project), Colombia (in collaboration with PAHO), and Côte d’Ivoire.

The case studies focus on country-level strategies for replacing donor funding and sustaining and expanding immunization programs with local resources. They are identifying strengths and weaknesses of current funding strategies and evaluating how particular mixes of these strategies...
have worked in different settings and under different conditions. (For specific research questions to be addressed, see box.) Information gained will be used to develop options for improving the financing and sustainability of ongoing immunization programs as well as for introducing new vaccines. Other countries and the international health community can use the results in planning sustainable and effective immunization programs.

Tools for Policy and Planning

A series of analytical, planning, and monitoring tools, based on the results of the case studies, will be developed under this initiative:

- A synthesis of findings from the case studies and guidelines in selecting appropriate financing strategies for immunization programs
- A simulation model for estimating costs of adding new vaccines under different scenarios
- A tool to assess country-level immunization financing
- A menu of immunization financing options

Publications

Publications may be ordered in limited quantities from the address shown in the masthead, inside front cover.

In This Issue


