Reforms that many low- and middle-income countries have been undertaking have concentrated on strengthening various aspects of the health system with the goal of improving health services, utilization, health behavior, and health status. Some countries are already in a second generation of changes, having learned from successes and failures in the first stages of policymaking and implementation.

The broad array of reforms, each carried out under unique country circumstances, poses both challenges and opportunities for priority health services aimed at preventing and treating major threats to maternal and child health, effective family planning and reproductive health practices, and protection from the 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 health workers perform well to deliver quality care, how much people and governments pay for health care, how well the poor are served, whether enough drugs and supplies are available, and whether surveillance systems operate adequately to warn the population about impending outbreaks of infectious diseases.

The health policy process itself has been undergoing enormous changes. Emphasis is being increased on broadening participation and input from an array of stakeholders, on using better evidence to make decisions, and on monitoring and evaluating the impacts of reform to keep it on track. Changes in the policy process and in reform strategies to improve functioning of health systems carry both promises and uncertainties as new approaches are tried and new skills learned.

Being able to trace the impact of these far-reaching reforms on delivery and use of priority health services is more important than ever before. With more information about the dynamics and impacts of specific reforms, policymakers and program managers can make appropriate corrections or move forward in successful directions.

Anecdotal evidence abounds on the mixed and sometimes negative effects of reforms such as decentralization, integration of care, implementation of user fees, and moving ministry roles away from provision of care toward financing of care. In many cases, reforms have not been well designed, and the effects have not been studied systematically. Reforms are often in early implementation stages, fraught with unforeseen problems, and may have been affected by other major changes in the country.

Other reforms seem promising and are widely cited as the key to advancing health systems toward better functioning. Some of these other reforms include outside contracts for services, performance incentive payments to public and private providers, essential packages of care that include priority services, community prepayment plans, and bloc grant to districts to manage their own health services. So far, these other reforms are more widely discussed than practiced, and little solid evidence yet exists on their effectiveness in different settings.

One of the key issues facing reformers is developing the strategies, skills, and capacities to harness reforms in the service of health care priorities for the majority of the population. When effectively designed and implemented, health reform can improve the access, equity, quality, efficiency, and sustainability of priority health services. A broader reform context aimed at these objectives offers an opportunity to ensure that priority services can benefit from the system strengthening changes underway.

The Health Reform and Priority Health Services Journal is designed to illustrate how efforts to strengthen broader health systems can directly benefit, and create an enabling environment for, services that save mothers’ and children’s lives, achieve desired family size, and stop the spread of infectious diseases threatening people in low- and middle-income countries. This issue presents examples of work that PHR is conducting through its technical assistance to countries, applied research, and special initiatives related to health reform and priority health services. Together, these examples illustrate how reforms that improve policy, financing, organization, management, and incentives can open opportunities to improve priority health services. The issue also highlights information, approaches, and tools that can help frame the policy agenda, identify options, and craft solutions.

Charlotte Leighton, Ph.D., Editor
Reduced donor assistance, constrained government health budgets, and pressures to fund new and emerging diseases have, since 1990, been eroding gains in immunization coverage under Expanded Programs on Immunization (EPI). During the 1990s, efforts to build a sustainable funding base with local resources were often left behind in spite of major national reforms in health systems that many countries debated or began to undertake. The Summer/Fall 1999 issue of Health Reform and Priority Services reported findings from a PHR survey of 78 countries. These findings showed that many countries were paying larger shares of vaccine costs, especially in the Latin America and Caribbean (LAC) region. But many are still substantially dependent on donor assistance for basic recurrent costs of vaccines, social mobilization, disease surveillance, and supervision. Many also still depend on donors for replacing capital items such as cold chain equipment and vehicles.

Taking the First Steps

Building a sustainable strategy for National Immunization Programs (NIPs) requires first that countries know how much their programs cost, what the major components of those costs are, and where the funds come from. With support from the Child Survival Division of USAID’s Office of Health, PHR’s Special Initiative for immunization financing has helped develop this evidence in four countries: Morocco, Bangladesh, Côte d’Ivoire, and Colombia. With systematic evidence on costs and financing, country policymakers can see if current resources can be used more efficiently without hurting quality, develop a funding plan for sustainability that includes ways to mobilize new local resources, and see if the full range of financing strategies are being used.

In each country, a PHR team working with local counterparts—the BASICS project (Bangladesh), World Health Organization (Morocco), and Pan American Health Organization (Colombia)—conducted a rapid appraisal to develop a cost and financing structure and initiate a dialogue in the countries about sustainable funding strategies. Each country PHR worked with reflects a different setting to represent a range of possible immunization financing strategies, country income level, and level of health system development (Table 1, overleaf).

What Countries Spend on Immunization

The PHR team estimated what the Ministry of Health (MOH) and its partners currently spend and will need to spend in the next five years to provide immunization services with acceptable levels of quality and coverage. They also estimated additional costs of adding new vaccines or innovations the country had planned as well cost per capita, per dose, and per fully immunized child for purposes of
evaluating cost-effectiveness. (See full reports for these analyses.) To facilitate assessing the funding needs, they estimated two sets of costs.

▲ total costs of the program (e.g., cost of health workers’ time providing immunization services, vaccines, social mobilization, campaigns, proportion of capital costs such as health facilities, vehicles, and equipment used for immunization services)

▲ non-personnel costs that are specific only to the immunization program and not shared with other health activities (e.g., vaccines, social mobilization campaigns).

Table 2 shows the estimated total costs of the national immunization programs. In Morocco, Bangladesh, and Côte d’Ivoire, recurrent costs accounted for 89 to 92 percent of total costs, while capital costs made up the remaining 8 to 11 percent.

Figure 1 shows the percentages of each of the cost components for three of the four countries. Personnel is the largest cost category and accounted for over half of total costs (and approximately two-thirds of recurrent costs), followed by vaccines (19 to 30 percent). Other cost components comprised less than 10 percent of total costs.

Where These Funds Come From

Most countries fund their immunization programs from a combination of local resources—the government MOH budget, people’s out-of-pocket payments and/or social security mechanisms—and external resources such as assistance from international donors and voluntary organizations. The following summary groups all local sources together to illustrate differences in local and external shares.

As Figure 2 shows in the first three columns, local sources, primarily government budgets, paid most of total program costs (58 to 73 percent) in the three countries. Most government spending was to cover health worker salaries. External sources, including World Bank loans, paid for 27 to 42 percent of total costs.

The financing picture looks much different for program-specific costs (non-personnel costs specific only to immunization such as vaccines, social utilization. In this case, external funds pay most costs, as the second three columns of Figure 2 show. The percentage funded by the government declines from 58 to 73 percent.
of total costs to 7 to 28 percent for program-specific costs. Of the three countries, Morocco the most self-sufficient, Côte d’Ivoire the least.

Much of the external funding in Morocco and Bangladesh comes from World Bank loans—which have to be paid back with local funds. Morocco pays for its vaccines and supplies with World Bank funds, while Bangladesh pays for all but one of its vaccines with its World Bank loan. In Colombia, not shown in Figure 2, the government finances about 99 percent of the program costs. The only external assistance is provided by the Pan American Health Organization and is for technical and financial cooperation.
Morocco and Côte d’Ivoire: Using Financing Evidence to Increase Resources for Childhood Immunization

Morocco and Côte d’Ivoire are using PHR studies on their immunization program financing to increase their resources for childhood immunization.

With the help of its PHR study, the Moroccan Ministry of Health persuaded the country’s Parliament and Ministry of Finance to double the government budget for the National Immunization Program (NIP) in 2001. Côte d’Ivoire used its PHR study to support its application for funding from the Global Children’s Vaccine Fund to introduce new vaccines such as Hepatitis B and Haemophilus B.

Working closely with local counterparts and donors, in both studies PHR evaluated the existing programs and identified priorities for improvement. In both instances, PHR proposed options for reducing costs, changing the mix of financing sources, and mobilizing additional resources. Recommendations for immediate cost reductions included eliminating wastage in vaccine supplies. For Côte d’Ivoire, PHR also recommended using alternate procurement mechanisms for vaccines.

For Morocco, in light of the end of the World Bank’s five-year loan program in 2001 for financing vaccines and supplies, PHR also recommended eliminating excess stocks, increasing the Vaccination Independence Initiative revolving fund by $500,000 and, over the longer term, phasing in cold chain improvements and introducing additional vaccines such as Hepatitis B. PHR is continuing to provide technical assistance to the NIP through workshops on planning, costing, and financing.


Table 3: Funding Sources for More Sustainable Immunization Programs

<table>
<thead>
<tr>
<th>Sources of financing</th>
<th>Investment costs</th>
<th>Recurrent costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal, e.g., MOH budgets, communities, prepayment and insurance, user fees</td>
<td>Health worker salaries, transport, supervision, shared costs of maintenance and utilities, social mobilization and IEC, subsidies for the poor, all vaccines and supplies in routine immunization program</td>
<td></td>
</tr>
<tr>
<td>External, e.g., international donors and voluntary organizations</td>
<td>Capital equipment: cold chain and vehicles; technical assistance; possible introduction of new vaccines</td>
<td></td>
</tr>
</tbody>
</table>

IEC = information, education, communication.

funds. By focusing on the range of possible internal funding sources, the framework can also allow policymakers to evaluate which recurrent cost components are best financed by central and local governments, insurance and prepayment, communities, and individuals seeking vaccinations for their children.

Tool for Evaluating Immunization Costs and Financing Sustainability

The PHR team identified the mix of current financing strategies and their success in mobilizing sufficient resources in each country. Then it classified each type of cost that had to be funded and placed those costs into a matrix that could help identify current or future funding sources. Table 3 illustrates a more sustainable financing mix that Bangladesh, Côte d’Ivoire, and Morocco might aim for in the medium term. In the longer run, countries would also need to cover investment costs with local funding.

Using this framework helps to identify clearly where sustainability issues may arise if external funders withdraw their support or if MOH budget resources are cut. For example, the more recurrent cost items (top right cell, Table 3) that external sources cover, the less sustainable is the financing strategy.

Once specific donor and internal funding sources and amounts are identified in a country, the framework can also help ministries improve donor coordination and avoid redundancies in providing technical assistance and
Building More Sustainable Programs

Most important for long-run sustainability, ministries can also develop alternative funding mixes, if current ones appear too inadequate, unreliable, or inequitable. For each country, the PHR team identified a detailed range of options for using program resources more efficiently and developing alternative, more sustainable funding strategies with local resources. (See box for results of this work in Côte d’Ivoire and Morocco.) In general, ministries can:

▲ Phase in funding by local resources and increase central and local government allocations to immunization activities.
▲ Focus donor funding assistance on investment costs (e.g., cold chain equipment, introduction of new vaccines) to give the MOH time to develop and phase in local funding to maintain investments.
▲ Concentrate donor assistance on technical assistance to improve programs such as assisting with monitoring and evaluation and the introducing of new technologies.
▲ Mobilize resources through different types of mechanisms such as prepayment and community-based and social insurance plans that include coverage for immunizations.
▲ Review current cost recovery mechanisms and amounts people now pay for vaccinations and medications in the public and private sectors.
▲ Consider expanding use of private providers for people who can afford to pay for their services.
▲ Use resources more efficiently and effectively by changing vaccine-procurement mechanisms, reducing vaccine wastage, adjusting service delivery strategies to the most cost-effective approaches.

References:
△ Review of Financing of Immunization Programs in Developing and Transitional Countries
△ Case Study on the Costs and Financing of Immunization Services in Bangladesh
△ Financing of the Expanded Program on Immunization in Colombia: Impact of Reform and Decentralization
△ Case Study on the Costs and Financing of Immunization Services in Côte d’Ivoire
△ Case Study on the Costs and Financing of Immunization Services in Morocco
△ Costs and Financing of Immunization Programs: Findings of Four Case Studies
△ Financing Assessment Tool for Immunization Services
△ Immunization Financing Resources
Note: All entries are PHR Special Initiative Studies.

Tools to Strengthen Immunization Financing

PHR has two new tools for immunization program managers:

▲ Financing Assessment Tool for Immunization Services: Guidelines for Performing a Country Assessment. Designed to help national immunization program managers and other ministry of finance and health officials develop the financial component of medium-term action plans for immunization activities. The tool focuses on costing, financing, and planning issues. It can be used to make an independent financing assessment of a program or to complement the GAVI tool (see p. 47 in the Financing Section), especially where the GAVI financing component suggests deficiencies in an immunization program.

▲ Immunization Financing Resources. Provides a bibliography for use by donor agencies, ministries of health and finance, public health and research institutions, and universities. The document identifies literature and web resources on costing, financing, policy issues, tools, and other topics related to immunization financing. Also contains a contact list of key institutions and individuals working on immunization issues.
Policy Process

The process of reforming health systems can draw upon a wide range of policy tools to improve priority health services, including changes in government policy statements, advocacy skills, consultation mechanisms, 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 several examples from recent work that highlight how improvements in the policy process can strengthen priority health services. The first article describes work from one of PHR’s Special Initiatives that shows how improved advocacy can strengthen disease surveillance systems. Experiences in Central Asia and the Latin America and Caribbean region illustrate some of the possibilities and hurdles of involving NGOs in implementing policies to improve priority services in the context of primary care. Results from a PHR Major Applied Research study show how groundbreaking analysis of reform processes can help policymakers be more effective in designing and implementing major financing reforms.
Controlling infectious disease depends on effective disease surveillance, preparedness, and response. In many countries, however, surveillance systems are not consistently effective. Existing surveillance activities have developed unevenly, often financed and controlled by different vertical disease programs. Strengthening surveillance systems requires the engagement of actors at all levels of the surveillance system—from data collectors at the periphery to decision makers in the Ministry of Health (MOH) and other ministries.

With USAID support, PHR has developed several policy products as a critical first step to developing advocacy to improve surveillance systems worldwide. These products are designed to help USAID meet its objective of reducing the threat of infectious diseases by improving policies and increasing global, national, and local resources for appropriate infectious disease interventions. They are also designed to help USAID in its efforts to enhance knowledge, beliefs, and practices related to effective prevention and management of infectious disease.

Why Advocacy?

Several countries have conducted assessments and developed plans to improve their surveillance systems. In many cases, the considerable effort these countries invested in developing well-thought-out strategies have not produced results. This indicates that significant challenges exist in the implementation phase that go beyond sound planning. Surveillance systems are complex and include many subsystems. Changing surveillance systems requires the cooperation of many actors, working at various levels. These stakeholders have a vested interest in how their national surveillance systems function and strategies for their improvement. For effective implementation of a proposed action plan, which may include general improvements as well as more profound reforms, the MOH must nurture support among varied stakeholders who often have differing agendas. One strategy for eliciting this support is through the use of advocacy, which is a process of informing and persuading people to support a position and take concerted actions toward its accomplishment.

By emphasizing participatory advocacy and dialogue among actors at all levels of the surveillance system, the PHR approach provides an often missing link to the technical and procedural aspects of disease surveillance policy. Local input can provide crucial information for designing and carrying out policies that work. Participatory advocacy can help develop political consensus and overcome bureaucratic constraints that may block an effective implementation strategy. It can also encourage surveillance system actors to support and help maintain the surveillance reform strategy. Ministries may also find this approach useful to minimize uncertainty and risk of potential opposition when adopting and implementing new surveillance policies.
Building Advocacy into all Stages

PHR is proposing a comprehensive approach to using advocacy to improve national surveillance systems. Ministries of Health need to lead and coordinate planning and implementation for change. Ministries of Health, in collaboration with international partners such as the World Health Organization, the Centers for Disease Control, and USAID, can systematically foster change in surveillance systems by: assessing the existing surveillance system; determining priorities for a national system; developing a plan to improve the surveillance system; implementing the plan; and monitoring the results. Actors in the surveillance system can be engaged to build support for change during all of these stages.

Building Support Through the Assessment Process

There is widespread agreement that careful assessment of existing systems is a critical first step in developing an action plan. The assessment process provides an excellent opportunity to interact with stakeholders, whose support is critical during the implementation phase. During their encounters with stakeholders, the assessment team can inform stakeholders of potential benefits of an improved national surveillance system and begin to enlist their support. In this way, the assessment process is used as a forum for advocating improved surveillance.

Advocacy to Develop and Implement a Plan

The information gleaned during the assessment process is crucial in the development of an action plan. Interactions between assessment team members and stakeholders thus serve the additional purpose of soliciting local input for the eventual plan to improve surveillance systems. Local input and participation continue to be important during the implementation stage as well. Eliciting input from stakeholders is a valuable means to build ownership of, and commitment to, the recommended course of action.

Advocacy to Improve Surveillance

PHR has developed a package of advocacy tools to facilitate developing and implementing surveillance system improvements by garnering key stakeholder support and creating demand for surveillance data (see box).

State-NGO Partnerships
Promoting Policy Implementation and Civil Society in Central Asia

In the Central Asian republics of the former Soviet Union, national governments are struggling with limited resources to meet the basic health needs of their populations. Faced with declining economic conditions, budget crises, and shrinking expenditures in the social sectors, governments are turning to the private and nonprofit sectors as partners in health care delivery. Kazakhstan and Kyrgyzstan, with support from the USAID ZdravReform project, have created new nongovernmental organizations (NGOs) as part of health sector reform. The new NGOs, Family Group Practice Associations (FGPAs), are formally established, nongovernmental entities that serve as intermediary institutions between government and newly created Family Group Practices (FGPs). In the winter of 1999, a PHR team assessed the collaboration between the government and the FGPAs, looking at the effectiveness of the partnership and identifying success factors.

The Soviet Legacy
The Central Asian republics inherited a health system that was centralized, hierarchical, and standardized. Policies, practices, and treatment norms were all developed in Moscow, and then passed to each republic for implementation. The system emphasized tertiary care and specialty services. Hospitals and polyclinics received most of the resources, while primary care was underfunded and served mainly to refer patients upward to specialists and hospitals. The image is one of an inverted pyramid, heavy and bloated at the top, narrow and anemic at the bottom.

Health sector reform programs in the region share a number of basic features: cost reduction, rationalization of health facilities, health insurance plans to introduce cost-consciousness and performance incentives, and separation of payment from service provision. The reforms also emphasize training of physicians and other medical personnel, both to upgrade and broaden clinical skills and to focus on strengthening primary health care in an effort to reinvert the Soviet-era pyramid.

Reform in Kazakhstan
Following some strategic planning and the passage of enabling legislation, reform activities began in the 1990s when four oblasts (provinces) introduced health insurance mechanisms and new service delivery arrangements. This led to the establishment of a mandatory health insurance fund (MHIF), a capitated provider payment system, and development of a basic benefits package. FGPAs were created to provide primary care through contracts with the MHIF.

The city of Zhezkazgan, one of the original experimentation sites where one of the country’s most forward-thinking health administrators began testing new approaches,

The reforms also emphasize training of physicians and other medical personnel, both to upgrade and broaden clinical skills and to focus on strengthening primary health care in an effort to reinvert the Soviet-era pyramid.
established the first FGPA. Working closely with government health services, the FGPA participates in direct service provision and in health status monitoring and reporting. It has played a minor role in health policy advocacy. The FGPA’s relationship with its members centers on capacity building to help the FGPs make the transition to viable private providers of quality primary care services.

For example, the FGPA worked closely with the FGPs to conduct an information and marketing campaign prior to open enrollment. The association has been instrumental in obtaining donor resources, through grants, for FGP strengthening. Another aspect of the association’s relationship with its members deals with self-policing, regulation, and quality assurance.

A national FGPA was established in late 1998. However, the nascent national FGPA is too new to have developed a program of activities, and much of its founders’ energies are directed toward resolving the legal and organizational issues concerning its relationship to local-level FGPs.

Reform in Kyrgyzstan

In the mid-1990s, Kyrgyzstan’s health ministry developed a reform plan to establish new sectoral priorities, rationalize service provision, and test new financing mechanisms and service delivery modes. Ultimately, Kyrgyzstan wants to extend primary care coverage via FGPs to the entire country, expand the use of purchaser-provider contracts, and institutionalize social insurance. The World Bank–funded Manas Health Care Reform Program provides the umbrella under which a number of donors coordinate their work with the Kyrgyz health system.

Pilot reforms began in Issyk-Kul oblast, where capitated health insurance and primary care provision is being tested. Similar to Kazakhstan, FGPs were formed to provide primary medical care from a single location to all family members. From Issyk-Kul, demonstration sites spread to Bishkek City and Chui, Osh, and Jalal-Abad oblasts. Activities include: development of FGPs, formulation of new provider payment methods, creation of a case-based hospital payment system, creation of a financial intermediary to pay FGPs and hospitals, and development of clinical and financial information systems.

In 1995, an FGPA was established in Issyk-Kul oblast to support the formation and development of new FGPs, help to coordinate health sector reform, and improve the quality of primary health care. Additional FGPs were set up in new demonstration sites. The FGPs help their members with resource identification, capacity building, equipment procurement, clinical and management training, and organizational support. As in Kazakhstan, the FGPs have been reticent to take on a lobbying and advocacy function. In 1997, a national-level FGPA was established, and existing oblast-level FGPs are transitioning to become affiliates.

FGPA Roles in Policy Reform

The roles and responsibilities of FGPs were shaped by three factors:

▲ the downsizing of the public sector health delivery system and the separation of service provision from financing

▲ the emergence of a new government role in regulation and oversight of service providers, which created space for private service providers like FGPs
and associations of FGPs in support of their operations.

- the influence and resources of international donors in pushing for reform. International donor assistance was a major force in setting up FGPs.

Besides the FGPs’ involvement in service delivery and support to FGPs, devolution of some regulatory functions and shared approaches to quality assurance and monitoring brought them new roles and responsibilities in setting quality-of-care standards, monitoring performance, and accrediting health care providers. Donor resources and technical assistance have been instrumental in allowing FGPs to fulfill these new roles and responsibilities. These have been important in providing the means to enable the associations to show government officials that they can be effective partners in health sector reform.

Although nominally both the Kazakh and Kyrgyz FGPs’ roles include representing the interests of their members and lobbying for policy and procedural changes in support of those interests, to date in neither country has this role induced much advocacy activity. The associations have, for the most part, avoided advocacy and lobbying in favor of capacity building and participation in service delivery. When donors talk of FGPs as health policy advocates and representatives of an emerging voice of civil society in policy dialogue, they are anticipating what may evolve in the future, not describing their current activities.

Building Partnerships and Civil Society

The PHR study revealed that the approach to NGO formation and interaction in health reform policy implementation in Kazakhstan and Kyrgyzstan is leading to effective partnerships. The reasons for exploring partnership models of health sector reform that involve NGOs are both practical and value based.

On the practical side, NGOs can potentially contribute flexibility, responsiveness, adaptability, and efficient and effective performance to health sector reform. Given the limitations of the bureaucratic, rules-driven, and control-oriented public institutions in both Kazakhstan and Kyrgyzstan, inherited from their Soviet past, these instrumental pluses can be very important for making progress with reforms. The value-based reason for a model that incorporates NGOs into health sector reform is their potential contribution to democratization. Creating and strengthening NGOs increases opportunities for citizens to participate in decision making and action relating to policy formation and implementation. Thus, NGOs can contribute to developing new patterns and practices of governance.

Considerations for Policymakers

- A supportive legal framework is central to facilitating the emergence of viable NGOs and a vibrant civil society and to creating effective partnerships.
In terms of state-NGO relations, exemplified by the FGPAs and their member FGPs, the weight of the past hangs heavily over the state’s way of interacting with these new entities.

The successful initiation and continuation of the reforms in general, and the FGPAs in particular, depend upon the actions of key individuals, and groups, who can serve as champions for change.

NGOs established by government agencies with donor support will pursue objectives that fit closely with the desires of their creators. In the countries of the former Soviet Union, where civil society is underdeveloped, NGOs have limited experience with alternative models of action.

In partnerships where the state holds the preponderance of power, the NGO partners are unlikely to be anything but docile and cooperative. In both countries, the FGPA and FGPs tread warily in the partnership.

The medical staff operating within FGPAs and FGPs, in response to new incentives, are behaving differently than they used to as members of the public sector health establishment. The flexibility, autonomy, and responsiveness of NGO structures have made a difference in the speed and effectiveness of primary health care service reform.

The cases show that NGO capacity can be created using facilitative technical
South Africa: Lessons from the Health Reform Policy Process

The “how” of policy reform is as important as the “what.” This is the first lesson of health care policy reform in South Africa—and a basic lesson for reformers everywhere.

South Africa’s first democratically elected government took office with a mandate for broad and radical change to redress the apartheid legacy of inequity and inefficiency. Quick to seize the opportunity to reform health care, planners overemphasized a rapid response at the expense of consensus building and advance design of implementation, according to a November 1999 report by PHR.

South Africa’s experience with financing health care reform between 1994 and 1999 prompts a number of lessons about managing policy change:

▲ The policy formulation process should be strengthened: by supporting leadership through more ‘user friendly’ technical analysis; strengthening techni-
cians’ strategic skills and awareness; and building implementation concerns into design.

▲ To strengthen the decision-making process, mechanisms should be reviewed for consultation among policymakers, stakeholders and technical advisers and for dialogue between the highest levels of gov-
ernment and key reform managers and policymak-
ers at national and provincial levels.

▲ To make optimal use of the small available pool of health economists, research needs should be clari-
fied, and long-term partnerships should be forged between government and key training institutions.

▲ Norms and standards, compatible with national and provincial affordability and specifying the serv-
ces covered, should be set and used. Special attention should be devoted to maintaining the

The decentralized public sector structures because they allow for integration of national and oblast activities while permitting adaptation and autonomy locally.

▲ Government technicians and policy analysts alike should recognize the importance of strategy as a complement to technical analysis and political buy-
in as a precondition for effective action. Understanding the power, value bases, and con-
cerns of major actors in the health sector is basic to developing support for reform and offsetting the opposition.

▲ For effective implementation, mid-level managers and providers—the people who will execute the reforms—must be brought into policy design and development. This was a key failure of South Africa’s reform.

▲ Implementation should always be planned in advance to identify obstacles and capacity to bring about change. Gradual implementation can allow for any needed adjustments in design.

▲ Monitoring and evaluation are essential during implementation and at every other stage of reform.

▲ Financing reform should be placed at the heart of system development, and financing policy should be developed in an open and transparent process.

▲ Implementation should be an integral element of financing policy development and recognized as requiring special skills. Implementation is never self-executing.


assistance and external resources. However, FGPAs will continue to require outside help and infusions of funds for several years to come. Sustainability will not be immediate.

▲ FGPAs were initially formed at the oblast level as one of the institutional innovations in the health reform demonstration sites. National FGPAs came later. Federated structures on the NGO side of the partner-
ship are likely to provide a better fit with

Countries engaged in health system reform often make significant changes in the way health services are organized and managed. Decentralization, 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 district 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 information and tools that policymakers and program managers can use to improve management of priority health service provision in the context of health reforms. The first article illustrates findings from a PHR Special Initiative that show how managers might use cost and financing evidence to strengthen maternal health services. The second presents highlights of seven Special Initiative and Applied Research studies that PHR has undertaken on the impact of decentralization on priority health services. Boxes present capsules on district planning and management tools and illustrate how one country uses monitoring indicators to manage the impact of health reform on priority services.
or political, policy, and practical management reasons, reviewing costs and financing for maternal health care is important.

Evidence of costs can support political advocacy by responding to anecdotal and impressionistic views about the “high” and “unaffordable” cost of improving maternal health services. For policy purposes, understanding costs and available financing options helps decision makers choose the most cost-effective and financially sustainable service delivery strategies and approaches for their country settings.

And many countries face practical obstacles of resource constraints that force them to consider trade-offs among services as well as alternatives to public funding for maternal care. Considering the evidence about costs and financing options helps decision makers take practical management actions to resolve these resource constraints in ways that better assure increased, equitable, and sustainable access to quality maternal services.

Cost of Public and Private Maternal Care in Three African Countries

PHR found evidence of several steps managers could take in its recent evaluation of maternal health care cost and financing in public and private health facilities in three African countries: Ghana, Malawi, and Uganda. In one district in each country, the PHR team, working with local researchers, compared provider and consumer costs at a public and a mission hospital, a public and a mission health center, 20 private midwife sites, and 20 traditional birth attendants. Data collection techniques included provider observation, provider interviews, facility record reviews, and client exit interviews with 120 clients. Six services were covered: antenatal care, normal deliveries, cesarean deliveries, post-abortion care, and complications from postpartum hemorrhage and eclampsia.

PHR’s study is significant because it uses a similar methodology for all three countries, thus providing a more solid base for comparison than previous cost studies. It also goes beyond earlier studies to examine selected quality indicators as well as detailed personnel time for maternal care services using observation techniques. In addition, apart from findings in this PHR study, little direct evidence is available on all the costs that women and their families must pay to receive antenatal care or deliver their babies with a skilled attendant.

Costs of Providing Maternal Care

Costs for providing an antenatal care visit range from $3 to $6 in public and private hospitals and from $2 to $4 in health centers. Costs for a normal delivery with a skilled attendant can be as low as $2 (Uganda public health center) but range from $7 to $15 at public and private health centers in the three countries. Private midwives’ costs are similar or lower than at health centers. Costs of normal delivery at hospitals range from
$10 to $35 (Figure 1), while cesarean sections and complicated deliveries can cost from $50 to $100 because of more and higher level personnel and materials.

Depending on the service, either staff or medications and supplies dominate costs. For example, in the facilities studied, drugs, supplies, and laboratory tests absorb about 60 percent of total costs for antenatal visits, normal deliveries, cesarean sections, and post-abortion complications. Paying staff tends to require only 12 to 21 percent of total costs for these services (Figure 2). Staff costs rise close to 50 percent only for the most complex care, such as eclampsia.

Facilities with higher costs for each type of maternal service typically use more skilled personnel and provide more medications and supplies, or they have lower utilization rates, thus spreading the costs among fewer women. For example, the Ghanaian and Ugandan hospitals are overstaffed, and Malawian hospitals understaffed, in relation to their annual number of deliveries. Mission health facilities provide more medications and supplies than public facilities. In general, personnel spend the most time on administrative activities in facilities with low utilization. Enrolled nurses and midwives spend 8 to 16 percent of their time unoccupied or engaged in personal activities. And this percentage is higher at health centers than at hospitals.

Service Quality

The PHR team measured several aspects of structural quality and found, not surprisingly, that hospitals rank higher than health centers. Hospitals have more key drugs, supplies, and equipment and often score higher on the few process indicators that the study was able to measure. Mission facilities generally score higher on process indicators and client satisfaction than do public facilities, although not always on structural quality indicators.
Costs to Women Using the Services

The PHR team found that total client costs (user fees, travel costs, and other expenses such as food) for hospital-based normal deliveries range from $6.50 in the mission hospital in Malawi to about $23 in the mission hospital in Uganda (Table 1). For deliveries in health centers, women spend $1 or less in Malawi and about $2 in Uganda. Women also typically spend $1 to $3 for each antenatal care visit at hospitals in Ghana, Malawi, and Uganda. For each antenatal care visit to a health center in Ghana and Malawi, they spend $1 or less and about $1 to $3 in Uganda. In addition to these costs, women may have to purchase medicines and supplies at private pharmacies when the user fee does not include these items.

Not surprisingly, women have to pay more to get their antenatal care and deliver their babies at hospitals—because of both higher fees and higher transportation costs. In Malawi, travel costs are likely to equal fee costs. In Ghana and Uganda, travel costs are about one-third or less of total client costs.

### Table 1. Average Costs to Women for Antenatal and Delivery Services* (in U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th>Ghana</th>
<th>Malawi</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health center</td>
<td>Hospital</td>
<td>Health center</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>0.69 0.78</td>
<td>3.05 3.15</td>
<td>0.14 1.16</td>
</tr>
<tr>
<td>Normal delivery</td>
<td>12.52 20.64</td>
<td>0.35 1.17</td>
<td>7.69/1.56 6.46</td>
</tr>
<tr>
<td>Total</td>
<td>15.57 23.79</td>
<td>0.49 2.33</td>
<td>16.40/2.72 7.62</td>
</tr>
</tbody>
</table>

a. User fees, medicines, supplies, transportation, food, other miscellania. Cost of medicines purchased at private pharmacies, outside the facility, may not always be included.

b. Paying/nonpaying wards.

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**Costs to Women Using the Services**

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**Malawi District Implementation Planning Tool**

Responding to Malawi's national strategy of decentralizing and improving resource allocation and service capacities at the district level, PHR worked with Malawian officials to draft the fourth National Health Plan (NHP). NHP is one step toward resolving what the country's Ministry of Health and Population (MOHP) terms "massive health, population, and logistical problems" that are putting growing pressure on the health care delivery system.

The NHP is the first sector development plan to delegate to the 26 districts major new responsibilities for delivering health care. It also strengthens MOHP supervision of donor assistance through the new Sector-Wide Approach (SWAP). The SWAP enables the ministry to approve, coordinate, and manage vertical health programs and to track donor funding. The ministry considers the SWAP a way of strengthening its partnerships with donors and nongovernmental organizations and working more closely with districts to improve Malawians' equity of access to quality health care.

PHR also helped the Malawi MOHP develop a resource-driven framework for district implementation planning to assist in priority setting at the decentralized level. The tool includes worksheets on: implementation planning, resource analysis, monitoring, and evaluation. Ten District Health Management Teams now use these tools, which the Malawi MOHP plans to disseminate to 27 health districts to support the next planning cycle. For the first 10 districts to use the planning tools, PHR conducted three consecutive District Implementation Planning Workshops in March 2000. The workshops provided skills training in priority setting, implementation planning, monitoring, evaluation, and activity-based budgeting in line with the government's Medium-Term Expenditure Framework Budget Process.

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Not surprisingly, women have to pay more to get their antenatal care and deliver their babies at hospitals—because of both higher fees and higher transportation costs. In Malawi, travel costs are likely to equal fee costs. In Ghana and Uganda, travel costs are about one-third or less of total client costs.
Especially at the mission hospitals in this study, the percentage that women spend on high user fees often exceeds other costs. On the other hand, women using public health facilities often incur additional costs to fill prescriptions they receive at the facility.

Data from this study show that total costs to women for both antenatal care and normal deliveries can range from nominal ($0.50 to $2.33 at health centers in Malawi and $3.35 at health centers in Uganda) to moderate ($13 to $25 at hospitals in the three countries). Data were not available for this study to match amounts paid with ability to pay or to income. While these amounts may be affordable for many women in the three countries, they may prevent poorer women from using maternity services at hospitals.

Costs of antenatal care and delivery services may be more affordable than previously thought—both to Ministries of Health providing the services and to women using the services.

Cost Recovery

Mission hospitals, with their higher user fees, usually recover a higher proportion of their total costs for deliveries than do public hospitals (Figure 3). In Malawi and Ghana, however, public hospitals are recovering much higher percentages of total costs (60 percent) than reported in previous cost recovery studies. Cost recovery rates are also much higher in public facilities when compared with the costs of medications and supplies—often the primary costs that public sector user fees are designed to cover. In general, data from this study show higher recovery rates for deliveries than for antenatal care, which some facilities promote with low user fees.

Using Cost Evidence to Strengthen Maternal Health Services

Ghana, Malawi, and Uganda are all undergoing substantial changes in management due to decentralization of decisions about organizing and financing maternal health services as well as public health services in general. These changes give more decentralized decision and spending authority to regions, districts, or health facilities themselves. PHR’s evaluation of maternal care costs in Ghana, Malawi, and Uganda provides evidence that managers at
the central and local levels can use to improve access, efficiency, and sustainability of these services in a broader reform context. (See also the related article on Uganda in the Summer/Fall 1999 issue of Health Reform and Priority Services, for additional recommendations for efficiency, quality, and financing policy.)

Considerations for Managers

Costs of antenatal care and delivery services may be more affordable than previously thought—both to Ministries of Health providing the services and to women using the services. But several cautions need to be raised. Current costs of antenatal care and skilled attendance do not necessarily reflect the most efficient or effective quality of care. Nor do they necessarily offer a guide for knowing whether the most critical need is simply for more resources to improve availability or quality of care by skilled attendants—such as in countries where resources and infrastructure are severely limited—or whether the priority is, first, to use current resources more efficiently and develop more cost-effective models of care.

▲ Country managers need to estimate costs in their own setting, instead of relying on simulations or generalizations from estimates for other countries.

Variation in maternal health costs in the three countries—and revealed in other cost studies—occurs because of different packages of care, facility sites, and levels of services, skill of health workers at a birth or antenatal clinic, and protocols used. Because of this variation, countries cannot assume that their costs are equal to those of their neighbors or other countries in similar circumstances.

▲ It is important to match cost evidence with effectiveness measures and choose options that provide the most value for available public and private resources.

Variation in costs across the three countries and across health facility levels suggests that there are many approaches to delivering maternal health services and that some are likely to be more cost effective than others. For this reason, relying on cost evidence alone may mislead managers and decision makers. For example, not surprisingly, deliveries at health centers are usually less costly than at hospitals. But they may not always be more cost effective. Lower costs at public facilities may reflect lower quality rather than greater efficiency. On the other hand, private health facilities may also be inefficient, as this study showed, and less cost effective than public ones, depending on utilization and use of staff.

▲ It is important to match cost evidence with quality indicators.

The average cost per antenatal visit or per normal delivery may be relatively low in a country because of limited quality of the services. In these cases, additional
resources—not cost-cutting efforts—may be needed from a variety of financing sources to improve quality and access. Other countries, with higher technology maternal health interventions, may first need to increase use of tertiary level hospitals and highly skilled and paid obstetric personnel as well as their emphasis on more efficient use of existing resources for maternal health care.

▲ Maternal health program managers should evaluate costs and use of resources in their own settings to identify possible savings and increased efficiency without reducing quality. Evidence from Ghana, Malawi, Uganda, and elsewhere shows that these possibilities are becoming increasingly evident. Where pharmaceutical practice deviates from recommended protocols, costs are often higher than necessary. Costs are also higher than necessary: when midwives are underutilized (e.g., attending fewer than 200 births a year) or physicians are used for aspects of maternal care that other staff could handle; when most women bypass appropriate lower levels of care to deliver their babies in hospitals; or when cesarean sections are performed unnecessarily. For example, as reported in the Summer/Fall 1999 issue of Health Reform and Priority Services, costs of delivery in the public hospital studied in Uganda could be reduced by 40 percent by better staffing practices.

▲ Managers of maternal health services need to pay special attention to barriers that women face from the high costs and lack of transportation by developing special methods to fund transportation for delivery and emergency obstetric care. Evidence from Ghana, Malawi, and Uganda shows that transportation costs are sometimes higher than user fees, and user payments alone may not always be the main financial obstacle to use of maternal health services. Transportation, cultural barriers, intra-family decision making, uncertainty about costs that will be borne, and perceived quality are often equally or more important in women’s access to high-quality skilled attendance at delivery.

▲ It is important to go beyond anecdotal evidence about what women and their families spend for maternal health care. Data need to be collected on actual expenditures, by household income level. Managers then need to match this evidence with an evaluation of the country’s methods and safety nets for protecting the poor to see how well they are working to remove financial barriers to maternal health care for poor women. Managers can also examine fees of public and private providers to see if cost recovery rates can be improved at public sites, while strengthening the safety net for the poor.

HR has examined the impact of decentralization on priority health service delivery in seven countries. Together these studies show that much of the evidence on decentralization’s impact is mixed. Most countries engaging in this reform are in relatively early stages of implementation, and many models are being tried. Each decentralization approach affects the health sector and health service delivery differently. When countries decentralize the central government administrative system, sometimes health is placed under the responsibility of a newly empowered local government. In these circumstances, the central Ministry of Health (MOH) may lose virtually all responsibility for health services in the field. Alternatively, the central MOH may itself have a parallel decentralized structure that matches, or cross-cuts, the new decentralized government structure.

These arrangements are further complicated by the varying degrees of decentralized authority (e.g., in matters of personnel, service organization, governance, and/or financing and budget) given to local governments and/or regional or district levels of the MOH. Finally, decentralization often takes place during periods of other major changes in a country or economic crisis. These other changes make isolating the effects of “decentralization” on delivery and utilization of health services even more difficult.

Considering this broad array of situations under the umbrella term “decentralization,” it is not surprising that results have been mixed. Enough evidence has accumulated, however, to suggest that managers need to take special precautions to assure that priority health services (e.g., childhood immunizations, HIV/AIDS prevention and treatment, family planning and other reproductive health services) and public health functions (e.g., surveillance and control of infectious disease) do not get lost in the transfers of authority and funding that decentralization entails.

Following are highlights of forthcoming PHR studies.

**Colombia.** *Financing of the Expanded Program on Immunization in Colombia: Impact of Reform and Decentralization.* Special Initiative Report. PHR, Abt Associates Inc., Bethesda, MD.

This study examines the impact of decentralization on immunization coverage. The study uses a multiple regression model to assess the impact of a variety of factors along with decentralization such as changes in funding from the central MOH, population’s income, and prevalence of violence.

This study examines the impact of decentralization on total and local funding and service utilization for HIV/AIDS in three districts in Ethiopia. It presents secondary and new data collected by the PHR team from records and interviews covering public and private providers, funding at the national and local levels, management of HIV/AIDS programs, and use of services from public and private providers. Using evidence from Ethiopia, the study recommends ways that countries can build in protection mechanisms for HIV/AIDS services during decentralization and mechanisms to mobilize and distribute national and local monies related to national HIV/AIDS priorities. The study, a companion study to the one on Senegal, draws comparative lessons.


This study examines the impact of decentralization in general government and in the health sector on financing of surveillance, prevention, and social services of the National Program to Fight AIDS (PNLS). The PHR team compares funding for these services before the health sector decentralization in 1991, before the government decentralization in 1997, and after 1997. The researchers use both secondary data and primary data from new interviews at the central and local levels as well as district and facility record reviews. A companion study to the one in Ethiopia, it draws comparative lessons.


Dominican Republic: Tools for Monitoring and Managing Health Reform

The Dominican Republic, working with PHR, is field-testing a matrix of indicators to monitor health sector reforms. It is among the first of such systems tailored by a country in the Latin America and Caribbean (LAC) region to monitor and evaluate its own reform process.

Analysis of indicator data will allow health care policymakers to assess the progress, direction, and results of health sector reform. After refinements from field testing, the process will be documented and disseminated so that other countries in LAC and elsewhere can use the model in designing their own national systems.

The model was validated for field testing at a national workshop convened by the Dominican Secretariat of Public Health and Social Assistance (SESPAS) in March 2000. It culminated a 10-month effort by a local technical work group of public and private institutions to develop the indicators. PHR and the Pan American Health Organization (PAHO) provided technical assistance at each step of the process.
This study examines how reforms related to decentralization and related local government attempts to raise health revenues through user fees have affected provision and use of maternal and child health services in two districts of Uganda.


This study examines the impact of decentralizing MOH functions on provision, funding, and utilization of priority health services in Zambia. Using both national level data and local interviews and record reviews, it examines the effects of changes in decision space on the choices that local health authorities make for priority services at primary care level.


This study examines the degree of “decision space” regarding primary health care (PHC) that local authorities have under decentralization in the four countries. The study maps the decision space (range of choice) available to local entities in PHC policy, management, financing, and governance. In the Philippines and Uganda, local government is now responsible for health service delivery; in Ghana and Zambia, MOH has decentralized its own structure.
Experience with a broad range of reforms to strengthen health systems and services in low and middle-income countries has made it abundantly clear that understanding the underlying incentives in the present and proposed systems is key to achieving the desired outcomes of the reforms. Both health workers and consumers of health services take actions based on their perceptions of benefits and losses. Workers who are encouraged to raise revenue for their health center by charging user fees may not be likely to follow policies on giving exemptions to poorer patients. Even if salary-based employment may not foster as much excellence as other provider payment methods, failure to pay workers’ salaries does not motivate them to come to work on time or use fee revenues for the benefit of their health center. Consumers who find no drugs and poorly trained workers in a dilapidated facility have little incentive to seek health services there.

In this section, PHR’s experience providing technical assistance for pilot projects in Egypt and Rwanda reveals how performance-based incentives can be marshaled to improve the quality and responsiveness of priority services when incorporated into a basic package of care under new organizational and financing reforms. Highlights are also presented from PHR technical assistance to introduce incentives for improving priority services in Sengal and to improve NGO performance under contracting mechanisms in the Latin American and Caribbean region. A PHR Major Applied Research study provides field evidence of the numerous factors that affect health worker motivation in Georgia and Jordan. It has also produced tools for assessing health worker motivation and analyzing the links between health reforms and worker motivation.
Priority Services in Egypt and Rwanda

Building Performance Incentives

Planning reforms to strengthen health systems often requires policymakers to rethink the incentives they wish to set for providers. Thus, new ways of paying, organizing, and distributing resources among providers have been a major element of the reforms many countries have discussed. Many of these discussions have focused on incentives designed to improve the efficiency and quality of health services by tying provider performance directly to provider income. Compared with fixed and guaranteed salaries or unlimited income possibilities with fee-for-service payments, these performance incentives translate good delivery of services into financial rewards for providers. Conversely, poor quality or inefficient services may result in financial penalties.

While much discussed, performance incentives for providers have not been tried extensively in practice in low- and middle-income countries—and particularly not for primary care services that include priority health interventions related to maternal and child health and infectious diseases. Operations research and demonstration of these new mechanisms is therefore a priority need. PHR has been working with the Ministries of Health in Egypt and Rwanda to pilot test some of these new models so that lessons can be learned before scaling up to national implementation.

Using Incentives in Egypt to Sustain Priority Service Gains

Egypt has made substantial progress in programs for childhood immunization, schistosomiasis control, family planning, and diarrheal disease.

Why changes were needed. Despite their success, these programs have fragmented the delivery system, health workers, and utilization into many specialized, vertical programs. In 1997, the Ministry of Health and Population (MOHP) adopted a new strategy and scheduled implementation in phases over the next 15 years.

The first five-year phase emphasizes building an integrated service delivery system for primary care and preventive services centered on a family medicine approach. The new strategy aims to:

- Improve quality and access for all Egyptians by creating a basic benefit package that includes essential drugs and high-priority primary health services such as immunization, family planning, maternal and child health, emergency services, and treatment of the most prevalent chronic and communicable diseases.
- Reform financing to include mechanisms for contracting and performance-based

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payment, as well as features to reduce the burden of out-of-pocket expenditures on lower income families.

▲ Improve patient satisfaction, public awareness of health issues, and broaden stakeholder participation.

Planning and preparation for a pilot test of this new model began in the Mantazah District of Alexandria Governorate in 1998. The first site opened in May 1999, followed by six more by December 1999. Family care sites include MOHP, Health Insurance Organization, and NGO and private group practice providers.

How the plan works. Under the pilot model, families register voluntarily with a family health care team serving 600 families, or 3,000 individuals. Specialist physicians and nurses are selected for retraining as family practitioners to provide the basic care package. With PHR assistance, the pilot sites include mechanisms to strengthen quality: clinical practice guidelines that incorporate existing vertical program guidelines; facility accreditation based on assessment of the structure, process, and outcomes of integrated care; and a patient encounter data system basic information on each patient seen by the family practice team.

Performance incentives are a key element for maintaining quality and sustaining the progress of priority services under the new family care model in Egypt. They are being implemented in two phases.

In the first phase, the MOHP offered incentives equal to 50 to 250 percent of base MOHP salary to government physicians who volunteered to participate in the government-run pilot delivery sites. This incentive compensates physicians participating in the reform for increasing their hours of work and the number of patients seen each day as well as for reducing time spent in their private practices—and hence reducing their income from these practices. In addition, to receive the full MOHP payment, health workers in the pilot sites must demonstrate regular attendance, professional appearance, cooperation, and lack of negative patient comment.

Results

These initial performance incentives have already produced results.

▲ Utilization data for a recent month showed that each family medicine team generates 19 to 24 visits per day, a significant productivity gain from the baseline average of 3 visits per day per physician in pre-reform MOHP health care clinics.

▲ Besides increasing service to patients, the incentives to see a more adequate number of patients per day have led family care teams to improve clinic management and structure a more efficient patient flow, thus reducing waiting times.

▲ And they have increased patient satisfaction. According to a new client at the Siouf Family Health Center, one of the first family care sites, “Doctors treat us as human beings. They’re clean; the place is clean. The staff is respectful.”
Contracting with NGOs for Health Service Delivery in the LAC Region

Government contracting with for-profit and nongovernmental organizations (NGOs) is becoming an increasingly popular alternative to exclusive use of the public sector for delivery of health care services throughout the Latin America and Caribbean (LAC) region. Often these contracts emphasize delivery of priority health services to poor and underserved populations. NGOs can play a key role in this arena, with their history of strong links to communities and primary health care delivery to the poor. In partnership with the public sector, NGOs can often contribute to quality health care service delivery, sometimes at lower cost.

These were among the findings at a recent regional meeting in Santo Domingo, organized by the PHR project with support from the Latin America and Caribbean Health Sector Reform Initiative. Representatives from the public sector and NGOs from Colombia, Costa Rica, the Dominican Republic, Guatemala, and Peru participated in this two-day meeting.

Many similarities emerged among the country experiences examined, particularly in the project-identification process, lack of explicit legal frameworks, and difficulties in contract monitoring and evaluation. There were also significant differences in the health systems under which contracts are applied and the types and nature of each contract examined.

Two of the contracts examined included specific incentives and a monitoring and evaluation process to motivate good performance. For example, in Costa Rica, the Social Security Fund has contracted with the COOPESALUD cooperative and pays the cooperative through a predetermined global budget. To arrive at the global amount, the fund multiplies the average cost of a primary care visit by the total target population. Unlike the other four cases studied, the COOPESALUD contract includes a series of indicators to measure organization, service delivery, and quality of care. Both the public sector and the cooperative have very detailed financial, administrative, and clinical information systems. A team from COOPESALUD and the fund evaluates the indicators twice a year. Findings from these evaluations have financial implications for COOPESALUD. The contract provides for a reduction of 2.5 percent in the next six-month payment whenever the cooperative fails to achieve a score of 90 percent or more on areas measured by the indicators.

Workshop participants noted several actions needed to support better government-NGO contracts for health service delivery.

▲ Strengthen institutional capacity for contracting for both NGOs and the public sector.
▲ Improve MOH and NGO financial, technical, and administrative information systems.
▲ Conduct systematic monitoring and evaluation of contracts.
▲ Strengthen NGO capacity to develop health care plans based upon demand; develop financial information systems that allow them to calculate unit service costs; provide health care services consistent with national standards and protocols; and link input to results to mobilize further funding.
▲ Improve MOH capacity to pay promptly, set service standards and monitoring procedures, and incorporate data on alternative providers into the national system.
▲ Provide technical assistance on a regional level to design information, monitoring, and evaluation systems; develop case studies demonstrating new approaches around key themes; and determine an appropriate platform for sharing model contracts and related implementing instruments.


Next Steps

The next phase of the pilot program will introduce an additional incentive payment mechanism linked directly to quality indicators. A new Family Health Fund will finance these payments with 80 percent of its revenues from patient fees to be introduced simultaneously in the next phase.
Using two sources of information—patient encounter forms and facility records—the fund will evaluate both Family Care teams and the whole Family Health Unit. Comparing each family care team and each family care unit across all participating sites will help establish “norms” for the performance payments as well as an element of competition among the teams that should spur excellence. The director of each facility will award the incentive payments to individual staff members, based on their individual performance.

With PHR’s assistance, the fund is testing different performance indicators and evaluation mechanisms with input from the health workers. The goal is to develop indicators that motivate providers to decrease patient waiting times, deliver preventive care, and promote good health outcomes for their registered patient population. Performance indicators are likely to include number of visits, use of ancillary services, referral patterns, visit length, and prescribing behavior. The fund will also conduct quarterly patient-satisfaction surveys and random chart reviews to assess compliance with clinical practice guidelines.

A new policymaking body, the High Committee for Health Insurance, will agree on the incentive payment system based on the performance data provided by the fund. The fund will administer the system through a performance contract with each pilot site, clearly outlining expectations and basis for incentive payments. Sites must be accredited to enter into a fund contract. Implementation of this phase of performance reporting and performance-based incentive payments was to be completed by December 2000.

Rebuilding Priority Services in Rwanda

In 1999, Rwanda began implementing a pilot prepayment system for health care in three districts.

Why changes were needed. As donor assistance to health services began to decrease following the end of the war and genocide in 1994, the MOH had reintroduced prewar-level user fees in health centers and hospitals. By 1998, utilization of primary health care services had fallen to a low of 0.28 consultations per person per year. In response to this situation, the MOH sought to make major reforms to:

▲ Improve equity in access to quality care for rural populations by offering a basic package of services that includes high-priority primary services such as child vaccinations, prenatal care, other preventive and basic curative care, and essential drugs.

▲ Strengthen financing of health centers to mobilize additional resources to compensate for decreased donor assistance.

▲ Increase community participation in health care delivery and financing.

Working with the MOH, PHR helped develop and implement the pilot plans under a short timetable. They designed a system of three...
How the plan works. Under the prepayment plan, households or individuals pay an annual premium that entitles them—after a one-month waiting period—to the defined package of benefits at a health center of their choice. Members make a small copayment of FRw100 (about $0.30) per episode of care at the health center.

As in Egypt, performance incentives are key to the new system. The executive bureaus for each health center use prepayment revenues to make monthly payments to the center, based on a fixed per capita amount for each member enrolled at that site. With this capitation amount, the health workers must provide members with all services in the basic package. Capitation has become a major incentive for health centers to improve their performance. It discourages health centers from offering unnecessary or excessive services and encourages them to focus on preventive measures and efficient utilization of services. It also strongly links provider performance to patient satisfaction. With more members, health centers receive more capitation payments.

Results

In general, the pressure of better informed members with increased negotiating power due to capitation has improved the quality of services, which translates into more members and thus more payments to health centers. The incentives from capitation payments and other features of the pilot have already produced results that benefit the population.

- To recruit more members, health centers have taken steps to build a reputation for offering good care. In the first six months, 50,000 Rwandans signed up and registration continues steadily.
- Health center personnel report that prepayment plan members seek care earlier, need fewer drugs, and recover faster than non-members.
- Use by members reflects satisfaction with the services and payment arrangements and is reaching levels more in line with...
health needs. Members are making from 1.3 to 1.8 visits per year, compared to virtually no use (less than 0.28 visits per year) of primary care health facilities for nonmembers under the traditional arrangement.

▲ After early start-up difficulties, general assemblies with all members have held reelections to strengthen their representation on the executive bureaus that manage the funds. These elections have also enhanced credibility and trust among the population and further increased member enrollment.

▲ Regional MOH physicians have replaced unqualified auxiliary personnel with trained nurses to head health centers, resulting in a positive impact on quality of care.

▲ The participatory structure has also paid off in promoting strong elements of accountability. During general assemblies with plan members, health centers have to answer more and more questions from members about treatment-related issues. Members’ suggestions have also contributed to defining their district’s basic benefits package and have influenced two districts to modify the package to include limited hospital services, ambulance transfer to hospitals, and cesareans.

Next Steps

The original design in Rwanda called for a more complex incentive mechanism for linking provider payments directly to quality measures. Under the original plan, part of the monthly capitation payment as well as part of the MOH base pay for health workers would depend on meeting health care quality indicators related to maintaining good patient records, following of protocols, and meeting service delivery goals for priority services such as immunization and prenatal care visits.
The MOH encountered several problems in trying to establish this system in the first months of implementation. While implementation was deliberately phased in over several years in Egypt, with capacity building along the way, the Rwandan Ministry has been anxious to rebuild its health system with a good quality base. But complex quality performance systems have proven beyond Rwandan capacity to implement during the first year of the pilot.

For example, because success has led to increased utilization rates, health centers have needed their full capitation amount just to keep up with their usual cost recovery rates from the prior fee-for-service system. The district bureaus responsible for making monthly payments to providers could not handle the additional calculations involved in splitting the payment by varying percentages to take account of a quality ranking. It is difficult enough to calculate the monthly payment, based on the accumulated amounts in the prepayment fund. Health workers need more time to develop patient record and reporting skills to provide a base for collecting reliable quality and service delivery indicators. And more time is needed to establish and train district-level units to monitor and evaluate quality indicators.

A Promising Initiative to Strengthen Priority Health Services

So far, performance incentives in Egypt and Rwanda have had positive results. Fundamental differences exist in the approaches Egypt and Rwanda are taking to build incentives into their primary health care systems. In Egypt, where the organization of care into family practices represents a major shift for providers, they concentrated first on establishing the new care model, while retaining the traditional salary base of provider payment, enhanced primarily by conditions of professionalism that must be met. Egypt thus put off more complex financing arrangements until a second phase. In Rwanda, where the clinical care model remained essentially the same, they concentrated on building in new financing and community participation arrangements at the start.

Pilot experience with performance incentives in these two countries has demonstrated the need for sufficient lead time to build adequate infrastructure and administrative capacities for wide-scale implementation. In both countries, second phases are planned to introduce more complex mechanisms to link new provider payment mechanisms and quality improvements into performance standards. Also in both countries, evidence of both financial and nonfinancial incentives has already demonstrated results for providers, communities, and households. In addition to improving performance, incentives have introduced and empowered a new major player in health care, namely the patient. Patients and communities are much better able to influence the quality of services they receive than they could with traditional salaried MOH workers or fee-for-service private providers.


Many program managers and observers cite worker motivation as a major constraint to performance of health systems in developing and transitional countries, where working conditions have often deteriorated due to economic reforms, political upheaval, or severely constrained government budgets. The quality of service delivery, efficiency, and equity are all directly related to workers’ willingness to apply themselves to their work. PHR has undertaken this topic for exploratory research under its Major Applied Research program. Although extensive research has been done on health worker motivation in the United States, little has been done in low- and middle-income countries. To better understand this issue, PHR developed a multidisciplinary conceptual framework as a tool for examining what factors generally affect health worker motivation and the links with health sector reforms. (See box on page 35 for the framework and a description.) PHR is now applying several assessment tools to provide information on the determinants of health worker motivation in specific low- and middle-income country contexts. This work also serves to field test an operational tool to identify and analyze particular problems regarding health worker motivation—especially problems that may affect the chances of reforms to strengthen health systems and the priority services they seek to deliver. (See box on page 37 for a description of these tools.)

Motivation in Health Reform Settings

In Georgia and Jordan, PHR teams, working with local counterparts, examined motivation in two hospitals. They used all three of the health worker motivation assessment tools: a contextual analysis, a 360 degree assessment, and an in-depth analysis of individual motivation and performance. Both Jordan and Georgia have undertaken significant reforms in their health systems in recent years, especially in the hospitals. Although these studies focused on health workers in hospitals, the general approach and pattern of findings also apply to primary care settings undergoing reforms in priority maternal and child, family planning, and reproductive health services. Table 1 and the following highlight only one part of the findings of these studies to illustrate the variety of work motivation factors that health workers in these countries identify.

Georgia

In Georgia, the PHR team interviewed 129 nurses, physicians, supervisors, and technical and administrative staff in two hospitals in Tbilisi: Children’s Republican Hospital, a large teaching and tertiary level hospital and City Hospital No. 5, a medium-size general hospital serving a lower income, depressed urban area.

In their identification of factors in the work environment that most motivated them to do good work, Georgia workers gave high scores to more elements related to social dimensions of the work environment than to other categories. A cluster of factors related to job content ranked second, particularly among doctors. (Table 1 lists factors that received a score above 4 in a 5-point scale.)

The high regard given to social dimensions reflects a cultural trait particular to Georgia. A study of seven large industrial employers found that social solidarity was the only key...
The figure illustrates the links between health worker motivation, worker performance, and health reforms that may be designed to strengthen overall health systems as well as priority service delivery. Worker motivation (pictured at the center of the figure) is affected by three complex sets of factors (on the left of the figure), as well as by feedback on performance (on the right). Feedback can come from supervisors, coworkers, clients, and from bodies representing broader community interests (e.g., district health committees).

Links Between Health Worker Motivation and Health Reforms

Reforms (pictured at the bottom of the figure) add to these influences by having their own effect on the set of determinants affecting motivation as well as on worker performance. The bidirectional arrows also suggest that the success or failure of reforms are affected by the same factors that impinge on worker motivation as well as by how well worker performance advances reform goals. Worker motivation directly affects worker performance, which affects the same results health sector reform is trying to achieve — usually improvements in the quality, equity, and efficiency of health care delivery.

In the figure, three main sets of factors affect health worker motivation.

- Individual factors. These include values, goals, self-concept, and expectations for consequences of work behavior.

- Organizational and work context factors. These include organizational structure and processes, organizational culture, and human resource management inputs.

- Cultural and client influences. These include community-health worker interactions and broad sociocultural factors.

How these various factors influence motivation cannot be observed directly because motivation is an internal psychological process. But their effect is seen in performance behavior such as attendance, willingness to learn new skills or follow new treatment protocols or adopt new methods of planning and organizing service delivery.

Reforms can affect motivation via the individual, organizational and/or cultural determinants. For example, organizational reforms such as decentralization affect lines of accountability and administrative procedures and may affect the level of resources available. Training and developing new capabilities in the work force may affect workers’ perceptions of their own efficacy and thus their motivation. Changes in roles of the community and clients such as establishing community oversight committees or hospital boards may provide them with a more effective and stronger means to offer feedback on provider performance. In addition to the content of reform, the way it is designed, communicated, and introduced will also influence health worker motivation.

Policymakers ignore these complex interrelationships at their peril. Failure to think about how proposed reforms will affect motivation may lead to unanticipated results in terms of worker performance and behavior, which may prevent the achievement of broader reform goals. By describing and tracing in detail the channels through which motivation is influenced, the conceptual framework can help policymakers better plan both the design and implementation processes of health reform, so as to minimize adverse effects on worker motivation and support improved performance.
value in companies. Responses about discouraging factors reflected demotivation from the multiple impacts of scarce resources (poor pay, lack of stationery and supplies) that lead to tension in the patient-provider relationship.

The Georgia study also found that the 40 patients interviewed had appreciably more negative views of the hospitals than did the hospital staff. It is likely that patients do not understand the context in which workers are working and therefore have artificial expectations. The contextual analysis revealed a lack of broader communication between providers and patients outside of clinical consultations.

Workers also rated 21 specific types of interventions that would be most effective in stimulating good performance and provided specific illustrations in each category. Of the interventions they ranked as the top 10, all but 3 involve some form of financial incentive or assistance. Three were largely nonfinancial: putting more emphasis on getting things done correctly, providing more up-to-date material, and increasing opportunities for professional development.

All groups named improved income. For doctors, job content and opportunities for training were also important. Workers perceived managerial reforms such as improved job definition or flexibility in working hours as least effective interventions. Central management currently plays a very weak role in the two hospitals, and formal policies are largely by-passed.

These interviews with workers about their perceptions revealed significant variation in views about factors stimulating better performance. The two hospitals differed on eight interventions, and managers, supervisors, and workers ranked five interventions differently, although managers and supervisors tended to hold common views, compared to other employees. The most significant differences showed up among types of workers—doctors, nurses, and other staff, who differed on five factors. Doctors ranked the following factors higher than the other cadres: good supervision, interesting work environment, hard but interesting job, chance for training, chance to stay up-to-date with new developments.

In Jordan, the PHR team examined worker views of 185 staff and 85 patients at two public hospitals, Al-Basheer, a large central and teaching hospital in Amman, and Al-Ramtha, a community hospital in rural Northern Jordan.

When asked about factors in the work environment that most motivated them to do good work, workers in Jordan gave the highest scores to a cluster of management issues related mostly to personal achievement: opportunities for advancement, salary, chance for training and learning new skills, and good supervisor. These views contrast with Georgia, workers who ranked only one management issue highly (income) and emphasized more of the social factors in the work environment.

In Jordan, workers gave a high rank to more than half (11) of 18 specific types of interventions that would be most effective in stimulating good performance. They named several interventions in all categories but one: skill and career development.

For example, in addition to better salaries they named fair promotion and attendance policies.

---

**At the core of the motivation question is the extent to which individual health worker goals align with the goals of the employing organization. Policymakers need to assess how well organizational structures and process facilitate clear communication of organizational goals, provide timely feedback on performance, and ensure appropriate rewards for desired performance.**
as management interventions that would promote better performance. Up-to-date equipment, improved physical environment, and keeping more accurate medical records ranked as high as fair policies on pay and promotion. More teamwork, better job definition, and more emphasis on doing things correctly came in as close seconds to these. In their extended
Table 1. Georgia and Jordan: Health Workers’ Views, About Work Conditions, and Incentives Important for Performance

<table>
<thead>
<tr>
<th>Work conditions that best stimulate good work</th>
<th>Georgia</th>
<th>Jordan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▲ Social environment. Good supervisors, pleasant coworkers, working with patients</td>
<td>▲ Social environment. Stimulating, enjoyable coworkers</td>
</tr>
<tr>
<td></td>
<td>▲ Physical work environment. Appropriate equipment, infrastructure</td>
<td>▲ Physical work environment. Adequate lighting, ventilation, work space</td>
</tr>
<tr>
<td></td>
<td>▲ Management issues. Income</td>
<td>▲ Management issues. Opportunities for advancement, income, training and continuing education; good supervision</td>
</tr>
<tr>
<td></td>
<td>▲ Job content. Interesting work environment, prestige in working for hospital, hard but interesting job</td>
<td>▲ Job content. Working with patients, sufficient time, interesting place to work, challenging work, prestige associated with hospital</td>
</tr>
<tr>
<td></td>
<td>▲ Skill/career development. Important only for doctors</td>
<td>▲ Skill and career development. Chance to learn new skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interventions that best enhance motivation</th>
<th>Georgia</th>
<th>Jordan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▲ Management issues. Fair income distribution, according to the contribution made</td>
<td>▲ Management issues. Fair pay, fair promotion, fair attendance policies</td>
</tr>
<tr>
<td></td>
<td>▲ Improved work conditions. Better pay; also safer, cleaner, less crowded conditions; cold and hot water; adequate supply of up-to-date materials</td>
<td>▲ Improved work conditions. Modern equipment and adequate physical environment</td>
</tr>
<tr>
<td></td>
<td>▲ Job content. Recognition and appreciation of good work (especially financial incentives), system to encourage good work (especially financial incentives), more emphasis on getting things done correctly</td>
<td>▲ Job content. More accurate medical records, more emphasis on teamwork, better task definition, more emphasis on doing things correctly</td>
</tr>
<tr>
<td></td>
<td>▲ Skill/career development. Increased opportunities to develop professional skills</td>
<td>▲ Skill, career development. None highly ranked</td>
</tr>
<tr>
<td></td>
<td>▲ Person oriented. Assistance with childcare, transportation, and other problems</td>
<td>▲ Person oriented. Help with transportation and childcare</td>
</tr>
</tbody>
</table>
comments, they also emphasized interventions related to generating more interaction and open communication between employees and supervisors; educating the community to have more realistic expectations; getting more appreciation from the administration, patients, and the media; and improving enforcement of employee rights.

As in Georgia, workers had different perspectives depending on their profession, their role, and the hospital where they worked. For example, Al-Basheer and Al-Ramtha hospitals differed on the importance of five interventions for stimulating better performance. Other aspects of the study revealed that social interaction and pride were higher at the smaller community hospital, which is more embedded in the community and has closer links between workers and the patient population.

Different cadres of workers also differed in their views on two factors. Nursing staff, in particular, had their own perceptions about the working environment. As a group, nurses were most likely to have a lower or negative view of the hospital and of their coworkers. Other studies of nursing in Jordan have highlighted nursing issues. This study confirms that special consideration may need to be given to address their issues.

Implications for Harnessing Motivation to Achieve Reform Goals

While each country and health facility needs to analyze its particular constellation of motivating factors, the Georgia and Jordan findings suggest a number of implications for managing worker-motivation issues when implementing health reforms.

Many aspects of working conditions affect health worker motivation, and a package of interventions may be needed to stimulate good performance. Workers in the two studies clearly identified multiple factors influencing their work behavior. In other countries, reform programs focusing on only a limited number of channels have often resulted in little improvement in work motivation and unanticipated influences sometimes even reduced it. Making sure that all incentives work in the same direction is equally important.

While financial incentives may be important determinants of work motivation, it seems equally evident that they alone cannot, and have not, resolved all work motivation problems. Moreover, excessive focus upon financial incentives in the public sector has led to negative consequences in many countries.

Communication strategies need to target different messages for different groups of workers since different sets of factors may motivate them. In addition, the workers’ organizational context will mediate the impact of reforms. Workers in hospitals will be affected differently from workers in primary care settings as will workers in more advantaged health care facilities and in less advantaged ones. Policymakers need to be aware of these differential impacts. The more that reforms are seen to treat different groups fairly, the more likely they are to be accepted.

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 the use of financing information to improve policy options for sustainability and equity in priority services. The first article presents evidence from a PHR Special Initiative that assessed the impact of polio eradication campaigns in Bangladesh, Côte d’Ivoire, and Morocco on financing immunization services. Another PHR Special Initiative shows how data from a national health accounts analysis of household spending on HIV/AIDS in Rwanda can inform policymakers about the equity of financial and economic impacts on households that have to take care of members afflicted with the disease. Policymakers can use this information for better planning and budgeting, setting priorities, and targeting to mitigate inequities. With PHR technical assistance, a local team in Mali conducted and evaluated household survey findings as a first step in designing mechanisms to remove financial obstacles that poor populations, especially young adults, face in using family planning, reproductive, and maternal health services.
The global polio eradication campaign has made substantial progress toward its goal. The Latin American region has certified eradication, and the Western Pacific and European regions are in the preliminary stages of certification. In 1996, two thirds of the world’s children under five years of age were vaccinated with three doses of oral polio vaccine (OPV) during routine immunization services and coordinated national immunization days (NIDs).

With the global eradication goal in sight, the campaign has accelerated and will reach the peak of activities in 1999 to 2001. Regional NIDs and targeted “mop-up” campaigns involving door-to-door immunization are being promoted globally as a final strategy to address the estimate 3,500 cases remaining.

Critics of eradication campaigns have argued that these activities divert resources and undermine efforts to maintain and strengthen routine health services. Previous studies have shown both positive and negative impacts of eradication campaigns. Positive gains in social mobilization, laboratory capacity, and surveillance networks have been demonstrated in several countries. Other studies found that targeting effort on polio eradication in poorer countries of Latin America diverted resources away from routine services, especially during mass campaigns.

PHR, in collaboration with local counterparts, assessed the impact of the polio eradication initiative on the financing of national immunization programs in Bangladesh, Côte d’Ivoire, and Morocco. The study complements similar work commissioned by the World Health Organization (WHO). The PHR study examines whether funding for routine immunization programs declined as a result of shifting donor or government funding to polio eradication activities.

Bangladesh

Bangladesh’s National Immunization Program began polio eradication activities in 1995. While the first rounds of NIDs were conducted in March and April 1995 in order to coordinate with India, later NIDs have been conducted each year during the months of low transmission, December and January.

The trends in financing NIDs and routine EPI from 1993 to 1997 stayed about the same for most funders. However, the government of Bangladesh decreased its contribution over time for NIDs while the government of Japan increased its donations. Funding for routine immunization activities, on the other hand, increased from both the government and from donors, who were likely to fund either one or the other of the two types of activities.

In Bangladesh, combined spending from government and donors for both EPI and NIDs increased faster than the total health and population budget.

Figure 1 shows trends in the government’s contribution to spending for EPI and NIDs.
Côte d’Ivoire

Côte d’Ivoire launched its first NIDs in 1996 and holds three-day NIDs annually in February and March.

The government’s contributions for both polio eradication and routine EPI have gradually increased since 1996 (Figure 2). The government increased its contribution to routine EPI by 10 percent in 1998 and to polio eradication by 33 percent in 1999.

As in the case of Bangladesh, some donors provide funding for either routine EPI or polio eradication activities. Rotary International, the Japanese government, and USAID finance only polio eradication activities, not routine EPI. KFW, a German development bank, provides funding exclusively for routine EPI activities, not polio eradication. As part of its financing for polio eradication, the Japanese government has donated $1,166,000 for cold chain equipment, a contribution that will also strengthen the routine EPI program. UNICEF and WHO also contribute to both routine immunization programs and NIDs.

Morocco

Morocco began conducting NIDs to supplement routine immunization services prior to the initiation of the polio eradication campaign. Polio eradication activities began in the early 1990s and were linked to the existing NIDs in 1995. Morocco offers all six EPI vaccines in NID campaigns.

Government funding for the routine immunization program and NIDs increased from 1994 to 1997 (Figure 3). Most of the national immunization program expenditures were financed with a World Bank loan.

Implications for the Future

In Bangladesh, Côte d’Ivoire, and Morocco, instead of siphoning off funding for routine immunization activities, the governments have increased that funding while conducting polio eradication activities. While all three governments increased their contribution to routine immunization activities, most donors concentrated on funding either routine EPI or polio eradication activities.

Funding both routine immunization and polio eradication campaigns may have had opportunity costs with respect to other health services, however, especially in countries where funding for national immunization programs—both routine EPI and polio eradication activities—has been increasing faster than the health budget as a whole.

In the longer term, countries may reallocate polio eradication funds to the routine immunization program, thus “institutionalizing” the additional funding. But since donors provided much of the additional funding for polio eradication, the long-term prospects of donors’ switching their financing to routine immunization once polio is eradicated are not clear. Some of the funding for polio eradication, however, has been for capital costs of equipment and vehicles. Countries can use these in their routine EPI programs for several years.

early 11 percent of the Rwandan population is estimated to have HIV/AIDS, making this one of the most important health issues facing the country. In Rwanda, as in other African countries, HIV/AIDS is competing for limited resources with other urgent health care demands such as malaria, diarrhea, high maternal mortality rates, and respiratory infections. The Rwandan health sector’s limited financial and human resources will be further challenged by the costs of caring for a growing HIV/AIDS-infected population.

In this situation, it is important to know what people, the government, and donors now spend to prevent and treat the disease. This information and related epidemiological data can help Rwandan policymakers estimate present and future funding needs, identify whether they are spending public resources in the most cost-effective way, plan resource allocation for HIV/AIDS relative to with other priority services, and develop a strategy for targeting services and financial assistance where it is most needed. Comprehensive health spending information can thus help policymakers face the crisis that HIV/AIDS poses to the health system and to the livelihood of households with members who need care.

What NHA Data Show

Several general facts about health financing in Rwanda show just how serious the extra costs of dealing with HIV/AIDS are for people needing care and the health sector that must provide it. Working in close collaboration with the Ministry of Health (MOH), PHR helped to establish national health accounts (NHA) data covering the whole Rwandan health system for 1998. According to preliminary findings from this general NHA analysis, in 1998 the Rwandan government spent $6.80 per capita on debt service and $0.80 per capita on health. Rwanda’s public health spending is 2.2 percent of total government expenditures. NHA data reveal that 64 percent of the Rwandan health sector is financed by international organizations, 27 percent by private households, and 9 percent by the Rwandan government.

To date, estimates of expenditures on HIV/AIDS in Rwanda have suffered from many shortcomings, including the absence of a consistent methodology, reliance on secondary data analysis, and a lack of information on private out-of-pocket expenditures. With PHR assistance, the MOH is using the national health accounts framework and methodology for the first time to estimate expenditures on HIV/AIDS in Rwanda. This methodology will address some of the earlier studies’ shortcomings. This article highlights findings from the first part of the NHA analysis: household expenditures on HIV/AIDS. Subsequent work will examine government and donor spending for the disease.

A PHR team, working in close collaboration with local counterparts, carried out a survey of
350 HIV-positive individuals who were either enrolled in an HIV/AIDS support group or sought care at four selected health facilities. The team collected information on their sociodemographic status, their use of health services, their expenditures, and sources of financing for these services. Table 1 summarizes the results.

HIV/AIDS Demographics

Individuals in the sample had been HIV positive for an average of 4.52 years—longer for females (4.63 years) than males (3.96 years). For both males and females, the most important reason for getting tested was sickness or symptoms suggesting they might be HIV positive. People cited HIV in a partner or another individual in the household as the second most common reason. Only a small portion of people interviewed cited routine prenatal or other tests.

These findings confirm earlier observations that routine testing for HIV is not common. While the Central Hospital in Kigali (CHK) and the University Hospital in Butare carry out HIV tests, district hospitals and health centers generally do not screen for the virus since no adequate patient follow-up is available. CHK estimates that 60 percent of its patients hospitalized at the internal medicine department are seropositive. According to CHK, patients are not generally screened for the virus, and because of the lack of follow-up and stigmatization of the disease, health workers do not often inform the patient when tests prove seropositive.

Use of Health Services

Once HIV-positive individuals decide to enroll with a health facility or counseling center, they become high users of health care services. For the entire sample the PHR team interviewed, annual per capita use rate translated to 10.92 visits. This compares with a per capita use rate of 0.29 outpatient visits for the general population in 1998.

Significant differences exist in utilization, according to gender, marital status, place of residence, and income. Men used more health services per capita than females. People living
in urban areas made more than 10 times the number of visits as those in rural areas, reflecting rural respondents’ more limited access as well as limited income. Married persons used more health care than the widowed, and people in the highest income quintile made twice as many visits per capita as those in the lowest expenditure quintile.

Table 1. HIV/AIDS Treatment, Cost, and Financing (U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th>Average cost/visit</th>
<th>Average assistance provided/visit</th>
<th>Average amount borrowed/visit</th>
<th>Average sale of assets/visit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total sample</strong></td>
<td>6.40</td>
<td>21.32</td>
<td>20.03</td>
<td>3.32</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>5.27</td>
<td>18.97</td>
<td>21.04</td>
<td>1.13</td>
</tr>
<tr>
<td>Males</td>
<td>11.64</td>
<td>32.22</td>
<td>15.35</td>
<td>3.80</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>4.85</td>
<td>4.70</td>
<td>3.64</td>
<td>0.26</td>
</tr>
<tr>
<td>Rural</td>
<td>2.12</td>
<td>2.47</td>
<td>NA</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quintile 1</td>
<td>2.43</td>
<td>3.02</td>
<td>0.01</td>
<td>NA</td>
</tr>
<tr>
<td>Quintile 2</td>
<td>1.53</td>
<td>2.29</td>
<td>0.29</td>
<td>NA</td>
</tr>
<tr>
<td>Quintile 3</td>
<td>3.62</td>
<td>9.65</td>
<td>0.70</td>
<td>0.50</td>
</tr>
<tr>
<td>Quintile 4</td>
<td>3.96</td>
<td>6.40</td>
<td>4.84</td>
<td>1.18</td>
</tr>
<tr>
<td>Quintile 5</td>
<td>16.26</td>
<td>65.88</td>
<td>70.43</td>
<td>11.26</td>
</tr>
<tr>
<td><strong>Age groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to age 25</td>
<td>7.24</td>
<td>6.26</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>26–35</td>
<td>50.28</td>
<td>18.75</td>
<td>12.75</td>
<td>0.20</td>
</tr>
<tr>
<td>35–45</td>
<td>7.35</td>
<td>3.01</td>
<td>31.33</td>
<td>0.74</td>
</tr>
<tr>
<td>46 and older</td>
<td>6.85</td>
<td>2.58</td>
<td>12.17</td>
<td>0.74</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4.89</td>
<td>3.63</td>
<td>0.26</td>
<td>NA</td>
</tr>
<tr>
<td>Married</td>
<td>14.86</td>
<td>71.58</td>
<td>53.12</td>
<td>16.43</td>
</tr>
<tr>
<td>Widowed</td>
<td>5.79</td>
<td>14.95</td>
<td>21.25</td>
<td>1.08</td>
</tr>
<tr>
<td>Divorced</td>
<td>1.89</td>
<td>4.97</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Cohabitant</td>
<td>1.08</td>
<td>6.68</td>
<td>0.45</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>7.76</td>
<td>22.95</td>
<td>25.89</td>
<td>8.28</td>
</tr>
<tr>
<td>Post primary</td>
<td>15.95</td>
<td>40.03</td>
<td>37.79</td>
<td>1.34</td>
</tr>
<tr>
<td>Secondary and higher</td>
<td>17.98</td>
<td>78.15</td>
<td>63.09</td>
<td>NA</td>
</tr>
<tr>
<td>NA = not available.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Spending for health care by HIV-positive people varies strikingly.

Men not only use more health services per capita than women but they also spend 2.6 times more.

Urban dwellers spend nearly three times more per capita than people living in rural areas.

People in the highest income quintile spend more than 13 times as much as individuals in the lowest expenditure quintile.

Married people spend three times more per capita than the widowed.
Less than 30 percent of households could meet the costs of health services exclusively from their own resources. Most households resorted to multiple ways to pay for health care, including financial assistance from others, borrowing, and selling assets. Sixty-six percent of households received some kind of assistance, 18 percent had to borrow money to pay for care, and 5 percent had to sell assets. The high proportion of households that reported receiving assistance reflects Rwanda’s community and church support systems. Without them, the impact of health expenditures would have been even more catastrophic for these families.

Health insurance in Rwanda does not cover treatment for people with HIV/AIDS. Thus, access to care clearly depends on patients’ socioeconomic situation. CHK reports that 108 AIDS patients currently receive tri-therapy treatment. Their average monthly out-of-pocket expenses amount to FRw 170,000 ($480) per patient. However, the large majority of Rwandans who think they are seropositive seek care in community health centers and with traditional healers.

Economic Impact on Rwandan Households

Largely because of additional costs of health care and lost income from work, HIV seriously impairs the ability of households with HIV-positive members to meet basic needs. Nearly three quarters of the sample households either could not meet the household’s food needs, or did so with difficulty. In addition, many households could not meet their basic need for housing (57 percent), for education (86 percent), and for clothing (82 percent).

Also, on average, respondents missed 4.8 days of work due to ill health in the past two weeks. Nearly 35 percent of respondents had missed at least one week of work, and 20 percent reported that they could not work at all in the past two weeks. While longitudinal studies will be required to better understand the longer term economic impact of HIV on households, these findings do indicate that it is probably severe.

Implications for Policymakers

Findings from this study highlight the need for more systematic research covering a larger sample than was possible for this study to better understand the national impact of HIV/AIDS on households. At a minimum, the findings highlight gender, income, and place-of-residence inequities in the use of expenditures on health services to treat HIV/AIDS. They also flag the problems households have mobilizing resources to pay for care.

However, given the current state of the economy, level of health expenditures, and reliance on donors for funding health costs, mobilizing significant new resources to pay for treating people afflicted with HIV/AIDS will be difficult for the government. It will be important to identify priorities for allocating public health resources so they are targeted on cost-effective ways to prevent the spread of this disease and devise equitable ways to finance treatment for the better-off and poorer individuals.

Since 1989, the health sector in Mali has been undergoing continuous reform, beginning with cost recovery under the Bamako Initiative, and followed by the creation of a new partnership between the state and local communities. At community level, this partnership has meant establishing decentralized democratic structures to manage health care delivery and promote community participation. At state level, the Ministry of Health (MOH) undertook an ambitious program to make health care accessible to a majority of its population by building, renovating, and equipping community health facilities. About 40 percent of Mali’s population now lives within 15 kilometers of a health facility that provides the minimum package of services.

While these reforms have brought about promising increases in utilization of certain priority services, such as prenatal visits and vaccination for children under one year, use of curative care and other services remains extremely low (<0.3 visits per person per year). Moreover, the reforms have not yet reached certain populations, notably the most  

**Priority Services in Mali**

Protecting the Poor from Financial Obstacles

A fact sheet on user fees, developed by PHR and the World Health Organization (WHO) will help policymakers evaluate the benefits and drawbacks of implementing user fees in national immunization programs. This is part of the technical support for strategic planning that PHR has provided the Global Alliance for Vaccines and Immunizations (GAVI).

GAVI officially launched the global children’s immunization campaign at the World Economic Forum in January 2000. The GAVI is coordinating a global network of international development organizations, private sector leaders, and others in re-energizing the world’s commitment to vaccines and immunizations as basic to assuring primary health care services for people everywhere. The establishment of the Global Children’s Vaccine Fund (GCVF) with a $750 million donation from the Bill and Melinda Gates Foundation in 1999 created a unique challenge for the GAVI, which needs tools and information for making effective decisions about distributing these monies.

WHO, a GAVI partner, developed a global assessment tool to evaluate immunization programs and determine individual country needs for GCVF assistance. PHR reviewed and provided technical assistance in the development of this tool, particularly on costing, financing, and planning. The user fee fact sheet is part of this package.

PHR will continue to provide technical assistance to GAVI through the U.S. Agency for International Development through the following activities:

- conducting two regional workshops to present country case-study findings and introduce the application process to the Global Children’s Vaccine Fund, managed by GAVI
- contributing to the GCVF application process
- participating in GAVI country assessments.
- developing a list of options for immunization financing.

rural, disadvantaged populations. The MOH has encouraged local communities to mobilize local solidarity mechanisms to address remaining equity problems.

Under cost recovery systems such as those in effect in the Bamako Initiative in Mali, many people assume that user fees are the primary cause of restricting access of the poor to priority health services. PHR, through its Equity Initiative in Mali (l’Initiative pour l’équité) set out to investigate this hypothesis.

Using a scientific survey methodology, a PHR team in close collaboration with United Nations Children’s Fund and local counterparts looked at both the demand for health services and the supply of basic health services in two pilot sites, one rural (Bla) and one urban (Sikosso). As a first step in designing effective protection mechanisms such as fee waivers or a solidarity fund to improve utilization of health services among poor groups, PHR sought to understand the health needs of different income groups, their health-seeking behavior, and the range and quality of health services available to them.

**Assessing Use of Priority Services in Mali**

The PHR team chose several sentinel indicators to represent use of basic priority health services: fever (presumed to be malaria); maternal health services; family planning, and sexually transmitted infections. In total, 12,645 individuals were surveyed (to allow statistically valid analysis). Of this number, 899 individuals (7 percent) had suffered from fever in the specified time period. Of the 2,903 women of reproductive age (15 to 49), 769 women had given birth in the past 12 months or were pregnant. In addition, the team interviewed 1,318 youth, aged 15 to 24, about family planning and sexually transmitted infections (STIs).

**Need for Priority Services**

For three of the indicators investigated—fever, maternal care, and STIs—need for services does not vary significantly by income quintile. The need for curative care for STIs and fever also does not vary by site—by urban or rural setting. The most striking differences is in rural women’s much greater need than urban women’s for maternal care (prenatal, delivery, and postnatal). The crude birth rate varies widely—from 29 births per 1,000 population in Sikosso (urban) to 54 in Bla (rural).

**Use of Services and Choice of Provider**

In care-seeking behavior, the rural-urban divide is significant. Not surprisingly, education is positively associated with the decision to seek care for all services.

In general, urban dwellers are significantly more likely to seek care for fever (generally assumed to be malaria) than are rural dwellers (49 versus 37 percent). Income group is significant in the decision to seek care among women but not men, where the poorest women are much less likely to seek care for malaria than all other income groups. The poorest also are the least likely to use modern public providers (less than 30 percent compared with 44 to 47 percent for other income groups). On the other hand, poorest households have the heaviest use of traditional healers (26 versus 9 percent) and of modern private providers (36 percent versus 27 percent for the richest households). Table 1 summarizes these findings for fever treatment.

For maternal care seeking, 70 percent of all women said they had used prenatal care services during pregnancy and 74 percent said that some type of health provider assisted their delivery. A midwife attended about 53 percent of these births, trained birth attendants (matrone) assisted at 23 percent, and traditional birth attendants assisted at 23 percent of the births. Rural women are, however, significantly less likely to seek prenatal care and to have an assisted delivery—with any type of health provider. 95 percent of the urban women had an assisted delivery, while 70 percent of the rural women did. Only 58 percent of the poorest rural women have assisted deliveries, however. Women use postnatal care equally infrequently, however—on average only 36 percent seek it.
Figure 1 shows the differences in choice of site for childbirth by the poorest and other women in both urban and rural areas. As the figure shows, the poorest women are most likely to deliver at home and all others most likely to deliver at a modern public health facility, where midwives are more likely to assist the birth. For family planning, use and non-use is evenly spread across income groups and age. Women in general are significantly more likely to use these services than men in the age group surveyed (15 to 24). Use is also significantly associated with education level among both men and women.

A majority of the young adults (69 percent) said they had sought treatment when they had an STI, with no significant difference between urban and rural or male and female groups. But income did affect use of STI services: 40 percent of young adults in the poorest quintile sought care, compared with 67 to 87 percent of youth in richer quintiles. Income has a stronger effect on men’s than on women’s use. Men in the poorest quintile in both the rural and urban sites were

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**Table 1. Sources of Treatment for Fever by Rich and Poor Households**

<table>
<thead>
<tr>
<th>Provider type</th>
<th>Income quintile</th>
<th>Modern public</th>
<th>Modern private</th>
<th>Traditional</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest (%)</td>
<td></td>
<td>15 (30)</td>
<td>18 (36)</td>
<td>13 (26)</td>
<td>1 (2)</td>
<td>51 (100)</td>
</tr>
<tr>
<td>Richest (%)</td>
<td></td>
<td>33 (47)</td>
<td>19 (27)</td>
<td>6 (9)</td>
<td>2 (3)</td>
<td>70 (100)</td>
</tr>
<tr>
<td>Total (%)</td>
<td></td>
<td>48 (40)</td>
<td>37 (31)</td>
<td>19 (16)</td>
<td>3 (2)</td>
<td>121 (100)</td>
</tr>
</tbody>
</table>

Survey of 121 households.

Role of Fees in Preventing Use

PHR’s survey results demonstrate that the need to pay user fees is not always the most significant factor in the decision to seek care. When those interviewed were asked what the most important factor was in choosing to seek care from a particular provider, the two most often cited reasons were the presence of competent personnel and geographic proximity to home. Perceived competence was more important for those seeking treatment of fever and STIs, while for pregnancy-related care and family planning, proximity was most important.

When the PHR team interviewed providers, they found that only 51 percent of public and private providers have a thermometer to verify fever. Clients are motivated to seek care when they perceive it to be of high quality. Improving quality can therefore have an impact on utilization. Given the high use of prenatal care across sites and income levels, the low use...
of postnatal care cannot be explained by lack of geographic access. Rather, outreach or heightened communication about the importance of postnatal care might be necessary to improve utilization of these services.

**Implications for Improving Use of Priority Services by the Poor**

Findings from the surveys in Mali have at least two important implications for removing obstacles that prevent the poor—and others—from seeking care for priority services.

- A package of interventions is needed to overcome obstacles to use. Action is needed to improve quality of health personnel and infrastructure (e.g., equipment and supplies), outreach and operation of financial protection mechanisms for the poor.

- Interventions to protect the poor from financial obstacles need to be targeted to specific groups for specific services. Findings showed that income obstacles affect men and women, and urban and rural populations, differently—and for different priority services.

**Next Steps**

The PHR team discussed survey results with key stakeholders during summer 2000 in Sikosso and Bla and with health staff, community health organizations, household heads, women’s and youth groups, local media, regional and local government officials. Now PHR will help to design, implement, and monitor a strategy to improve access to priority services for target groups, based on community-defined priorities.

The local planning groups will identify their objectives for improving equity and choose related indicators for monitoring and evaluation such as increasing the percentage of the poorest rural women who have deliveries assisted by a trained attendant; increasing the percentage of women who get postnatal care; increasing the percentage of the poorest who seek care from modern providers when ill with fever.

Specific mechanisms to achieve objectives related to removing fee barriers for the poor could include solidarity funds, where the facility and the community health organization
contribute to cover a certain service for a specific group. They could also involve communication campaigns, outreach, or even fee waivers. Fee waivers can be based on socioeconomic, demographic, or other user characteristic, (e.g., gender, age, student status and/or income); and/or types of service (e.g., immunizations, prenatal care, STI treatment).

A pilot activity may involve modifying a tool already in use such as changing the questions used during means tests to determine ability to pay. A second type of pilot may focus on compliance. In this case, the initiative would identify weaknesses in implementation of protection mechanisms such as inconsistent application of means-testing criteria, and work to improve compliance.


Developing-Country Research on Health Reform and Priority Services

Under its Applied Research program, PHR has sponsored developing-country researchers with small applied research (SAR) grants. Many of the SAR studies include analysis on links between health reform and priority services as bundled in primary care or in specialized follow-up hospital services. The following SAR studies focus on priority services and on themes this issue addresses.

▲ Bangladesh. Costing the Integrated Management of Childhood Illnesses Module
▲ India. Competition, Incentives and the Structure of Private Hospital Markets in Urban India: A Study of Madras
▲ Peru. Determinants of Women’s Health Services Usage and its Importance in the Design of Policies
▲ Peru. Targeting Public Health Expenditure in Peru: Evaluation of Ministry of Health Services Procedures and Proposal for Targeting Systems
▲ South Africa. A Cost-Effectiveness Analysis of AIDS Patient Care in Western Cape Province
▲ Tanzania. Health Financing Reform in Tanzania: Appropriate Payment Mechanisms for the Poor and Vulnerable Groups in Lorogwe District, Northeastern Tanzania
▲ Zimbabwe. Regulation and Incentive Setting for Participation of Private For-Profit Health Care Providers in Zimbabwe.
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