

The Role of Pilot Programs

Approaches to Health Systems Strengthening



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Acronyms

CBHF	Community-Based Health Financing
CMB	Central Monitoring Bureau
DRP	Directorate of Research and Programs
DTP	Diagnosis and Treatment Protocol
EEC	European Economic Community
EU	European Union
FGP	Family Group Practice
FMTC	Family Medicine Training Center
GDP	Gross Domestic Product
GHSD	Grant for Health Sector Development
HCFSDR	Health Care Finance and Service Delivery Reform
HFS	Health Financing and Sustainability
ISDS	Initiative for Sub-District Support
M&E	Monitoring and Evaluation
MHI	Mandatory Health Insurance
MHIF	Mandatory Health Insurance Fund
MOH	Ministry of Health
MPH	Ministry of Public Health
NGO	Nongovernmental Organization
ODA	Organization for Development Assistance
OHD	Oblast Health Department
ONAPO	Office National de la Population
ONPPC	National Office of Pharmaceuticals and Chemical Products
PHC	Primary Health Care
PHR	Partnerships for Health Reform
PHR<i>plus</i>	Partners for Health Reform <i>plus</i>
PPS	Prepayment Schemes
USAID	U.S. Agency for International Development
WHO	World Health Organization

Foreword

The U.S. Agency for International Development (USAID) is one of the primary providers of technical assistance for health systems strengthening, and, through its global and country-level projects, it has accumulated significant experience in designing and implementing health sector reforms. One approach to health system strengthening that has been used relatively frequently by USAID-supported projects is the implementation of small-scale pilots. Such pilots enable country decision makers to “try out” a complex health system reform before deciding whether and how to roll out the reform at the national level. Pilots are often supported by evaluations that help inform the decision as to whether or not the reform should be rolled out, and may help fine-tune the reform design.

While the use of pilots is not unique to health systems strengthening efforts, the piloting of health system reforms is rather different from piloting of new clinical interventions, or even service delivery modes. Complex health systems strengthening initiatives typically challenge country policymakers and implementers on multiple levels: they involve a diverse range of stakeholders, they address politically sensitive issues, they generally include multiple related components, and they frequently require skills and capacity that are in short supply in-country. Under these circumstances, piloting health system strengthening initiatives may offer particular advantages.

Abt Associates, in its work for USAID on the Health Financing and Sustainability project, the Partnerships for Health Reform, and the *ZdravReform* project, has been involved in multiple health systems strengthening pilot programs. The contract for the Partners for Health Reform *plus* project (PHR*plus*) initially required that three pilot sites be established. The PHR*plus* team therefore decided that it would be important to take stock of what had been learned from previous health system strengthening pilots. Surprisingly, the published literature on this topic is minimal: papers that document pilot experiences are hard to find, and there is nothing in the literature about how to design or implement a pilot project. PHR*plus* conducted a review of the grey literature on piloting complex health system reforms,¹ but also determined that it was important to document our own experiences of piloting.

This volume represents the fruit of these efforts. It contains case studies of three health system reform pilots undertaken in Kyrgyzstan, Niger, and Rwanda during the past 15 years. Chapter 1 draws upon these experiences, as well as the broader review previously conducted, to develop a conceptual framework to assist with the design and planning of health system strengthening pilot programs, as well as summarizing the lessons learned from these three case studies and similar experiences.

¹ Bennett S and M Patterson. 2003. *Designing and Implementing Complex Health System Reforms*. Technical Report. Bethesda MD: PHR*plus*, Abt Associates Inc.

PHR*plus* has implemented only one of the three pilots that it originally planned. This was due partly to funding constraints, but also to an environment that increasingly emphasizes the need for scale-up and accelerated responses. In such an environment it has been increasingly difficult to justify pilot programs and similar incremental approaches to health systems strengthening.

It is difficult to evaluate in any rigorous sense the role that piloting (as opposed to moving directly to national roll-out of health systems strengthening strategies) has played. However, the case studies presented here illustrate the multiple ways in which piloting health system strengthening strategies may contribute to policy development, as well as to further developing the knowledge base regarding effective health system interventions and developing capacity at the national and subnational level. It is hoped that the experiences and lessons contained in this volume enable future health system strengthening pilots to be even more effective.

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Chapter 1. Designing, Implementing, and Evaluating Health System Reform Pilots

Sara Bennett

Introduction

A pilot health system reform project is a geographically defined entity where substantial, and most probably complex, health system strengthening reforms are undertaken. Pilots are typically undertaken with the purpose of testing the feasibility of the piloted reforms and evaluating their early impacts, in order to inform policy and implementation decisions. Frequently, pilot projects are seen as mechanisms to test reform on a small scale, with the ultimate goal of “scaling up” or “rolling out” the reform. This chapter suggests that, in practice, objectives for undertaking health system pilots vary substantially and, even if the piloted reform is not in the end rolled out, pilots may lead to other equally important outcomes.

Despite the existence of a body of work on pilots and demonstration projects that was developed in the early 1980s (e.g., Pyle 1980, Honadle and Van Sant 1985), there is not a substantial and clear body of knowledge about how to conduct health system pilots. The framework and lessons presented here are drawn from the three case studies presented in this volume and a review of 17 health system reform pilots (Bennett and Patterson 2003). Table 1.1 summarizes the 17 pilots. It demonstrates the diversity of health system reform pilots in terms of their geographic location, population covered, duration, and reforms piloted.

Table 1.1: Health System Reform Pilots Reviewed

Country	Topic	Size of Pilot	Life of Pilot	External Funding
Niger	Cost recovery and quality improvement	Three districts, with total population of 660,000	October 1992-April 1994	Yes
Kyrgyzstan	Family group practices	One oblast, with population of 253,000	1994-present (no official end-date, pilot site still used to test new interventions)	Yes
Almaty, Kazakhstan	Primary health care fundholding	Two polyclinics, with catchment population of 70,000-80,000	Pilot designed 1997 but political constraints prevented implementation	Yes
South Kazakhstan	Family group practice	One oblast, with population of 2 million	Collapsed around 1997 (after about two years)	Yes

(Continued on the next page)

SARA BENNETT, PhD, worked for Abt Associates as the Senior Research Advisor for PHR and PHR*plus*. She has not been directly involved in the implementation of any of the pilots reported here, but, with Mary Paterson, undertook a review of health system reform pilots.

(Table 1.1 Continued)

Country	Topic	Size of Pilot	Life of Pilot	External Funding
Egypt	Primary health care reform	Five family health centers, with 40,000 persons registered	1999-present (no official end-date though TA completed in 2000)	Yes
Rwanda	Prepayment schemes	Three districts, with population of 1.08 million (though only 88,000 joined scheme)	Implementation started July 1999 Final evaluation September 2000 Pilot activities continue	Yes
Thailand	Thai health card scheme (rural insurance)	Initially small scale (18 villages in 1983) but grew over time	Phased: Small scale 8 months in 1983 Broader 1984-97 Roll-out 1998 onward	Yes
Poland	Restructuring of PHC and prevention	Three regions, with population of 6.2 million	n/a	Yes
Zambia	Financial decentralization	Three districts, with population of 460,000	1991-1993	Yes
China	Rural health insurance	About 40 townships, with population of about 1 million (90% enrollment)	Initiated in 1994 Final evaluations in 1999	Yes
Philippines	Provincial health insurance program	Three municipalities, with population >1 million, though fewer joined	Initiated in 1993-1994 Still functional in 1999 (no official end-date)	Yes
Ukraine	Disease surveillance	Three oblasts	1997-1999	Yes
Russia	Health financing reform/provider payment reform	One region, with population of 3.5 million	1988-1991	No
Tanzania	Community Health Fund (rural health insurance)	Initially one district (Igunga, population 250,000), then additional nine districts	Phased: 1995-1998 one district 1998-2001 nine districts	Yes
Tanzania	Tanzania Essential Health Intervention Project (TEHIP)	Two districts, with population of 700,000	1996-2001	Yes
South Africa	Initiative for Sub-District Support (ISDS)	Initially four subdistricts, now 21 districts	Phased: Initiated in 1996 in four subdistricts Still operating now in 21 districts	No
Uzbekistan	Financing and management reforms of rural physician posts	Selected rayons of three oblasts	1999-2001	Yes

This chapter represents a first attempt to organize the knowledge that is available and to synthesize lessons from pilots that have been undertaken. The chapter aims to serve the needs of policymakers, staff of international organizations, and technical assistance staff who are potentially interested in conducting pilots or wish to understand more about the role that pilot projects can play in further health system strengthening agendas.

The next section of the chapter briefly reviews the arguments for and against piloting reforms and highlights why pilots may be particularly appropriate vehicles for furthering health system reforms. An overview of the conceptual framework underlying this chapter is then presented. Subsequent sections take the reader through the individual elements of the framework, focusing in turn upon pilot objectives and links to the reform implementation cycle, contextual factors that should be taken into account in designing the pilot, the overall pilot approach, monitoring and evaluation strategies, pilot implementation, and pilot outputs.

Arguments For and Against Pilots

Pilots and demonstration projects have been a part of development approaches for many years. Such projects may be specific to a sector, such as health or agriculture, but during the 1970s and 1980s, there was substantial interest in integrated rural development projects that piloted related, small-scale reforms across a number of different sectors within a geographically defined area. During this period there also appear to have been a large number of health sector pilots. A 1986 paper identified 34 pilot projects on family planning in Africa alone (Ross 1986).

During the late 1980s and 1990s, pilot approaches were increasingly questioned. Criticism of pilots focused upon a number of themes (Pyle 1980, Honadle and Van Sant 1985, Tollman and Zwi 2000):

- ▲ Pilot projects were frequently perceived to be donor-driven and dependent upon external funding. Furthermore, it was argued, the heavy external involvement in their design meant that they were excessively influenced by external priorities, thus failing to adequately serve local interests or capture local commitment;
- ▲ Pilot projects often did not result in roll-out of the piloted design. It was suggested that sometimes the intensive support that pilot projects received was impossible to replicate on a broader scale;
- ▲ The intense nature of pilot projects may absorb excessive human and financial resources. For example, scarce skilled researchers, health workers, and program managers may be attracted to pilot areas to the detriment of other areas. This magnet effect also meant that strategies that could be successfully implemented on a pilot scale could not be effectively rolled out;
- ▲ Finally, it was argued that pilot projects may stifle broader reform efforts. They may weaken the confidence of health service leaders to pursue widespread radical reforms and/or

become convenient mechanisms for policymakers to employ in order to defer broader, politically risky reform.

The process of building support for, designing, and implementing “big bang” health system reform can present a number of challenges: It is often politically contentious. There is likely to be much uncertainty about the effectiveness of alternative reform packages given the relatively limited research base that exists on health system strengthening as well as the difficulties of applying conclusions from one context to very different contexts. Many health system reforms require government and other stakeholders to acquire new skills and capacities that typically take time to develop. For reform to succeed, ways to work deal with these issues must be worked out.

“Piloting aspects of reforms may generate lessons for further implementation, while phasing reform implementation can allow problems to be identified and addressed even during implementation” (Gilson 2000).

“The [World] Bank is increasingly engaged in reform issues that have no commonly agreed solutions or universal models, limited evidence about what works, and are areas of limited Bank experience...Incremental approaches may therefore be more appropriate, built on solid research, pilots and focused efforts to learn from experience” (Stout and Johnston 1999).

It is important to distinguish pilots that address complex health system reforms from those that focus on a single intervention or a vertical program within the health sector. Complex health system reform pilots typically aim to advance the reform implementation cycle and have explicit or implicit links to the broader policy process. This usually means that they involve a wide range of stakeholders with varying perspectives and values, and, therefore, as noted above, they tend to be politically sensitive and contentious. In addition, they are more programmatically complex. In contrast, reforms that address a single intervention or a vertical program tend to have a smaller set of relevant stakeholders, and these stakeholders are likely to share a common programmatic understanding. Because of these factors – the large groups of stakeholders generally involved contention around reform design, and the complexity of the nature of system reforms – pilot projects offer particular advantages for health system reforms:

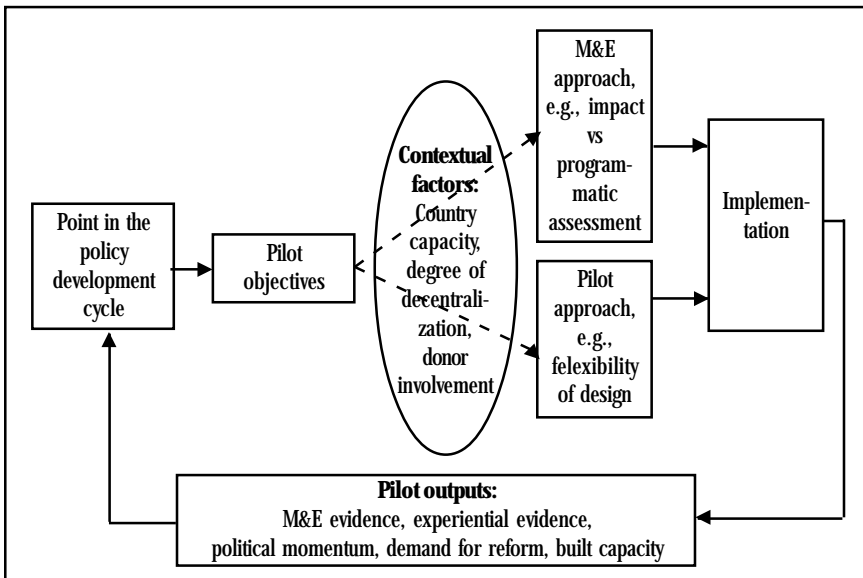
- ▲ Pilot projects allow policymakers to “try out” alternative arrangements for the health care system in a relatively risk-free way. If policymakers are uncertain about the political support for, or technical feasibility of a new health system design, piloting the reform may allow them to determine these factors before institutionalizing such reforms or implementing them nationwide;
- ▲ Piloting of reforms may generate lessons regarding technical design and implementation that can feed into the further implementation and refinement of the reform;
- ▲ Pilot projects offer an opportunity for greater control over the implemented intervention than is typically the case for broad-scale reform. This can contribute to the establishment of a powerful information base about the effects of reform;

- ▲ Pilots can provide the opportunity to build a nucleus of capacity in reform implementation through learning-by-doing, prior to attempting more widespread implementation;
- ▲ Pilot projects can demonstrate the benefits of reform in a very tangible and experiential manner. This may be important to convert reform skeptics who have difficulty understanding how the proposed reform would work, and can also help develop reform champions.

Overview of Conceptual Framework

Figure 1.1 presents an overview of a conceptual framework for planning and implementing pilots of health system reforms. It is predicated upon the fact that health system reform pilots generally link, either explicitly or implicitly, to broader reform processes. Accordingly, a critical first step in planning a health system reform pilot is understanding at what point in the policy development cycle the proposed reform currently is: whether there is a substantial degree of consensus and commitment to the reform to be piloted, or whether the proposed reform is much more experimental. This contextualization of the health system reform intervention in the broader policy process should directly determine the objectives of the pilot. As used here, the term “objectives of the pilot” refer to the goal that the pilot has with respect to furthering the reform implementation cycle. Pilots also clearly have technical objectives (such as improving efficiency or increasing coverage of services), but these objectives relate to the reform design rather than to the process of piloting per se.

Figure 1.1: Overview of the Process for Piloting Health System Reform Interventions



The pilot objectives will also determine the overall approach to the pilot and the monitoring and evaluation (M&E) approach; however, these relationships will be mediated by a number of contextual factors such as the level of local technical capacity, the degree of decentralization within the health system, the available budget, and constraints upon the timeframe.

There are a number of different aspects of the pilot approach. Flexibility, for example, is a key element: to what extent is the technical design to be piloted flexible, and can it be adapted over time or in different pilot areas, versus being fixed in stone. Another key aspect is the extent to which the pilot implementers engage with policymakers in decisions regarding the design of the pilot, versus remaining somewhat distant from them.

M&E approaches to pilots can also vary substantially, ranging from strong classical impact assessments, to much more process-oriented, evaluation designs. Furthermore, pilots may give greater or less priority to M&E elements depending upon the overarching objectives of the pilot.

There are also a number of key decisions about how the pilot should be implemented. While some pilots are implemented through structures that are very integrated into ministries of health, others operate almost as stand-alone projects. Again, the implementation strategy should be influenced by the overall goals of the pilot.

The overall design and implementation of the pilot (and its M&E activities) will clearly influence pilot outputs. This chapter identifies a range of different types of outputs from pilot projects, such as M&E evidence, experiential evidence, political momentum, built capacity, and demand for reform. Clearly, the challenge facing the policymaker interested in conducting a pilot is how to ensure that outputs from pilots help achieve pilot objectives.

Ultimately, pilot outputs should feed back into the policy reform and implementation cycle in a manner that help moves that cycle forward. While scale-up or roll-out of the piloted reform is frequently seen as the primary measure of pilot success, in practice the drivers of the pilot may be seeking a number of alternative policy outcomes, from simply getting a new idea onto the policy agenda, to promoting consensus on the need for reform, or enhancing clarity on the precise nature of the reform. The nature of desirable policy outcomes, linked to appropriate pilot objectives, is discussed in more depth in the next section.

Determining Pilot Objectives

The Reform Cycle

Typically, reform processes do not follow any clear linear path but are iterative and, more often than not, a little muddled. Figure 1.2 attempts to describe the principal steps in the health system reform implementation cycle. As the double-headed arrows indicate, reform processes may move backward and forward between steps. The initial step in the process is simply getting the need for reform to be recognized by key stakeholders, and potential options for reform onto

the policy agenda. Once the need for reform has been acknowledged, the next step is the development of a supportive policy environment. Sometimes this might occur in a very strategic manner, through, for example, conducting stakeholder analyses; in other cases, the process of developing stakeholder consensus is less coordinated.

Once at least a quorum of key stakeholders becomes committed to reform, work can begin on the design of the reform and implementation approach. This stage may be protracted. Moving the policy process forward to reform implementation depends upon a sufficient number of stakeholders reaching agreement about the technical design. In some cases, a small number of powerful stakeholders may be able to push a reform design through; in others, complex negotiations among multiple stakeholders is required. Frequently in the case of health system reforms, there are complex technical questions – such as the definition of appropriate payment mechanisms or the development of service packages – that require substantial analytical work, and it may be difficult for all stakeholders to appreciate the technical arguments. Furthermore, many health system reforms require support from stakeholders in different sectors or ministries (such as ministries of health and finance), and a lack of a common perspective across such actors can impede progress. In such situations, where reform progress falters, the piloting of alternative approaches may be considered as a means to move the process forward and enable stakeholders to get a better feel for design alternatives.

Once agreement about a technical design and approach to implementation of reform has been reached, stakeholders can proceed with implementing the reform package. In general, this stage will require capacity building for implementers and detailed work on the development and implementation of new subsystems, such as health information systems or human resource management systems. Radical reforms – such as separating purchasers from providers and the development of contracting mechanisms, or widespread decentralization – may require not just capacity building, but a complete change in the culture of the implementing organizations.

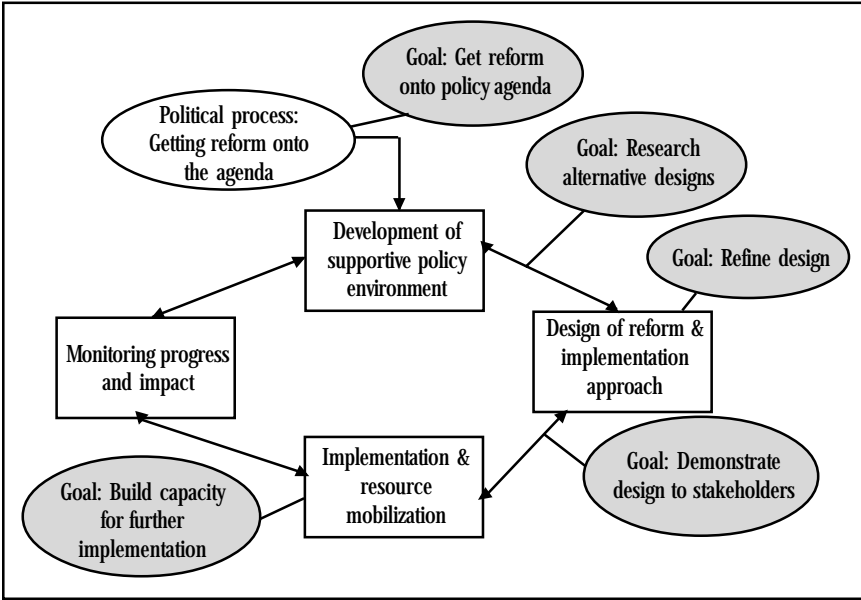
As implementation occurs, M&E processes should track changes that occur in the system and provide feedback to policymakers and implementers. The monitoring and evaluation design should be developed at the same time as the broader reform design.

As a particular reform package moves through this cycle of steps in the reform implementation cycle, there is growing certainty among stakeholders about the nature and likely effects of reform.

Pilot Objectives in Relation to the Reform Cycle

Health system reform pilots may occur at any point in the reform implementation cycle, from stages where there is really no consensus about the need for reform to stages where the nature of the reform is widely agreed and well defined. The objectives of the pilot and the pilot implementation strategy will vary according to the point in the reform cycle.

Figure 1.2: Linking Pilot Objectives to Points in the Reform Implementation Cycle



Adapted from Brinkerhoff and Crosby (2002)

The shaded boxes in Figure 1.2 illustrate the likely objectives of pilots according to the point in the implementation cycle. Some pilots may have a primary objective of *generating a demand for reform*. Prior even to a reform reaching the political agenda, pilots may be useful to demonstrate that there are alternative ways of organizing the system and to generate a demand for reform. This use of pilots appeared to be particularly common in the former Soviet Union during the 1990s. Pilots were sometimes pushed by outside actors in policy environments where there was a high degree of inertia.

“We were attempting to encourage a few people with good ideas to experiment and create examples within a generally very conservative system.”

External technical advisor on the rationale for piloting health system reforms in Russia during the mid-1990s

Once there is some degree of consensus about the need for reform, it may be difficult to identify the most appropriate reform strategy. For example, if the overall objective of reform is to generate greater financial resources from the community to support the delivery of health services, then this could be pursued through a user fee strategy, the development of community-based health insurance schemes, or the establishment of social health insurance. A pilot project may be established to *investigate empirically the advantages and disadvantages of alternative reform designs* in a particular context. For this type of research pilot, the primary

focus is the gathering of empirical evidence. The Niger pilot reported in Chapter 3 of this volume piloted a user fee intervention in one district and a mandatory head tax in another district, and compared these two designs.

Frequently, however, the overarching architecture of a reform design is known: for example, key stakeholders may be agreed that a community-based health financing (CBHF) approach is the preferred approach. Nonetheless, there frequently are multiple design elements that need to be worked out: should the CBHF scheme request monthly or annual payment of premiums? How should the scheme be governed? How should providers be paid? In such circumstances, a pilot may be undertaken with the goal of *developing or refining a health system design*. This was the case with the Rwanda pilot reported in Chapter 4 of this volume.

Sometimes there is considerable agreement among key stakeholders about the design of the proposed health system reform, but other stakeholders may have little sense of how the design will actually work in practice or need to be convinced of its utility. In such circumstances, a pilot may be undertaken to *demonstrate how the new system would work and demonstrate its feasibility*. For example, the Partnerships for Health Reform project piloted primary health care reforms in Alexandria, Egypt; one of its goals was to provide hands-on experience of the reform at the community level and with key stakeholders.

Finally, pilots may also be undertaken with the primary objective of *building capacity among reform implementers* and perhaps fine-tuning the implementation process. This type of pilot is very similar to the phased implementation of reform. From the start, it is quite certain that the reform will be rolled out, but the initial implementation of the reform in a geographically defined area allows reformers to build upon experience.

"A pilot never ends, there is always continuous learning as the pilot goes deeper"
(Ibraimova 2003, in McEuen 2004).

The pilot in Issyk-Kul oblast, Kyrgyzstan (reported in Chapter 2) was initiated in 1994 and remains to this day a test site for subsequent steps in Kyrgyz health reform. While the initial pilot objective was to develop or refine a new health system design, subsequent pilots have focused upon testing and refining more specific and narrow health reform interventions such as the single-payer system and the introduction of facility-level quality improvement systems. In contrast to the initial Issyk-Kul oblast pilot, these subsequent pilots have been more rigorously and capably evaluated by the Ministry of Health and the Mandatory Health Insurance Fund, with support from the World Health Organization and other donors.

In practice, pilot objectives may include more than one of the objectives described above. For example, a pilot may aim to refine a reform design and simultaneously build capacity for further implementation. However, it is advantageous to be as clear as possible about how the pilot is expected to further the reform implementation cycle, and as specific as possible about its objectives. Previous analyses have suggested that lack of clarity about pilot objectives may lead to confusion about piloting strategy and, ultimately, failure to achieve any of the goals originally specified (Pyle 1980).

It is also possible for the objectives of a pilot to evolve over time, as a specific reform moves through various phases of the reform implementation cycle. The evolution of the Thai health card scheme could be interpreted in this light. The Thai health card scheme, which was a government-run scheme that provided voluntary health insurance for rural communities without formal sector employment, started in 1983 on a small scale and very experimental basis. Over the course of the next 15 years, the scheme was gradually rolled out, with frequent evaluations. While initial goals of the pilot were primarily to determine the feasibility of the overall approach, later phases of piloting focused more on fine-tuning the design of the scheme and developing capacity for further roll-out.

Taking Account of Pilot Context

While the overall goal of the pilot is likely to be the primary factor driving the pilot approach, attention also needs to be paid to other contextual aspects that will influence pilot design and implementation. Three interconnected, contextual aspects are particularly important.

Country Capacity

As argued previously, health system reforms are frequently technically and politically complex. They may be very demanding upon country capacity. Skills and capacity are required to develop policy, create consensus, conduct technical design work, possibly develop legislative instruments, and actually implement the reforms. Countries vary in their capacity to be able to undertake these steps. Piloting of reforms may alleviate some capacity constraints, but pilots themselves still make significant demands upon capacity.

Donor Involvement

Donor involvement in the piloting of health system reforms is very common (as illustrated in Table 1). Donor involvement brings with it several advantages but also disadvantages. Pilots that receive strong donor support are more likely to be well-resourced, and also have greater access to external technical assistance. But donor support may impose artificial timeframes upon the piloting process. For example, if a pilot is being supported by a particular donor project, then there may be pressure to complete the pilot phase and conduct an evaluation prior to the end of the donor project. Sometimes these practical issues of funding dominate pilot timeframes, even if a more extended timeframe would be better in terms of allowing adequate time for pilot impacts to occur and for learning from pilot experiences. Ideally, country policymakers would overcome such constraints by identifying alternative funding to continue the pilot – but this is not always practical. Unless country ownership of the pilot is strong, donor involvement may potentially shift the focus of the pilot, perhaps giving greater priority to addressing international research issues rather than local policy concerns. For example, from the review of pilots (Bennett and Paterson 2003), it appeared that donor involvement in pilots is likely to be associated with stronger, and more classical monitoring and evaluation approaches, than in government-financed pilots. The review also suggested that donor involvement was greatest in low-capacity

countries, and that, in pilots where donors were extensively involved, there was likely to be more centralized approaches to pilot design and implementation.

Scale and Degree of Decentralization

The size of a country and the extent to which policy making is decentralized will affect the feasibility of a centrally planned pilot. In decentralized contexts where local administrative structures have substantial decision-making authority, it may not be possible for the central level to provide a technical design for local administrations to implement. Pilots that work in such contexts tend instead to lay out the broad parameters to be met by a new design, and then allow local-level actors to flesh out the details.

The degree of decentralization in a country will also impact how easy it is for government to roll out a successful design across the whole country. In large countries such as China, it is difficult for central government to simply roll out a reform nationally. In such circumstances, the demonstration effects of pilots may be more important. Documenting and disseminating pilot activities and organizing study tours to pilot sites may convince policymakers from other regions of the advantages of reform. Conversely, in small, centralized countries, policymakers may be able to decree and effectively implement the scale-up of a pilot relatively easily.

Determining the Pilot Approach

Flexible versus Fixed Design

Pilots vary substantially in the extent to which they follow a rigid design developed at the start of a pilot process versus allowing implementers to adapt the design as they go along. If the primary objective of a pilot is to evaluate alternative reform designs, then a more rigid approach is likely to be necessary. For example, let us say that policymakers are trying to compare the relative advantages of contracting out primary care services to nongovernment organizations versus providing such services directly through government health care facilities; if the pilot design were to be adjusted half-way through the implementation process, evaluation findings might be invalidated. The results of the evaluation would no longer represent a comparison of two clearly defined and independent strategies but rather a muddle of different approaches. It is relatively common, during a pilot, that problems in pilot implementation arise and a debate occurs about whether or not to adapt the design straightaway to reflect the lessons learned in implementation.

In the literature on evaluation there has also been substantial debate about the relative advantages and disadvantages of more scientific approaches to evaluation (that would strive to fix technical interventions) versus more pragmatic ones (that would accept the need for policy evolution over time). This debate is particularly pertinent to the question of the appropriate design of pilot interventions, as some pilots (unlike broader national programs) are undertaken with the primary objective of generating evaluation data. If the objective of the pilot is primarily

focused upon providing empirical evidence to demonstrate that one design is better or worse than another, then flexibility in design may be very problematic and lead to indeterminate findings. In contrast, for pilots that have a primary objective that is focused upon building capacity or demonstrating a design, flexibility in pilot design is more acceptable, and it generally makes sense to adapt implementation strategy to reflect lessons learned as the pilot progresses. After all, this ability to process information on an ongoing basis, and adapt strategy, is one of the distinguishing criteria of skilled managers and decision makers, and a more flexible approach such as this is likely to lead ultimately to a better design. In such pilots where there has been substantial flexibility and adjustment in the pilot design, M&E findings can describe the overall impact of the different interventions implemented but are unlikely to help decision makers determine whether specific design features of the overall intervention were effective or not.

“The bottom-up and comprehensive approach to the process of health systems development is a key philosophy of the Initiative for Sub-District Support” (ISDS 1998).

The ISDS is a pilot program that aimed to strengthen district-level operations in South Africa. No fixed set of interventions was supported in the pilot districts; rather the Initiative sought to build capacity and support local-level innovation in health system management. The evaluation component was participatory in nature and did not follow a classical M&E design. One of the main outcomes of the pilot has been its ability to demonstrate to district management teams elsewhere how well-functioning districts work.

In addition to pilot objectives, the appropriate degree of flexibility in the design of the pilot will also be affected by the extent of local capacity and the degree of decentralization within the health care system. In countries where significant capacity exists at the local level, flexible approaches that allow local-level innovation might make a significant contribution to the final design. In some cases, the central level simply determines the overall goal of the reform to be piloted and local-level authorities are given complete freedom to shape the content of the reform. For example, in Poland, the World Bank supported a competitive process that required interested regions to prepare a reform proposal focused upon restructuring primary health care and preventive health services in their region (Sheahan 1995). In the United States, health care reform demonstration projects operate on a similar principle, providing waivers from national legislation and sometimes financial support to approved proposals developed by individual states (Thorne et al. 1995). In very decentralized contexts, it is likely to be inappropriate for the central level to attempt to determine all details of the reform piloted. Different aspects of the pilot (overall pilot design, specific details of the pilot design, and M&E frameworks) may be more or less decentralized.

Policymaker Engagement

Another factor that pilot designers and implementers need to consider as they plan a pilot strategy is the extent to which the pilot needs to actively engage senior policymakers as opposed to flying under their radar. The policy engagement strategy of the pilot will most likely vary

according to the overall goal of the pilot but is also likely to change during the life of the pilot. The pilot may also develop quite different relationships with local-level policymakers in the area where the pilot is being implemented, and with national-level policymakers.

For pilots that have a predominantly research focus, it may be advantageous to elude the policy limelight until findings are in hand and a clear case for or against the piloted reforms can be made. If such pilots receive recognition from national policymakers too early in the process, then it may prevent the interventions from being successfully implemented, and/or decisions about pilot roll-out may be made before results from the pilot are in hand. Similar issues arise for pilots that aim to generate a demand for reform. If the strategies being piloted do not require national government approval (for example, they focus upon the private sector or decentralized levels of the system), then it probably makes sense to wait until the pilot is up and running before trying to actively engage national-level policymakers in debate about the advantages and disadvantages of the pilot approach.

“There was a waiver [for the pilot] initially to work in splendid isolation. Political will and policy approval came later and provided validity for continual expansion, especially when obstacles were encountered” (O’ Dougherty 2002, in Mc Euen 2004).

In Issyk-Kul, Kyrgyzstan, the initial design and implementation period was spent in “splendid isolation” working intensively at the oblast level with little interference from national policymakers. The space that this gave the pilot to get basic reform structures into place prior to receiving close political scrutiny was seen as a distinct advantage. At a later point in the life of the pilot, those working in Issyk-Kul engaged with policymakers much more closely; this engagement was also viewed to be important in terms of the further development of the pilot and feeding lessons from the pilot into national policy.

However, for pilots that aim to demonstrate the feasibility and appropriateness of a particular reform design, it is likely to be important to engage key national policymakers from the very beginning of pilot design. In this way, the pilot can benefit from a good understanding of the alternative policy options being considered and the questions and concerns that policymakers have. Through direct engagement in the pilot design and implementation process, policymakers will also gain an appreciation of the different steps it takes to implement the reform and how the reform might be implemented on a broader scale. In many cases, engagement of national-level policymakers will be imperative from the start, as it will be necessary to get waivers from existing regulations in order to implement the pilot design.

Most pilots engage in some kind of policy dialogue or discussion with policymakers about the technical design, and this frequently occurs through workshops and conferences that aim to build consensus about design and implementation processes. In other cases, particularly if there is strong donor involvement in a pilot, then it is critical to engage senior policymakers early on to ensure local ownership of the pilot.

Duration

Pilots may have very different degrees of duration. Some pilots operate for only 12-18 months before evaluations are conducted and pilots are closed. Others, such as the Issyk-Kul, Kyrgyzstan, pilot reported in Chapter 2, become sites for ongoing experimentation and never really end.

A number of different factors are likely to determine the appropriate lifespan of a pilot. In many instances, the lifespan of a pilot is determined by policymaker timeframes. In the United States, the CHAMPUS pilot (Civilian Health and Medical Program for the Uniformed Services) was criticized for the short timeframe for evaluation (Zwanziger et al. 2001). In this case, the timeframe was driven by political necessity. Similarly short timeframes may occur for pilots dependent upon external support, but in these cases timeframes may be driven by the peculiarities of donor or project assistance. In the Rwanda pilot discussed in Chapter 4, the short timeframe was driven by the closure of the supporting donor project.

The complexity of the reform being piloted should also affect pilot duration. If the reform is relatively modest in its scope (for example, a reform of a health information system or a specific provider payment mechanism), then it may be feasible to implement and evaluate it within a short timeframe. But if the pilot is much more complex and diffuse, then it may take longer to implement properly, and longer for the actors involved in implementation to understand the new system and start to respond to it appropriately. In such cases, a timeframe of five years or even more may be appropriate.

Monitoring and Evaluation Approaches

As for the pilot approach, the monitoring and evaluation strategy needs to reflect the overall goal of the pilot. For pilots where the primary goal is to research the effectiveness of alternative designs, or refine an existing design, M&E is likely to be a critical component of the pilot, and a strong M&E design with a focus upon impact and efficiency assessment is desirable. For other pilots, where the primary objective is to demonstrate a completed design, generate a demand for reform, or develop capacity for reform, classical impact assessment approaches may not be appropriate. In this type of pilot, M&E may still be useful but the M&E approach is more likely to focus upon monitoring pilot implementation.

For both M&E designs that focus upon impact assessment and M&E designs that focus upon program implementation, there is a wide menu of alternative M&E approaches from which pilot evaluators will need to select. For classical impact assessments, the appropriate M&E design will most likely be driven largely by hypotheses about the likely effects of the pilot, combined with a consideration of which data it will be possible to collect. For M&E that focuses upon program implementation, it is also very important for the design to take into consideration the primary goals of the pilot. For example, if the primary goal is to build capacity, then M&E approaches might focus more upon participatory evaluation approaches that allow stakeholders themselves,

including pilot implementers, to participate in the identification of the evaluation issues, the design of the evaluation, the collection and analysis of the data, and the action taken as a result of the evaluation findings (Jackson and Kassam 1998). Such participatory evaluation processes aim to create a learning process for stakeholders that will allow them to learn, seek solutions, and improve implementation. For pilots that focus primarily upon demonstrating a design to stakeholders, evaluations may focus more upon how different stakeholder perspectives of the reform have changed as a result of the pilot.

Experience suggests that, even with an appropriate M&E design and findings that are produced in a timeframe that meets policymaker needs, findings from a pilot evaluation may not influence policy in the way anticipated by those involved in the evaluation. This lack of influence of evaluation findings upon policy may arise for a number of reasons. Evaluation findings may be overridden by political agendas. For example, even if an evaluation shows on balance that the reform does not promote efficiency in health service delivery, politicians may be aware that it offers benefits to certain key groups and support the reform for that reason. In other cases, negative findings from a pilot evaluation may be ignored or reinterpreted because there are too many interests already vested in the piloted reforms. Finally, it may be difficult to interpret the results of the evaluation of a pilot, as it is not always possible to control for exogenous factors, such as the spread of HIV/AIDS or across-the-board budget cuts, that affect results.

Pilot evaluations cannot protect themselves fully against all of these factors, but there may be a number of things that they can do to ensure some degree of protection. For example, evaluations need to take political timeframes into account so that findings can be made available in a timely manner. Some degree of separation between pilot implementers and evaluators is desirable in order to encourage unbiased reporting of findings. The extent to which issues such as these need to be thought through in advance depends considerably on the overall goal of the pilot, and how critical the evaluation findings are perceived to be, relative to the achievement of that goal.

Pilot Implementation

Separate from the approach to the technical design of the pilot, those designing a pilot need to determine how the pilot will be implemented. There are many different aspects to the implementation of a pilot including the overall management of the implementation process; operational management of the piloted interventions at the facility, community, or district level; the implementation of the M&E process; and responsibilities for data collection. In considering pilot implementation, the key issue to be addressed is the extent to which the pilot should be implemented through separate structures, systems, and personnel especially established for this task, versus working through existing organizations. In practice, different pilot implementation tasks may be more or less integrated into existing organizations and systems: for example, operational management of the pilot may be completely integrated into existing structures while M&E responsibilities may be completely separate.

As described previously, one of the main criticisms of earlier pilots was that they acted as magnets that attracted resources and skilled staff, and, hence, even though evidence from a pilot program might suggest that an intervention or strategy was both feasible and desirable, it frequently proved difficult to implement this strategy on a wider scale. Those planning health system reform pilots need to decide whether the pilot should be implemented in a manner that is integrated with the existing health system and bound by the resources currently available in the wider health system or whether it makes sense to treat the pilot as a separate and special entity that may be entitled to a superior level of resources (both human and financial).

In practice, pilots vary significantly in the extent to which they fit in with existing organizational structures and implementation systems. In some pilots, a conscious decision is made that pilot areas will not receive preferential treatment of any sort. In other pilots, the pilot areas receive substantially greater funding than comparable areas and are also endowed with substantial technical assistance support. It appears to be relatively common for pilots to benefit from additional resources. Presumably, the mere fact that the pilot is trying something new and untested means that additional resources are likely to be required to develop or fine-tune new systems, develop training curricula for staff, etc. Once these initial investment costs are met, rolling out the piloted design should require fewer resources.

Similar questions arise concerning institutional structures for implementation. Sometimes separate units for managing pilots are set up in the district or region where the pilot is operating (this was the case in the Kyrgyzstan pilot reported in Chapter 2). On other occasions, pilots are managed or overseen by autonomous project-assisted management units located close to or within the ministry of health – this was the case in Rwanda. In Niger, the Ministry of Public Health established a government unit within its own structure to manage and coordinate the pilots. Each of these arrangements has different advantages and disadvantages. Decentralized management units are likely to do a better job at managing what goes on in the field but may be remote from the policy milieu. Autonomous management units are likely to have greater flexibility and ability to move with speed than units that are formally part of more bureaucratic ministry structures, but establishing a formal structure within a ministry of health indicates a sense of ownership of the pilot and may bode well for sustainability.

The extent to which it makes sense to integrate pilot structures into existing health system structures again depends in part upon the objective of the pilot. Pilots that are testing out or refining reform designs, in situations where there is already considerable certainty about the likelihood of the reform, probably need to be more integrated and more closely aligned with resource constraints in the health system than pilots that seek to generate a demand for reform or those that wish to research a possible reform design. The greater the likelihood that the pilot will be “rolled out,” the more important it is to ensure that the circumstances in which it is implemented accurately reflect the circumstances within which roll-out would take place. There is thus considerable overlap between this question (of how well the pilot implementation organization should be integrated into existing structures) and the question of to what extent pilot implementers need to engage with policymakers.

Pilot Outputs and Impact Upon Reform Processes

As indicated in Figure 1.1, health system reform pilots might lead to a number of immediate outputs including:

- ▲ Generation of stakeholder demand for reform;
- ▲ Monitoring and evaluation evidence regarding the effects of the piloted reform;
- ▲ Monitoring and evaluation evidence regarding programmatic implementation of the reform;
- ▲ Experiential evidence gained by various stakeholders who have participated in or observed the pilot;
- ▲ Political momentum as policymakers and politicians appreciate better the advantages that reform may offer;
- ▲ Built capacity.

These outputs can be mapped quite directly to the overarching goals of pilots described in Figure 1.2. For example, both monitoring and evaluation evidence and experiential evidence might help refine the overall design of the reform.

Many pilots appear to make a significant contribution to capacity building. Pilots may play an important role in building/consolidating technical skills among counterparts, as well as strengthening their ability to plan and strategize for reform. Pilots can also deliver benefits in terms of enhancing understanding about how to implement reforms, for example, how to sequence different reform elements. Particularly for reforms that constitute a radical departure from the status quo, pilots may be important in order to allow people to experience and better understand the reform.

As suggested earlier, the ultimate aim of a pilot is to have a positive impact upon reform processes, so as to advance the reform implementation cycle. Typically, this is conceptualized in terms of the roll-out or scale-up of the piloted design, but other types of equally useful outcomes may arise. For example, in some instances, piloted reforms may be shown to be ineffective or inappropriate; accordingly, an alternative reform design may be developed and rolled out. In other cases, the process of piloting may help generate a demand for reform that does not necessarily lead to the uptake of the piloted reform but rather allows for the consideration of a broader range of reform options. Alternatively, the piloted reform may be rejected for political or other reasons, but the capacity built via the piloting process may still prove to be very useful in the design and implementation of other related reforms. In highly decentralized contexts, it may not be feasible for the government to decree that the piloted reform be rolled out nationally, but, nonetheless, successful designs may be spontaneously replicated in other parts of the country.

Reviewing the outcomes of health system reform pilots suggests that it is somewhat infrequent that there is an orderly progression from the pilot to the nationwide roll-out of that design. Although roll-outs of successful pilots do occur, there are many stumbling points along the way that are difficult to protect against: governments may change, donor support for the roll-out may not be secured, broader government policy may lead to the adoption of alternative priorities. However, even in cases where such obstacles arose, pilots are still frequently perceived to be useful in terms of building capacity or knowledge about the appropriateness of future reform directions.

Final Lessons

There is still much that is unknown about what constitutes best practice in the design and implementation of complex health system reform projects. The growth of knowledge in this area has been hampered by the poor documentation of pilot projects. In particular, the documentation that is available tends to focus upon the technical design of the pilot and evaluation findings. It is rare for pilot documentation to cover factors such as the overall objectives of the pilot and how the pilot has been implemented. Nonetheless, there are a number of key messages that should guide future piloting. In designing, implementing, and evaluating health systems strengthening pilots, decision makers should:

- ▲ Be clear as to the precise objectives of the pilot, not in terms of the objectives of the technical design to be piloted, but rather how the pilot will contribute to the reform implementation process;
- ▲ Align the pilot approach with the context within which the pilot is taking place and the pilot's objectives. So, for example, if a pilot is operating in a very decentralized context and aiming primarily to create a demand for reform, then the pilot approach needs to be decentralized, to encourage local-level innovation, and to allow flexibility in the interventions piloted;
- ▲ Align the M&E plan with the pilot objectives – a classical impact evaluation is neither appropriate nor necessary for all pilots, but it is likely to be useful for those that are focused upon researching alternative designs or refining a reform design. For pilots with other objectives, M&E needs to focus more upon program implementation and could use a variety of evaluation techniques to establish whether the pilot has helped achieve progress in the reform implementation cycle;
- ▲ Pilot programs have a fundamental, underlying concern with learning, in a multiplicity of ways, from pilot processes. Although impact evaluations are not suitable for all pilots, pilot implementers need to make sure that they maximize the opportunities for learning to take place – whether this be through participatory evaluation, or study tours to the pilot sites, or documentation and dissemination of pilot processes.

Now, as previously, donor-supported projects frequently play an important role in supporting health system reform pilots. There are also lessons for donors and donor-supported projects:

- ▲ Donor and project timeframes should not be allowed to determine the lifespan of a pilot if they conflict with the needs of local policymakers or implementers. If donor timetables foreshorten pilot lifespan, then alternative funding sources need to be sought for the completion of the pilot;
- ▲ Pilot success should not be judged solely in terms of whether or not the piloted reform was rolled out nationally. Health system reform pilots may be undertaken with a variety of objectives in mind, although all ultimately seek to advance the reform implementation cycle. The effectiveness of a pilot is best judged against the objectives that it sets for itself, whether this be developing a demand for reform, building capacity, demonstrating feasibility, or refining a reform design.

Bibliography

- Bennett, S and M Paterson. 2003. *Piloting Health Systems Reforms: A review of experience*. Bethesda, MD: Partners for Health Reformplus, Abt Associates Inc.
- Brinkerhoff, D and B Crosby. 2002. *Managing Policy Reform: Concepts and Tools for Decision-Makers in Developing and Transitioning Countries*. Bloomfield CT: Kumarian Press.
- Gilson, Lucy. 2000. *The Dynamics of Policy Change: Lessons from health financing reform in South Africa and Zambia*. Major Applied Research 1, Technical Paper No. 3. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc. (September)
- Honadle, G and J VanSant. 1985. *Implementation for Sustainability: Lessons from Integrated Rural Development*. Bloomfield CT: Kumarian Press.
- Initiative for Sub-District Support (ISDS). 1998. *The Development of District Health Systems in South Africa: lessons learned from the experience of ISDS*. Technical Report No. 5. Initiative for Sub-District Support, Health Systems Trust, South Africa.
- Jackson, ET and Y Kassam. 1998. *Knowledge Shared: Participatory Evaluation in Development Cooperation*. Bloomfield CT: Kumarian Press.
- McEuen, M. 2004. "The Role of Pilots in the Health Sector Reform: The Kyrgyzstan Experience." Chapter 2 in Bennett, S et al. *The Role of Pilots: Approaches to Health System Strengthening*. Bethesda, MD: Partners for Health Reformplus, Abt Associates Inc.

- Moll, L. 2004. "The Role of Pilots: Primary Health Care Cost Recovery and Quality Improvement in Niger." Chapter 3 in Bennett, S et al. *The Role of Pilots: Approaches to Health System Strengthening*. Bethesda, MD: Partners for Health Reformplus, Abt Associates Inc.
- Pyle, DE. 1980. *From Pilot Project to Operational Program in India: The Problems of Transition*. In Grindle, MS, ed. *Politics and Policy Implementation in the Third World*: 123-144. Princeton, New Jersey: Princeton University Press.
- Ross, JA. 1986. *Family Planning Pilot Projects in Africa: Review and Synthesis*. Working Paper 24. New York: Centre for Population and Family Health, Columbia University.
- Saunders, M. 2004. "The Role of Pilots: Community-Based Health Insurance in Rwanda." Chapter 4 in Bennett, S et al. *The Role of Pilots: Approaches to Health System Strengthening*. Bethesda, MD: Partners for Health Reformplus, Abt Associates Inc.
- Sheahan, MD. 1995. "Prevention in Poland: Health Care System Reform." *Public Health Report* 110(3):289-295.
- Stout, S and T Johnston. 1999. *Investing in health: development effectiveness in the health, nutrition, and population sectors*. Washington, DC: World Bank.
- Thorne, JI, B Bianchi, G Bonnyman, C Greene, and T Leddy. 1995. "State Perspectives on Health Care Reform: Oregon, Hawaii, Tennessee and Rhode Island." *Health Care Financing Review* 16(3):121-138.
- Tollman, SM and AB Zwi. 2000. "Health system reform and the role of field sites based upon demographic and health surveillance." *Bulletin of the World Health Organization* 78(1):125-134.
- Zwanziger, J, KD Hart, RL Kravitz, and EM Sloss. 2001. "Evaluating Large and Complex Demonstrations: The CHAMPUS Reform Initiative Experience." *Health Services Research* 35 (6):1229-1244.

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Chapter 2. The Role of Pilots in Health Sector Reform: The Kyrgyzstan Experience

Mark McEuen

Introduction

The concept of piloting has been used effectively in implementing health sector reform throughout the former Soviet Union. One of the first pilots in Central Asia, established in 1994 in Issyk-Kul oblast (province or state) in Kyrgyzstan (Figure 2.1), continues to provide valuable information on the process of implementing complex health reforms. The initial objective of the pilot was to provide the Kyrgyz government with a demonstration of a planned social health insurance model. During the design phase, the pilot quickly evolved into a broader health reform effort aimed at strengthening the primary care sector and downsizing an inefficient hospital sector to increase health system efficiency.

Some early experiences and lessons learned from the Issyk-Kul pilot site fed into the concurrent development of a national health reform strategy (the MANAS Program). Over time, the development of the national strategy provided the top-down political support necessary for continuing, strengthening, and rolling-out of pilot activities in Issyk-Kul oblast. Even though the Issyk-Kul pilot project was never rigorously evaluated, the model that was tested was modified and refined based on implementation experience, rolled out to two additional oblasts after two years with assistance from a World Bank loan project, and eventually rolled out nationally. Experience and lessons learned in Issyk-Kul with establishing a health insurance fund were used to establish a national health insurance fund in late 1996 and early 1997.

An achievement greater than national roll-out, however, may be the Ministry of Health's (MOH) sophisticated appreciation for the role and use of pilots in developing and refining its policies, and the capacity built at local and national levels to implement complex health reforms. A cadre of capable and progressive reform stakeholders at oblast and national levels was developed through rigorous national-level capacity building by the World Health Organization (WHO), U.S. Agency for International Development (USAID), and other donors, and hands-on experience implementing and evaluating the Issyk-Kul pilot. Recently, the MOH has piloted continuous quality improvement processes, a single-payer financing model, an outpatient drug benefit for the insured, and new models of providing emergency care and ambulance services, with great success. In contrast to the initial Issyk-Kul pilot, these pilots aimed to test and refine more specific and narrow health reform interventions, and they have been more rigorously evaluated by the MOH and the Mandatory Health Insurance Fund (MHIF), with support from WHO and other donors. Evaluation and implementation experience has led to refinement and phased implementation of a number of these "second generation" pilots.

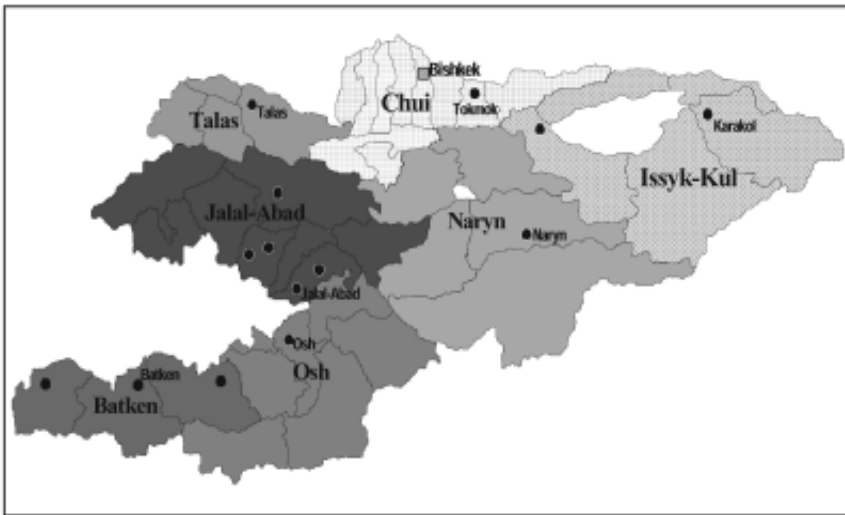
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This case study describes the pilot process in Kyrgyzstan, including factors involved in the development of the pilot and dimensions and outcomes of the pilot. The case study aims to:

- ▲ Contribute to greater appreciation for the steps involved in designing and implementing a regional pilot to test complex health reform;
- ▲ Describe how a pilot approach can continuously inform national policy and decision making; and
- ▲ Determine the factors that supported implementation, roll-out, and scale-up of pilot activities.

The organization of this case study is largely chronological. Section 2 describes the pilot context in Kyrgyzstan in 1994-95, including the emergence of the pilot concept, how the pilot site was selected, and the principal actors involved in the pilot. Section 3 sets out pilot objectives. Section 4 describes the design of the pilot – what was being piloted, and how it was to be monitored and evaluated. Section 5 provides an overview of the implementation process, and Section 6 describes what monitoring and evaluation of the pilot actually took place. Section 7 provides outcomes of the pilot, and Section 8 offers lessons learned.

Figure 2.1: Regions of the Kyrgyz Republic



Pilot Context

Emergence of the Pilot Concept

The pilot concept emerged in early 1994 as the MOH was pressured by the government of Kyrgyzstan to begin implementing two laws that had been enacted in 1992. The

Health Protection Act of the Kyrgyz Republic had been passed on July 2, 1992, and outlined a program to:

- ▲ Develop a framework of health protection and define measures to ensure rights of citizens to sanitation and environmental health safety;
- ▲ Shift priorities toward health promotion and disease prevention and focus on primary- and family-based care;
- ▲ Make changes in the form of health facility ownership; and
- ▲ Diversify and decentralize health revenue sources, mandating that health care financing be moved partially “off-budget” with revenues coming from special earmarked taxes and other services.

The Law of the Kyrgyz Republic on Medical Insurance was passed on July 3, 1992, and described the requirements for mandatory and voluntary medical insurance. The Law included a plan to create a health insurance fund in each oblast to be financed through a minimum 6 percent payroll contribution paid by employers, a per capita rate paid by the oblast government to cover non-working and exempt populations (including employees of public budget organizations), and funds transferred from the current 34.5 percent Social Insurance and Pension Fund payroll tax. A subsequent Cabinet of Ministers decree stated that implementation of the Medical Insurance Law would begin on January 1, 1995.

Poor macroeconomic performance, a low tax revenue base, and a lack of technical capacity within the health sector delayed implementation of the 1992 health reform laws. But in early 1994, under pressure to meet the Cabinet of Minister’s deadline, the MOH hoped to develop a plan to demonstrate a transition from a government-financed, centrally planned health system to a more efficient system of health service organization and delivery of care, with mixed (public and private) financing. Realizing that such ambitious attempts to increase the efficiency of the health care system might have negative affects on access to and quality of care, the MOH planned an initial pilot project in a defined geographic area. The pilot project would implement the Medical Insurance Law in a comprehensive way but on a limited scale, and use experience and lessons learned to plan for national implementation (Langenbrunner et al. 1994).

USAID was simultaneously considering the concept of providing technical assistance in demonstration or pilot sites, as a way to provide rapid-response assistance on a wide range of health care financing and service delivery issues emerging throughout the former Soviet Union. USAID was fairly new to the region and “[t]here was considerable political pressure from the State Department and internal pressure from USAID to start the process of health care reform through the Newly Independent States as soon as possible” (Laudato et al. 1997). One approach was for a potential USAID contractor to field teams that would analyze the local situation, propose site-specific programs to quickly test various models of reform and financing, and then replicate successful interventions more broadly in the medium to long term.

The MOH and USAID visions of piloting health reform in Kyrgyzstan converged in early 1994, when the government of Kyrgyzstan requested USAID to provide technical assistance in the area of health care financing reform, and more specifically to assist in evaluating the design of a health insurance demonstration to be implemented in Issyk-Kul oblast beginning January 1995. USAID called on the globally funded Health Financing and Sustainability (HFS) project to provide this initial assistance. HFS project teams made trips in March-April and June 1994 to provide technical assistance to design the demonstration. During the competitive tender process for its Health Care Finance and Service Delivery Reform project in mid-1994, USAID requested proposals for projects that included intensive demonstration site activities. Further USAID support to Issyk-Kul oblast was provided through this mechanism, renamed the *ZdravReform* project when Abt Associates won the tender.

Pilot Site Selection

The MOH selected a limited area of Issyk-Kul oblast as its first demonstration site in early 1994. The area included the city of Karakol and the three surrounding *rayons* (districts) of Dzhetiougouz, Ak-Sou, and Tyup, because of their previous designation as a free economic zone.¹ The area had a relatively strong industrial base, potential mining resources, and high per capita spending levels for health care compared to the rest of the country (\$7 versus \$3 per capita). In 1993, health care expenditures in the demonstration site represented approximately 4.4 percent of oblast income, compared to 3.3 percent nationally. The free economic zone experiment covered about 253,000 people (Langenbrunner 1995). Additional factors in the selection of Issyk-Kul oblast as the first pilot site in Kyrgyzstan may have been its relative proximity to the capital, Bishkek, the fact that both the governor and the head of the oblast health department (OHD) were progressive and interested in health reform, and the manageable size of the territory and population of the oblast (Ibraimova 2003).

In March 1995, a ministerial decree officially established the free economic zone in Issyk-Kul oblast as the “health insurance” demonstration site and granted greater authority to the OHD to implement pilot activities. In late 1995, the demonstration site was expanded to include the entire oblast – Karakol city and five surrounding rayons, covering nearly 400,000 people (Borowitz and O’Dougherty 1995).

Principal Actors in the Pilot Process

A large number of actors were involved in the Issyk-Kul oblast pilot project. Principal Kyrgyz actors included:

- ▲ Ministry of Health;
- ▲ Ministry of Finance;

¹ Free economic zones were established throughout the Soviet Union as pilot programs to gradually introduce market principles and increase autonomy in raising and spending revenues.

- ▲ Issyk-Kul oblast health department;
- ▲ Issyk-Kul oblast finance department;
- ▲ Newly formed family group practices (FGPs);
- ▲ MANAS team set up in 1994 under MOH to develop a national 10-year health reform master plan; and
- ▲ National Mandatory Health Insurance Fund established in 1997.

The Issyk-Kul OHD was very supportive of the pilot. A USAID evaluation of the *ZdravReform* project points out, a “key ingredient [to success] has been a strong oblast health department director who feels a sense of ownership for the reforms and is willing and able to carry them out in the face of local and national opposition” (Laudato et al. 1997).

At the national level, Dr. Kasiev, the Minister of Health in 1994, provided initial strategic direction for the pilot and established an independent national team to develop a health reform master plan. The MANAS team was led by a program coordinator, Professor Tilek Meimanaliev, and included 25 central-level and seven oblast-level professionals who worked full-time in a project office outside of the MOH. The MANAS process placed a strong emphasis on building capacity of the team and of MOH staff at all levels of the system to strengthen the policymaking and management capacity of a group of Kyrgyz experts to support implementation. Capacity-building efforts emphasized improving program management skills, increasing technical knowledge on health system and health reform issues, learning English, and developing basic computer skills.

National capacity-building efforts resulted in the creation of a cadre of highly qualified reform experts. In October 1996, implementation of the MANAS master plan was launched, and it was decided that implementation would be led by the Policy, Planning, and Coordination Department of the MOH led by Dr. Meimanaliev. The MANAS design team was integrated into this coordination unit. In 1997, Dr. Meimanaliev was appointed Deputy Minister of Health and in that position he began to incorporate the entire health reform team into the ministry. In 1999, Dr. Meimanaliev became the Minister of Health and the health reform team (and to a large extent, the health reform agenda) were completely integrated into Kyrgyz institutions.²

Donors also supported health reform efforts in Kyrgyzstan. USAID and the British Organization for Development Assistance (ODA) helped design the pilot in Issyk-Kul. During a three-week design trip in June 1994, USAID and ODA worked with the MOH and Issyk-Kul oblast health leadership and local technical counterparts and intensively discussed and debated options and recommendations for a health financing reform pilot. These discussions resulted in an in-depth analysis of the existing situation and needs, a debate of intervention alternatives, and initial training in cost accounting and medical information systems to prepare counterparts for various aspects of pilot implementation.

² In 2002, President Akaev reorganized his Cabinet of Ministers in the wake of growing political opposition, and Dr. Meimanaliev again became Deputy Minister after the appointment of a new Minister of Health.

During pilot implementation phases, USAID – through the HFS, *ZdravReform*, and *ZdravPlus* projects – provided the most significant support to the Issyk-Kul oblast pilot (see Box 2.1). In early 1995, *ZdravReform* established an office in the city of Karakol, staffed by Kyrgyz technical and administrative staff and an expatriate site advisor. Technical assistance was provided largely by project staff and international consultants based in the United States and *ZdravReform*'s regional office in Almaty, Kazakhstan. As reforms were institutionalized, long-term on-site expatriate assistance was no longer required; *ZdravReform* and *ZdravPlus* gradually were able to reduce their support to the Issyk-Kul pilot. WHO and the World Bank hoped to support evaluation of the pilot to inform their work at the national level; however, a formal evaluation never took place.

Involvement of a number of donors in the design of the Issyk-Kul pilot, along with an active ministry-led donor coordination component of the MANAS Program planning process, led to ongoing interaction among pilot site implementers, donors, and national-level stakeholders. Early donor coordination and capacity-building among reform stakeholders at pilot and national levels led to recognition by the MOH, and specifically its Policy, Planning, and Coordination Department, that donor coordination, led by nationals, was indispensable in achieving results in Kyrgyzstan – “The MANAS Program showed the importance of placing the coordination role in the hands of national officials and the need for international and bilateral donor agencies to respect this” (WHO/EURO 1997). The eventual roll-out of the Issyk-Kul health reform model was facilitated by donor collaboration mechanisms established to design the pilot intervention and the national reform plan, as well as active and continuous interaction between oblast- and national-level stakeholders.

Box 2.1: USAID Health Reform Assistance in Central Asia

Health, Financing, and Sustainability (HFS) project (1990-95) – A globally funded USAID project to improve financing and efficiency of health sectors in developing and transitional countries and address key policy and organizational constraints hindering access to health services of acceptable quality for all citizens. Abt Associates implemented the HFS project. USAID/Almaty provided field support funds to the project for initial assistance in Kyrgyzstan.

***ZdravReform* project (1994-2000)** – A three-year globally funded USAID project working in Russia, Ukraine, and Central Asia to improve the efficiency, accessibility, and sustainability of health services delivery. Abt Associates implemented the initial *ZdravReform* project. USAID/Almaty provided mission funding to award a two-year contract option period for Central Asia to Abt Associates in June 1998.

***ZdravPlus* project (2000-05)** – A five-year regionally funded USAID project building on the successes of the *ZdravReform* project by continuing to provide technical assistance and training to improve the quality and efficiency of health care services in Central Asia. Abt Associates is implementing the *ZdravPlus* project.

Pilot Objectives

The primary objective of the pilot in Issyk-Kul oblast was to develop or refine a health system design; specifically to demonstrate the feasibility of a mandatory health insurance (MHI) scheme. Faced with declining gross domestic product (GDP) and public revenue, the government of Kyrgyzstan clearly identified the need for additional sources of health financing soon after independence. Policymakers had researched financing options and, like neighboring Russia and Kazakhstan, proposed in 1992 to implement an MHI scheme. However, due to the difficult macroeconomic situation, a weak tax base, and limited capacity to design and implement such a system, much uncertainty remained about how MHI would actually work.

In addition to the primary pilot objective to develop or refine health system design, *ZdravReform* viewed the pilot in Issyk-Kul as a way to demonstrate specific designs to provide information and evidence to national stakeholders over time and to simultaneously build capacity for further implementation. *ZdravReform's* intensive demonstration sites were designed to “provide information to policymakers, develop and demonstrate the usefulness of capabilities in analysis and management, and provide concrete evidence of what can (or cannot) be done” (Sigler et al. 1994).

Pilot Design

Assessing Needs

The demonstration proposed by the government was to establish a Mandatory Health Insurance Fund organization at the oblast level, financed by a new 6 percent payroll tax on employers and a per capita fee for non-workers from the oblast budget. The government had defined a system for collection and management of funds by the new insurance organization in the Medical Insurance Act. As defined in the act, the goals of the MHI system were to:

- ▲ Increase the level of resources available for spending on health;
- ▲ Allocate available resources more efficiently;
- ▲ Improve the management of service delivery and quality of care; and
- ▲ Decrease reliance on the government for health care spending and allow for more sustainability of funding.

When the HFS team arrived in June 1994, national stakeholders had discussed only vague notions concerning the design of the pilot. Discussions among the HFS team and Kyrgyz counterparts resulted in an understanding that certain “pre-conditions” were required before mandatory health insurance could be demonstrated fully and effectively, even at the oblast level, and that the set of proposed activities would have to encompass organizational and financing changes more broadly.

The HFS team's assessment report found that due to the state of the economy in Issyk-Kul oblast, with rising cost inflation and low salaries, "MHI is unlikely to be able to raise significant amounts of additional revenue by instituting new payroll taxes. At the same time, the effect of new payroll taxes on economic growth may be negative" (Langenbrunner et al. 1994). The HFS assessment team recommended a broader health financing pilot, focused first on addressing the second and third goals of the MHI defined above. "For the next few years, it will be much more important to focus on reallocating existing resources through changes in efficiency" (Langenbrunner et al. 1994). A modeling exercise calculated cost savings associated with reductions in inappropriate lengths of stay and more appropriate use of outpatient care, and led to recommendations on payment system and organizational changes that would contribute to greater efficiency in health care service delivery.

Based on the initial discussions of options at the oblast and national levels during the design trip and paired with knowledge of health reform directions in other parts of the former Soviet Union, the HFS report recommended demonstration site activities that would:

- ▲ Shift priority from inpatient to outpatient care and develop multi-specialty outpatient groups;
- ▲ Allow the population to choose their primary health care (PHC) provider to promote competition;
- ▲ Introduce new provider payment systems for hospitals and outpatient facilities, with corresponding quality assurance mechanisms, management information, and cost-accounting systems;
- ▲ Grant facilities more autonomy and decision-making authority; and
- ▲ Establish an oblast-level MHIF to pay for health care and explore options for generating additional revenue.

Technical Features

The immediate focus for the demonstration site was to implement cost-saving measures to improve the efficiency of health care delivery and address some of the deficiencies of the Kyrgyz health delivery system that had been inherited from the former Soviet Union. The HFS report recommended the establishment of independent primary care group practices. These group practices would consist of a pediatrician, an internist, and an obstetrician-gynecologist. To create competition among the practices, patients would be encouraged to enroll with the primary care provider of their choice and be able to change providers after six months. Payment to group practices would be based on a per capita rate to cover outpatient services only. Payment to hospitals would initially be made using global budgets provided in lump sums, based on their past budgets, and in six months move to a case-based system.

A package of interventions to improve quality of care was also recommended including strengthening of management information systems, development of a general practice training

program, set-up of internal quality improvement mechanisms in facilities, and creation of an independent facility accreditation committee.

Monitoring and Evaluation

The *ZdravReform* project reported progress to USAID annually and included indicators such as the number of primary care group practices formed, the percentage of the eligible population enrolled in the group practices, reduction in referral rates of primary care physicians, reduction in hospital admission rates and lengths of stay, reduction in the number of hospital beds, and the number of health care facilities with improved quality assurance, financial, and clinical information systems. However, the Issyk-Kul pilot design lacked a formal monitoring and evaluation component.

Table 2.1: Chronology Reforms in Kyrgyzstan

1992	Government of Kyrgyzstan passes Health Protection Act and Law on Medical Insurance
1994	Memorandum of Understanding signed between WHO/EURO and MOH to undertake the MANAS Health Care Reform Program Government of Kyrgyzstan requests USAID technical assistance in health care financing reform and plans pilot in Issyk-Kul oblast HFS project sends a team to help develop a health insurance reform demonstration in Issyk-Kul oblast National Health Policy developed and approved by government USAID awards Health Care Financing and Service Delivery Reform Program in Russia, Ukraine, and Central Asia to Abt Associates (later renamed <i>ZdravReform</i> project)
1995-96	Restructuring of primary health care in Issyk-Kul oblast, including development of new family group practices, introduction of family medicine, open enrollment, and development of new provider payment and health information systems Government approves MANAS Health Care Reform Program World Bank-funded Health Sector Reform project begins (1996-2000) in Bishkek city and Chui oblast
1997-99	Introduction of mandatory health insurance; 13 hospitals contracted with MHIF MHIF brought under MOH MHIF expands to 66 hospitals and 290 family group practices Roll-out of FGP formation and open enrollment to Bishkek and Chui oblast Budget funds (national, oblast, city, rayon) pooled in Issyk-Kul Roll-out to South Kyrgyzstan and formation of first FGPs
2000	MANAS health reform team institutionalized into MOH, MHIF, and other health sector entities USAID awards five-year Central Asia Quality Health Care project to Abt Associates (later renamed <i>ZdravPlus</i> project)

(Continued on the next page)

(Table 2.1 Continued)

2001	Single-payer system established and pilot-tested in Issyk-Kul and Chui oblasts Development of monitoring and evaluation efforts (WHO/British Department for International Development) Co-payment policy introduced in single-payer system pilot sites; evaluated by Swiss Red Cross Clear positive results in Issyk-Kul and Chui including rationalization of beds, buildings, and staff; reinvestment of savings; increases in salaries; reduction in fixed costs; population accepts co-payment and does not pay more Extensive policy dialogue on FGP model; move to mixed model of FGPs and family medicine centers for roll-out World Bank-funded Health Sector Reform project II begins
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Implementation

Pilot Technical Intervention

The pilot in Issyk-Kul oblast was launched in 1994. *ZdravReform* worked with oblast-level counterparts to develop a comprehensive, integrated health reform model, consisting of work focused in four areas:

- ▲ Health delivery system restructuring and strengthening of primary care;
- ▲ Population involvement;
- ▲ New provider payment systems; and
- ▲ New management information systems.

The first intervention area resulted in the reorganization of service delivery away from large, specialty-dominated polyclinics and hospitals toward a newly developed PHC structure. Family group practices were created as entities capable of providing the entire range of PHC services. “Some of the salient features of the FGP model were: physicians’ ability to choose the group practice and the other physicians with which they wish to affiliate; cross-training among the three specialties; a greater level of clinical autonomy and administrative discretion than existed in the polyclinic structure; continuity of care and a long-term relationship with the patient and the patient’s family; and a business entity approach entailing the development of business systems and introduction of practice managers” (Purvis 1997). Between 1995 and 1997, several hospitals and outpatient specialty facilities were closed and 81 FGPs were formed in Issyk-Kul oblast.³ Doctors from the FGPs received family medicine training, and an FGP association was established to support the development and strengthening of FGPs.

³ Over time, as FGP autonomy increased, the 81 FGPs that had been initially established voluntarily merged to combine resources, resulting in 74 functioning FGPs in Issyk-Kul oblast in 2000.

Involvement of the population was encouraged through open enrollment and free choice of FGP. Increased population participation in health care decision making held providers more accountable for providing high quality services and allowed patients to change providers if they were not satisfied with their care. Issyk-Kul oblast was the first health reform site in the former Soviet Union to guarantee free choice of primary care provider to its population, beginning what Deputy Minister of Health Meimanaliev refers to as “the democratization of health care” (Meimanaliev 2003). Local marketing teams conducted public awareness, consumer choice, and enrollment campaigns with much success. By 1996, approximately 85 percent of the population had taken part in open enrollment and selected an FGP.

The third intervention area introduced new provider payment systems. Payment systems were designed to introduce competition and pay providers based on services provided, not on historical budgets or input measures such as number of staff. The payment system provided financial incentives to FGPs to increase patient load and reduce referrals. A new case-based hospital payment system was developed in Issyk-Kul in 1996 and became the basis of a similar national system in 1997. From June 1998 to June 2000, the oblast hospital and all central rayon hospitals in Issyk-Kul were paid under the new case-based hospital payment system. The pilot in Issyk-Kul oblast formed the argument to replace many fragmented funding pools with a single health system payer and developed hospital, outpatient, and PHC provider payment systems, along with associated cost accounting, billing, and information systems.

Finally, the pilot in Issyk-Kul oblast helped the 81 FGPs develop new management, financial, and clinical information systems to help them operate more like independent business entities. The information systems provided data to develop and refine the new provider payment systems and served as management tools for facilities when the new payment systems were implemented. A new position within the FGP of a practice manager was created and a cadre of practice managers was trained and dispatched to help the FGPs adapt to the new provider payment systems. A licensing and accreditation program was developed and all FGPs in Issyk-Kul were accredited by 1999 to be eligible for payment by a capitated rate per enrollee by the insurance fund.

Implementation Approach

Hands-off political support and significant autonomy for the Issyk-Kul pilot were key aspects of successful implementation. The initial design and implementation period was spent in “splendid isolation” – working intensively at the oblast level with little interference from national policymakers (O’Dougherty 2002). The designation of the oblast as an official pilot site, and the presence of a *ZdravReform* site advisor and field office, allowed the Ministry of Health to grant oblast health leadership a great deal of autonomy and give the pilot a valuable asset needed to succeed: time.

“Elements of the health reform foundation such as training health policymakers and health professionals about reform and new management principles, restructuring the health delivery system, clinical training, educating the population, and establishing information systems all take time as they involve building physical and human capacity....this foundation, once established, continues to pay dividends over the long term” (Hafner et al. 1999).

Pilot implementation also benefited from a step-by-step approach that broke down complex health sector reforms and specific technical interventions into manageable pieces, improving the likelihood for successful implementation of each piece. The Issyk-Kul pilot “showed that it was not possible to introduce health insurance immediately, at one moment, and we learned the principle, the step-by-step approach...better to work out details of one step before moving forward to the next step...all of this reform would never have been possible if not in steps...” (Ibraimova 2003). Step-by-step implementation also proved important for successful capacity building. If reforms are implemented gradually and allowed to follow a natural process of expansion, ownership and sustainability are more likely, roles and responsibilities become clearer, and actual demand for new knowledge and skills from local partners drives additional capacity building so it is more timely and relevant (Borowitz et al. 1999).

Flexibility and Evolution of the Pilot over Time

Several planned elements of the original pilot were reviewed and revised in the light of emerging evidence and policy. Implementation approaches ensured that these elements could evolve over time. For instance, health insurance was proposed as part of the World Bank project design in 1996, raising the possibility that a new health insurance fund in the Kyrgyz health system would create a second health purchaser in addition to the MOH. Implementation of the World Bank loan was stopped to resolve this issue. Experience in Russia and Kazakhstan had shown many disadvantages of having two health purchasers: health policy was not coordinated, functions were duplicated, administrative costs increased, restructuring the health sector was difficult, contradictory financial incentives were created, the population was confused by two benefits packages, providers were incapable of managing payment from two sources, and fraud and abuse increased. In response to these concerns, health sector policymakers developed a new concept, approved by the government in mid-1997, called the Coordinated Policy for the Implementation of Health Reform and Health Insurance. This policy introduced five MOH and MHIF Jointly Used Systems – information, provider payment, accounting, quality assurance, and benefits coordination – to enable the MOH and MHIF to function as a single payer while remaining separate institutions with separate sources of financing. The Jointly Used Systems approach served as an effective precursor to introduction of a true single payer once the MHIF was moved under the authority of the MOH in 1999. It also reaffirmed the reform vision – a single payer with unified systems – and effectively turned crisis into consensus.

In 1999/2000, as part of broad government decentralization and downsizing, the government of Kyrgyzstan eliminated the oblast health departments (as well as oblast

departments in other sectors). The MOH still relied on the OHD to finance and manage health facilities, and the decision had significant ramifications for the health sector. Dr. Meimanaliev, the Minister of Health at the time, responded by using the crisis as an opportunity to affirm the role of the oblast MHIF in pooling funds at the oblast level and paying health providers (setting the stage for the single-payer system) and to consolidate and rationalize the oblast hospital sector. The MOH-formed oblast merged hospitals and placed the former heads of the OHDs in charge of them, allowing them to keep a certain power balance with the oblast-level MHIF. The result was a reorganization of the roles of the oblast-level health sector that was acceptable to everyone, affirmation of the concepts of oblast pooling and the single-payer system, and consolidation of hospital care under a single administrative structure that would allow for further internal rationalization and consolidation in response to provider payment incentives. The MOH effectively used a political decision they may not have supported as an opportunity to contribute to meeting their health reform goals.

Linking to National Health Reform Planning

Parallel and simultaneous to early reform efforts in Issyk-Kul oblast, the MOH and the WHO Regional Office for Europe (WHO/EURO) signed a memorandum of understanding in March 1994. In the memorandum, the MOH expressed its interest in developing a 10-year master plan (1996-2006) for the health care system, and WHO agreed to provide the necessary technical assistance and capacity building.

Development of the MANAS Program resulted in creation of a strategic vision for the health care system in Kyrgyzstan. The master plan set directions for the health system, but also recognized that technical details could be worked out later. Flexibility inherent in the master plan contributed to its ultimate success. Dr. Meimanaliev notes, “we didn’t feel we had to follow it to the letter” (Meimanaliev 2003). Ainura Ibraimova, General Director of the MHIF, states that “From the beginning, we said that MANAS is a working document – it’s not the bible, it’s not dogma, it should be a flexible vision....the health sector is too dependent on politics, economics, and priority setting so the Program set out just the broad strokes, leaving the rest to implementation” (Ibraimova 2003). The MANAS Program contributed to the reform process by officially providing governmental support for health reform and giving reformers a “flag behind which to marshal forces for change” (O’Dougherty 2002). In the long run, the mere existence of the strategic vision and high-level government support of the agreed-upon vision proved more important than the technical details or proposed timeline of the master plan. In fact, many aspects of the reforms were not implemented according to the master plan.

Donor collaboration, led by Kyrgyz reform experts, was a key element of the development process of the MANAS Program from the very beginning. The vision provided by the master plan established a framework or umbrella under which all donor and pilot activities could be coordinated. The design process was inclusive of all donors working in the health sector, including USAID and the *ZdravReform* project working in Issyk-Kul oblast, and was consensus-based to the extent possible.

The MANAS Program represented a top-down approach – a centrally planned vision for health reform. The Issyk-Kul oblast pilot site represented a bottom-up approach – actual implementation of a comprehensive and integrated health reform model. The two approaches came together in late 1996 and early 1997. The Ministry of Health planned to begin implementing the MANAS Program and took an interest in the experience and lessons learned from the Issyk-Kul oblast pilot. In Issyk-Kul, oblast leadership and the *ZdravReform* project were beginning to feel that certain aspects of the reform model, especially related to health insurance, health financing, and pooling, would have to be resolved at the national level.

The top-down, bottom-up approach created great synergies. The convergence of the MANAS Program and the Issyk-Kul pilot provided much of the initial momentum for reform. The MANAS Program did not actually implement reform, leaving the Kyrgyz reformers without operational experience or the visible symbol of reform needed in post-Soviet society. The Issyk-Kul pilot was initially considered an isolated test and did not have the high-level political support engendered by the MANAS master plan. The pilot, however, delivered tangible results that were felt by both health providers and the population, and that had national policy relevance. The pilot also determined and tested technical inputs that would later be applied to the entire reform program (O'Dougherty 2002).

Design of the first World Bank health sector reform project in 1995-96 also helped formalize the top-down, bottom-up approach. The design process of the project provided a platform for national discussions of the health reform and health financing model tested in Issyk-Kul and for resolution of barriers to further implementation. The design explicitly connected experience from the Issyk-Kul pilot to national-level health policy and financing reform and to the expansion of the Issyk-Kul model to two additional pilot sites – Bishkek city and Chui oblast.

Financing

The pilot in Issyk-Kul oblast and health reforms in Kyrgyzstan benefited from financing from donors, loans, and the local budget; without these committed resources, health reform efforts would not have been successful. Adequate financing ensured that the national health reform strategy was not just another unfunded or underfunded mandate and that the initial pilot site could be rolled out nationwide. WHO helped finance the development of the MANAS Program. USAID helped finance development of the Issyk-Kul oblast pilot. With both of these initiatives well developed by 1996, it was perfectly natural that two World Bank loans (\$18 million and \$15 million), an Asian Development Bank loan (\$21 million in South Kyrgyzstan), and subsequent donor assistance in the health sector would continue to support their development, implementation, evaluation, refinement, expansion, and institutionalization. Despite the Asian and Russian financial crises in the mid-1990s, the Kyrgyz government has remained committed to continuing to finance the health sector as it can. However, the MHIF has not received timely transfers from the Social Fund, and savings from rationalization within the health sector were not being reinvested in the health sector. Efforts are currently being made to make health financing more sustainable.

Monitoring and Evaluation

There was little formal monitoring and evaluation of the initial pilot health reform intervention in Issyk-Kul oblast, although several later initiatives tried to conduct some form of evaluation:

- ▲ In 1994-95, Kyrgyzstan was selected from the WHO/EURO region to be part of a WHO effort to evaluate health financing reforms in each of WHO's six geographic regions. It was decided that the pilot in Issyk-Kul oblast would be selected as it was starting to provide a basis for overall reform of the health system. Work was begun in 1995-96, but, due to issues within the evaluation team, it was never completed.
- ▲ In designing the first health sector loan in 1996, the World Bank was impressed with the reforms that had taken place in Issyk-Kul oblast and wanted to roll them out to Bishkek city and Chui oblast, but only after a formal evaluation. The Kyrgyz government agreed to conduct the evaluation as part of the conditions of the loan; however, this evaluation was not conducted as planned either.
- ▲ In 1997, WHO designated a new Kyrgyz counterpart to resume the work that both WHO and the World Bank had requested and to develop a detailed evaluation proposal. But by the time the proposal was completed, the decision to roll out the Issyk-Kul oblast reforms had already been made, and neither an evaluation nor a subsequent report was ever finalized.

The MOH (with assistance from *ZdravReform*), however, prepared a preliminary review of results and impact of the World Bank-financed Kyrgyz Health Sector Reform project during the design phase of the second loan project. The review describes many results in terms of process and outputs, as well as reduced hospital length of stay and decreased PHC referrals, two key indicators of performance under the reformed health system.

Despite the lack of a formal evaluation, health reforms that were piloted in Issyk-Kul oblast were rolled out to additional oblasts. Due to the parallel development of a national health reform program, national leadership was open to health system reform and interested in what was happening in Issyk-Kul. These leaders visited Issyk-Kul oblast and participated in joint working groups on technical and implementation issues relating to the pilot, while Issyk-Kul oblast representatives participated in development of the MANAS Program. This interaction provided informal evidence of what worked and what did not work in Issyk-Kul oblast, and allowed policymakers and implementers to slightly adapt the health reform model based on this evidence.

Monitoring and evaluation became more important in Kyrgyzstan in the second phase of piloting when options to further refine the broad health reform model were tested, such as patient co-payments and an outpatient drug benefit for insured populations.

Pilot Outcomes

Roll-out

Reforms tested in Issyk-Kul oblast were rolled out to the city of Bishkek and to Chui oblast starting in late 1996 under the auspices of the World Bank Health Sector Reform project. USAID provided significant technical assistance, and the World Bank loan provided substantial investment in commodities and political leverage.

In early 1997, experienced *ZdravReform* local staff were relocated from Issyk-Kul to Bishkek in order to establish an office and begin implementation of health reform in Bishkek city and Chui oblast in collaboration with the World Bank. The project planned to refine and adapt the Issyk-Kul technical interventions for the population composition and urban health service delivery structure in Bishkek and Chui. For instance, family group practices were located within mixed (multi-profile) polyclinics and there were more physicians per FGP. Family Medicine Centers (essentially FGP clusters) were established to coordinate payment to individual FGPs and consolidate accounting and information systems functions.

The roll-out of health reforms to Bishkek city and Chui oblast moved rapidly. By late 1999, 108 FGPs had been formed in Bishkek city and 144 FGPs had been formed in Chui oblast. In late 1998, over 80 percent of the population of Bishkek city and Chui oblast, more than one million people, exercised their right of free choice of PHC provider and enrolled in the FGP of their choice. National FGP and hospital associations were established, and their capability to advocate and provide services to their members increased. New provider payment systems and health information systems were developed, tested, and implemented under the MHIF (Borowitz et al. 2000).

During the design of a second World Bank loan project, plans were developed to roll out reforms geographically – to Osh and Jalal-Abad oblasts in South Kyrgyzstan in 1998 (in collaboration with the Asian Development Bank's rural infrastructure project) and to Naryn, Talas, and Batken oblasts in 1999-2000. Initial steps in rolling out to these sites included forming FGPs and FGP associations, and enrolling populations. Nationally, 27 family medicine centers were established along with 748 FGPs. As of November 2002, more than 2,000 physicians (80 percent of all PHC physicians) and more than 1,700 nurses (50 percent of all PHC nurses) had been retrained in family medicine (Fonken 2002). In stages, FGPs and other health facilities were included in national-level provider payment systems through the MHIF. Information systems were introduced to support financing systems and inform facility management.

Box 2.2: Technical Achievements within the Issyk-Kul Pilot

- ▲ Eighty-one new FGPs were formed in stages from early 1995 through mid-1996. From June 1998 to June 2000, the legal status of the FGPs was solidified and technical assistance and training largely succeeded in establishing FGPs as the foundation of a new health delivery system structure.
- ▲ Through an evolutionary process reflecting increased autonomy at the FGP level, FGPs voluntarily merged to combine resources, resulting in 74 currently functioning FGPs in Issyk-Kul oblast.
- ▲ FGPs were strengthened through the provision of family medicine training for FGP physicians and nurses in Issyk-Kul oblast from 1996 through the present. Nurses from Issyk-Kul oblast also were retrained in family medicine. The Family Medicine Training Center (FMTC) in Issyk-Kul oblast was institutionalized as an affiliate of the Post-Graduate Institute's National FMTC.
- ▲ FGPs began to incorporate infectious diseases and reproductive health into PHC.
- ▲ A new health sector nongovernmental organization, the FGP Association, was established in 1996. The Association established a voluntary board structure and developed its capabilities to provide services to member FGPs.
- ▲ More than 85 percent of the population was enrolled in FGPs as a result of intensive marketing campaigns held over the last half of 1996. The population database based on enrollment was strengthened and used as the basis for capitated rate payment to FGPs.
- ▲ Institutional capacity building and development of the oblast MHIF resulted in the existence of an entity capable of serving as a health purchaser.
- ▲ A new case-based hospital payment system was developed in Issyk-Kul in 1996 and became the basis of the national MHIF hospital payment system initiated in late 1997. From June 1998 to June 2000, the oblast hospital and all central rayon hospitals in Issyk-Kul were paid under the new case-based hospital payment system.
- ▲ In the fall of 1998, the national MHIF tested a new capitated rate payment system for FGPs in Issyk-Kul oblast. All 74 FGPs in Issyk-Kul now are paid under this new MHIF system. In 1999, the national MHIF extended this FGP capitated rate payment system to all FGPs nationwide.
- ▲ New health information systems for both the health purchaser and health provider were developed, tested, implemented, and refined in Issyk-Kul oblast and later implemented at the national level.

Informing National Policy

Technical interventions tested in Issyk-Kul oblast informed national health reform efforts. Health reforms were institutionalized at the national level in a variety of ways between 1997 and the present. As mentioned, the MANAS Program was developed as a flexible blueprint to guide health system strengthening. Conditions of the first World Bank loan included resolution at the national level of many of the outstanding issues in health financing and provider payment that had been confronted during implementation of the Issyk-Kul oblast pilot. A second World Bank loan was designed in 2001 to expand reform countrywide and to continue deepening national reform efforts in health services delivery restructuring, health financing, quality improvement, and public health.

One specific area in which the Issyk-Kul pilot informed national-level policy formation was the development of national mandatory health insurance. Even without a fully functioning oblast-level health insurance system in Issyk-Kul, technical details elaborated in the pilot site from 1994-96 were used to support the creation of a national MHIF in January 1997. Specifications for provider payment systems for hospitals and PHC facilities, clinical statistical groups (for hospital payment), and information systems developed in Issyk-Kul were taken wholesale by the MHIF in 1997 and adapted over time. As the MHIF's Ibraimova, says, "We practically took [them] straight from Issyk-Kul oblast to start, and just simply introduced them... We immediately wrote a decree that approved the clinical statistical groups and we took them as they were, almost exactly, including the information system, only making minor modifications to the clinical information form, for instance, and introduced them into the facilities where the MHIF began to work" (Ibraimova 2003).

The MHIF also adopted the step-by-step approach used to implement health system reforms in Issyk-Kul. The MHIF's plan was to gradually expand coverage by population category – workers, pensioners, unemployed, then children, and to gradually increase the number of facilities reimbursed with health insurance funds. They decided to work first with hospitals, as they were more prepared than the new FGPs. In June 1997, the MHIF contracted with one hospital. By the end of 1997, they contracted with all 13 national hospitals and over time contracted with 66 general hospitals throughout the country. By the end of 1998, the MHIF began contracting with FGPs as they were formed, paying them using a capitated rate payment system.

Building Capacity to Implement Health Reform

The management skills required to formulate and implement plans were not well developed in the Central Asian health sector, in part because the Soviet system did not put a premium on problem solving or risk-taking behavior. Health reform efforts, at pilot and national levels, have been accompanied by significant investments in building capacity to implement health reform. This has occurred through training, exchanges, and study tours, but perhaps most importantly through actual implementation by counterparts together with technical assistance providers.

This approach created a health reform foundation that made evolution of reforms more inevitable and relied on small successes to build confidence, increase interest, and ultimately contribute to big successes.

"A pilot never ends, there is always continuous learning as the pilot goes deeper" (Ibraimova 2003).

Issyk-Kul oblast remains to this day a test site for subsequent steps in Kyrgyz health reform, such as the single-payer system and the introduction of facility-level quality improvement systems. In contrast to the initial Issyk-Kul oblast pilot, subsequent pilots aim to test and refine more specific and narrow health reform interventions and have been more rigorously evaluated by the MOH and the MHIE, with support from WHO and other donors.

Conclusions and Lessons Learned

The story of the Issyk-Kul pilot and its role in the development of broader health system reforms in Kyrgyzstan is quite a remarkable one. The Issyk-Kul pilot is notable for its longevity, the continuity of key actors' roles, and the gradual evolution of the pilot over time in response to the changing policy environment. Health reformers and other stakeholders in Kyrgyzstan have embraced the notion of piloting as a means to test and demonstrate alternative health system strengthening interventions.

Demonstrations may be particularly effective change-agents in the former Soviet Union, overcoming many of the psychological and cultural obstacles hampering change. The nature of the still-prevalent Soviet mentality requires visible successes to overcome skepticism; data and evidence to counter overly politicized central decision-making processes; incremental or step-by-step approaches to forestall the tendency to implement new programs too quickly; small victories to enhance the status of progressive health reformers; and learning by doing to improve problem-solving skills and encourage risk-taking behavior (Borowitz et al. 1999).

It is clear that one of the primary ingredients of success in the Kyrgyzstan experience is the symbiotic relationship that evolved between the pilot on the one hand and national policy on the other. This final section reflects upon the factors in the Kyrgyzstan experience that enabled this relationship to develop and the real successes of piloting to be realized. This case study points to a number of factors that were particularly important in this respect:

- ▲ *Continuity* – The success and expansion of the Issyk-Kul pilot project have benefited from political stability and continuity among the major stakeholders, both in terms of local counterparts, and donors and technical assistance providers. Many of the counterparts that WHO trained in health reform topics, English language, and program management at the national level and that *ZdravReform* and *ZdravPlus* have trained in Issyk-Kul oblast have remained actively involved in health reform. Similarly, some of the

key players in terms of the donor/technical assistance community have remained constant over the 10 years since the pilot was initiated. This has contributed to a common understanding of the purpose of the pilot and how it is linked to the broader context.

- ▲ *Policy-Level Engagement* – The relationship of the Issyk-Kul pilot with national-level policymakers has evolved over time, but has largely been a very positive relationship. At the national level, there was early political support for the pilot and then a hands-off attitude during initial implementation. In the early days, policymakers removed obstacles and created time and space for the pilot to try new things (O’Dougherty et al. 2003). If the process is too politicized or the stakes are too high during early pilot phases, the pilot risks failure. As the pilot matured and the MANAS Program was more fully developed, political interest in the Issyk-Kul pilot intensified. At the same time, implementation of the pilot required inputs from the national level to continue to move forward.
- ▲ *The Importance of Vision* – Health reform in Kyrgyzstan was successful because Kyrgyz reformers had a long-term vision for the health sector. Due to the large and powerful nature of the Soviet health system inherited in Kyrgyzstan, it was understood that starting with facility-level interventions would not create sustainable system change over time. The pilot program, therefore, was designed to test approaches that would inform gradual and long-term system-level change, and not instantly bring a small number of health facilities up to Western standards with little impact on the broader health system. The MANAS Program provided a blueprint and parameters for the Kyrgyz health reform vision, while the pilot in Issyk-Kul helped develop the skills and approaches to implement the vision.
- ▲ *Capacity Building* – Piloting processes can be critical to successful capacity building, which is in turn key to sustainability. If top-down planning and legislation push reforms too quickly, implementation gets ahead of capacity, and local partners may become frustrated and disengaged. The Issyk-Kul pilot played an essential part in capacity building. As oblast counterparts gained experience with the day-to-day implementation of reforms, they became an important source of technical assistance for national policymakers, other oblasts in the country, and other republics.
- ▲ *Ownership and Political Commitment* – The Issyk-Kul experience also demonstrates the role that piloting may play in establishing local ownership of reforms, creating reform champions and securing political commitment. The gradual implementation of reforms in the pilot area allowed a natural process of expansion and developed local informed advocates for health system reform. The Issyk-Kul pilot was crucial in overcoming resistance to health reform. Operational implementation of health reforms that produced visible changes in pilot sites led to a shift in the opinions of health sector decision makers and increased support for early progressive health reformers. As with policymakers, the pilot helped convince health professionals and the population that health reform was possible and could benefit them.

- ▲ *Flexibility in Pilot Design* – Several planned elements of the original pilot (such as the establishment of the MHIF as a separate payer) were reviewed and revised in light of emerging evidence and policy. The close links between the pilot implementers and the national policy level meant that pilot design could be adjusted without losing sight of the over-arching vision of the Issyk-Kul oblast health reform model. At the policy level, the MANAS Program was flexible rather than dogmatic and allowed for innovation during implementation to refine technical details. These changes did not negate the authority of the MANAS Program but seemed to enhance it, as they were based on actual implementation experience in Issyk-Kul and other pilot sites.
- ▲ *Donor Coordination* – The eventual roll-out of the Issyk-Kul health reform model was facilitated by donor collaboration mechanisms. The MANAS Program provided an umbrella framework to guide and monitor MOH, MHIF, and donor activities at pilot and national levels. Coordination of donor activities was a crucial part of pilot site interventions and national health sector planning beginning in 1994. Technical assistance from USAID, WHO, Swiss Red Cross, and other donors was effectively paired with World Bank and Asian Development Bank loans, as well as donor grants for reconstruction, equipment, medical supplies, drugs, and computers for maximum impact.
- ▲ *Institutionalization* – While health reform champions in Kyrgyzstan may have started out in the Issyk-Kul pilot or the MANAS Program they have been gradually institutionalized in the MOH and MHIF, further increasing the sustainability of reform efforts.

The pilot in Kyrgyzstan has gone through a number of phases. The first stage was the initial pilot process that developed the internal workings of the health reform process and addressed the technical issues at the core of the system – health delivery system restructuring, population involvement, provider payment systems, and health information systems. During the second stage these initiatives were validated at the system level: creating the autonomy and “space” needed to move forward with facility-level quality improvements. In the first stage, many attempts at facility improvements had proved unsuccessful or unsustainable due to system-level barriers and obstacles to implementation and regulation. National-level validation and support removed such system-level barriers.

Kyrgyzstan recently entered a third stage in the piloting/health reform process where a dynamic for sustainable change has been created – opportunities for both system-level and facility-level improvements exist. The MOH continues to design, implement, and evaluate pilot health reform interventions in Issyk-Kul oblast (and other oblasts), and immediately connects these efforts to national health reforms. Simultaneously, implementation of facility-level interventions continues to reveal problems with medical practices and standards, medical education, and public health that only the health system can address. The development of an effective dynamic process and experienced health reformers that allow and encourage sustainable health system improvements at both facility and system levels is the best legacy of the Issyk-Kul oblast pilot, and may be the true measure of its success.

Bibliography

- Borowitz M and S. O'Dougherty. 1995. *Country Action Plan: Kyrgyzstan*. Almaty, Kazakhstan: ZdravReform project, Abt Associates Inc.
- Borowitz M, S. O'Dougherty, C. Wickham, G. Hafner, J. Simidjiyski, C. VanDevelde, and M. McEuen. 1999. *Lessons Learned and Next Steps in Health Reform for Central Asian Republics*. Almaty, Kazakhstan: ZdravReform project, Abt Associates Inc.
- Borowitz, M et al. June 2000. *Health Reform Initiatives in Central Asia: ZdravReform Project Final Report*. Almaty, Kazakhstan: ZdravReform project, Abt Associates Inc.
- Fonken P. 2002. *Family Medicine Training for Physicians and Nurses in Kyrgyzstan: An Update on Activities between June and November 2002*. Bishkek, Kyrgyzstan: Scientific Training and Language Institute, ZdravPlus Program.
- Hafner G, G. Purvis, and S. O'Dougherty. October 1999. *The First Phase of the Issyk-Kul Oblast Demonstration Site: Building a Health Reform Foundation in Kyrgyzstan*. Almaty, Kazakhstan:
- Ibraimova, A. 2003. Interview by author. General Director, Mandatory Health Insurance Fund.
- Kyrgyz Ministry of Health. 1996. *MANAS National Programme on Health Care Reforms (1996-2006)*. Ankara, Turkey: Turkish International Cooperation Agency (TICA).
- Langenbrunner J, M. Borowitz, S. Zaman, and J. Haycock. 1994. *Technical Assistance in Developing a Health Insurance Reform Demonstration in Issyk-Kul Oblast, Kyrgyzstan: Progress, Problems, and Prospects*. Technical Report No. 15. Bethesda: Health Financing and Sustainability (HFS) project, Abt Associates Inc.
- Langenbrunner J. 1995. *Technical Assessment and Planning for the ZdravReform Project in Issyk-Kul Oblast and Strategic Development of Reform "Roll-Out" under Proposed World Bank Loan Program*. Trip Report June 28-July 15, 1995. Almaty, Kazakhstan: ZdravReform project, Abt Associates Inc.
- Laudato G, L. Barenbaum, C. Bladen, H. Berman, J. Merenna, C. Powell, A. Vuturo, R. Wilkinson, and D. Woodrum. 1997. *Evaluation of the Health Care Financing and Service Delivery Reform Program Implemented by Abt Associates Inc.* (PD-ABN-840). Arlington, VA: BHM International Inc.
- Meimanaliev T. 2003. Interview by author. Ministry of Health.
- O'Dougherty S. 2002. Notes. ZdravPlus project.
- O'Dougherty S, J. Kutzin, and C. Cashin. 2003. Interview by author. ZdravPlus project.
- Purvis G. 1997. *Health Care Reform in Issyk-Kul Oblast, Kyrgyzstan 1994-97: Restructuring through Payment Reform*. Almaty, Kazakhstan: ZdravReform project, Abt Associates Inc.

Sigler W, G. Becker, and S. Hildebrand. 1994. *Proposal to USAID on Health Care Financing and Service Delivery Reform (HCFSDR) Project in the Newly Independent States*. Bethesda: Abt Associates Inc.

World Health Organization/EURO. 1997. *MANAS Health Care Reform Programme of Kyrgyzstan. Health Care Policies and Systems Programme*. Copenhagen: WHO/EURO.

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Chapter 3. The Role of Pilots: Primary Care Cost Recovery and Quality Improvement in Niger

Linda Moll, based on original text by François Diop, Ricardo Bitran, and Marty Makinen

Introduction

This case study examines the pilot test of alternative financing mechanisms in Niger in 1993-94, carried out to inform the design of national policy on sustainable financing of primary health care, particularly in rural areas. While it describes the technical aspects of the financing and related reforms, its focus is on the pilot process – how the initiative was designed and implemented, what constraints it encountered, how its findings contributed to national policy immediately after the pilot test concluded, and how it affected Niger’s Ministry of Public Health (MPH) and health care system in the long term.

The pilot followed a decade of economic decline in Niger, which resulted in diminished government budgetary allocations for the public health care sector and increased payments by households, including high expenditures for prescription drugs, for what was theoretically a free service. Despite periodic government discussions on the use of cost recovery to generate resources for and improve quality of the public health sector as well as overall support for such reform, repeated turnover in government decision makers and limited technocratic capacity and resources prevented the design and testing of possible options for revenue generation. Several limited interventions by individual external donor agencies took place, but also failed to effect broad change.

Finally, with the coincidence of a new government committed to social sector reform and the availability of external resources in the early 1990s, a window of opportunity to test the revenue-generating options opened. In addition to examining for Niger the relative merits of alternative health financing mechanisms and thus providing Nigerien policymakers information on which to base financing policy, the pilot project clearly illustrated the utility of field-based research and demonstration as an instrument for decision making and policy development.

This case study is summarized from a technical evaluation report produced by the United States Agency for International Development (USAID)-funded Health Financing and Sustainability (HFS) project¹ as well as an unpublished examination of the pilot. Those documents draw on

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¹ Diop, FP, R Bitran, and M Makinen. October 1994. *Evaluation of the Impact of Pilot Tests for Cost Recovery on Primary Health Care in Niger*. Technical Report No. 16. Bethesda, MD: Health Financing and Sustainability Project, Abt Associates Inc. The evaluation report, earlier HFS reports on the Niger pilot, and related journal articles are available from www.PHRplus.org.

earlier HFS technical reports and on publications by the government of Niger.² Additional information came from interviews with two HFS health economists who worked in Niger prior to and during the pilot and who authored many of the aforementioned publications.³

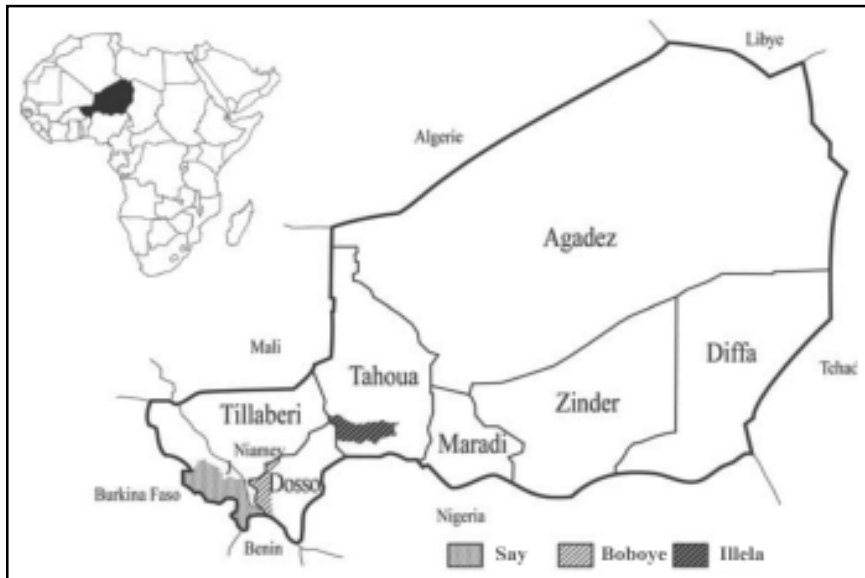
The case study first looks at the context in which the pilot took place: the obstacles to providing health care especially to rural Nigeriens that caused the MPH, other government agencies, and international donors to conceive of and support a pilot to find a new mechanism for financing primary care. It goes on to describe pilot objectives, design, and implementation and evaluation of technical interventions as well as capacity-building efforts to enable and sustain the interventions. It then reviews findings of the pilot's interventions, discusses how the findings were used, and reflects upon the success of the pilot itself.

Emergence of the Pilot Concept

The Need to Improve Financing and Management

Upon gaining independence in 1960, Niger, a poor, mostly rural, landlocked country in West Africa (Figure 3.1), committed itself to providing free public health care as part of a broader effort to develop the country's human resources. Niger's economy grew during the 1960s and experienced a boom in the 1970s, when the world energy crisis resulted in high prices for Niger's main mineral resource, uranium. This allowed the country to establish a network of

Figure 3.1: Map of Niger, with Cost Recovery Pilot Sites



² See bibliography for a list of documents.

³ François Diop, PhD, served as the on-site technical advisor for the Niger pilot experiment. Marty Makinen, PhD, consulted on pilot planning, implementation, and evaluation in visits to Niger from the late 1980s to the mid-1990s.

health centers, even in sparsely populated rural areas. During the 1980s, however, Niger's economic performance slowed as a result of deteriorating international uranium markets and successive years of drought. These events reduced the capacity of the state to maintain the quality of public services and to pursue the extension of health and other social services, especially to rural areas.

Health care coverage suffered from both insufficient funding⁴ and poor management⁵ of resources on the supply side, and from increasing needs of a growing population on the demand side. Performance of the health sector during the 1980s and early 1990s was poor, even by African standards; moreover, no significant improvement in health indicators occurred in that period. Quality of health services suffered, and access to modern services was limited and inequitable. Table 3.1 illustrates the disparity in access to selected preventive health services between the population as a whole and the 85 percent of the population that resides in rural areas; low and inequitable access to modern health services was similarly true for curative services.

Table 3.1: Access to Selected Priority Health Care Services in Niger, 1992 (in percent)

Indicator	All Niger	Rural Areas
Pregnancies assisted by trained health personnel	30	20
Birth deliveries at home	84	94
Immunization coverage, children ages 12-23 months	17 (54% in urban areas)	10
Children under 5 years treated at health facility for acute respiratory infections	14 (50% in urban areas)	10

Source: Diop, Bitran, and Makinen 1994

In addition to producing diminished quality of and inequitable access to public health services – essentially, to all health services, as a private health sector was nearly nonexistent – fiscal constraints created an informal transfer of responsibility for financing of health services (including purchase of pharmaceuticals) to private households, with poorest households suffering most.

⁴ Health represented between 7 and 9 percent of the budget of the government of Niger in the 1960s; after spending dropped to a low of 4 percent in the 1970s and early 1980s, it rose to between 5 and 6 percent from 1984 to the mid-1990s, well below the 10 percent advocated by the World Health Organization (Diop, Bitran, and Makinen 1994).

⁵ For example, the National Office of Pharmaceutical and Chemical Products, Niger's parastatal pharmaceutical procurement agency with a monopoly on drug imports and distribution in the public health sector, was locked into buying brand-name drugs from France at very high prices instead of purchasing cheaper generic drugs in competitive international markets.

Juggling Donors

One of the policy measures proposed in a 1987 government study on cost recovery to help remedy the imbalance of needs and resources in Niger's primary health care sector was recovery of recurrent costs.⁶ In the same year, the Bamako Initiative called for African governments to institute primary health care financing based on community participation and management of resources; UNICEF urged Niger to adopt the initiative. At the same time, several other donors' programs that incorporated cost recovery were taking place in Niger: A World Bank anti-malaria program that provided chloroquine treatment contained an element of cost recovery, and two experiments more explicitly targeted to cost recovery in rural health facilities were happening. One, in a health district in the department of Zinder and supported by the European Development Fund, involved the use of social financing based on a health tax; the other, by the Belgian Medical Cooperation Agency, introduced user fees at one health post in the department of Dosso.

The Nigerien Ministry of Public Health's limited technical capacity prevented its being able to coordinate the multiple donor programs, and it had limited involvement with these experiments. Thus, the MPH itself did not benefit from them in an institutional sense (for example, in terms of improved management capacity or technical skills). In addition, because there was no evaluative element built into the experiments, debates arose within the ministry about the equity implications of the alternative modes of payment and financial sustainability of the reforms. However, the MPH did have a health sector support grant from USAID/Niamey (Bilateral Grant for Health Sector Development, or GHSD), and a World Bank-supported health project with a large capacity-building component that enabled it to secure financial resources and technical support for the implementation of reforms in the areas of cost recovery and cost containment.

Moving toward Consensus

In November 1989, the MPH convened a National Workshop on Cost Recovery in the Non-hospital (primary care) Sector, which recommended that, in order to produce an equitable, efficient, and viable health financing system, the MPH conduct a pilot project of alternative health care financing mechanisms in rural Niger. The pilot would facilitate selection of a cost recovery mechanism to be rolled out in primary care health facilities nationally. Indeed, technical preparation for the pilot began at the workshop, in that attendees identified alternative ways of financing health care and the criteria on which evaluation of the tests would be based.

Following the recommendations of the workshop, the MPH Directorate of Research and Programs, with technical assistance from USAID's GHSD, continued technical preparations for the pilot tests with a target to implement in 1991: A review was done of Niger's earlier experiments with direct and indirect methods of cost recovery in the non-hospital sector

⁶ Cost recovery is the mechanism whereby patients pay part or all of the cost of care in a public facility as a means to generate additional financial resources (Wouters 1995).

Box 3.1: The “Kollo Conference”: Seizing Opportunities for Change

The 1989 National Conference on Cost Recovery in the Non-hospital Sector, which took place in Kollo and therefore was often referred to as the “Kollo conference,” was convened specifically to discuss the issue of instituting a cost recovery pilot test in the health sector, but it produced a sea change – in both planned and serendipitous ways – in how the Nigerien Ministry of Public Health carried out advocacy, policy planning and design, and leveraging of resources, and even in the MPH’s own organizational structure.

Prior to the conference, MPH personnel did a “stakeholder analysis” (though it was not called such at the time): In meetings with the Ministries of Finance, Planning, and Interior, with the President’s Office, and with other agencies (all of which had vested interests in the proposed cost recovery pilot because of their roles in financing the health sector, enforcing tax collection, etc.), the MPH briefed those entities on its needs and learned from those entities of their own concerns regarding a pilot test and eventual nationwide roll-out of reform. These meetings built relationships that produced collaborative consideration of issues and allowed the MPH to recruit both the support of these entities, which manifested itself in their ceding certain authority (in the levying of a health tax, for example) as well as their contributing tangible resources to the pilot.

The MPH then invited these agencies to Kollo not only to participate in a general sense but also to chair conference sessions. When at the end of the first day this proved to be diluting the focus of the conference, the participants agreed to appoint as chair a woman from the President’s Office, who earlier had worked for the Ministry of Planning. Her leadership was masterful, helping to produce collaborative support for a pilot test and thus streamlining for the MPH the parallel, and sometimes competing pressures from domestic stakeholders and international donor programs.

In addition, the conference helped to crystallize the MPH’s cognizance of the importance of financing issues and to change its strategic thinking about traditional patterns of resource allocation to ministry programs and directorates. In response, the MPH reorganized itself, establishing a Directorate of Planning with health care financing responsibility and hiring to lead the directorate a young woman from the Ministry of Planning who was not a physician – in other words, a person who was very much not a traditional appointee. Also to reorganize itself for the pilot initiative, it created the National Steering Committee on Cost Recovery to oversee the pilot and the Central Monitoring Bureau to monitor pilot interventions. The CMB functioned during the pilot as part of the Directorate of Research and Programs; the CMB outlived the pilot and was ultimately elevated to directorate status itself.

Source: Makinen 2004

in Dosso and Zinder. These pilots confirmed that Niger’s rural population was willing and able to pay its share of the cost of health care and that, for drugs, recovery rates ranging from 50 to 60 percent were feasible.

Despite this stated support for reform to formalize the practice of user fees, political and bureaucratic issues continued to delay the pilot test. Internally, repeated turnover in government impeded the assertive, consistent leadership needed to reconcile competing interests in or resistance to reform among the various stakeholders. In addition, the national government was contending with civil unrest and a separatist movement. Without certainty at the upper echelons of government, reform was too controversial to move forward. Externally, USAID had problems in releasing resources in sector grants.

Then, in 1990, strikes and demonstrations forced the government to recognize opposition parties, and, in 1991, a constitutional conference, the National Conference on Transition to a Pluralistic Democracy, stripped the president of power and established a transition government. At a national conference in 1992, the transition government put the health finance pilot in its agenda, and the government elected in early 1993 also gave political support to the pilot test idea. In the same period, USAID created the Health Financing and Sustainability project (1990-95); the contractor that implemented the new technical assistance project was one of those that had worked on GHSD. Its health economists and other health care experts thus were familiar with Niger's health financing problems and involved in the country's planning for a cost recovery pilot experiment, and momentum for the pilot could continue uninterrupted. In fact, the protracted period while implementation of reform was in limbo actually allowed for greater detail in planning than was typical for pilots.

Principal Actors in the Pilot Design

As the primary entity seeking information on the advantages and disadvantages of alternative financing mechanisms, especially in relation to consumer preferences, the Ministry of Public Health was the moving force in the cost recovery effort. As such, the MPH organized the workshop that gave impetus to the pilot project, and it created two entities – the National Steering Committee on Cost Recovery and the *Bureau Central de Suivi* (Central Pilot Test Monitoring Bureau, or CMB), the latter administratively attached to the Directorate of Research and Programs – to oversee and implement the pilot test.

The MPH recognized that the pilots would succeed only with support and participation of a wide and coordinated range of stakeholders. To that end, as discussed above, it invited to the 1989 Workshop on Cost Recovery representatives from the President's Office and the National Assembly; high-level officials from the Ministries of Health, Finance, Planning, and Interior; local government officials; traditional community leaders; representatives of labor unions involved in the health sector; and donor organizations. The Steering Committee, established in March 1991, comprised similar local actors as well as several international lending agencies (USAID/Niamey, World Bank, UNICEF, Belgian Medical Cooperation Agency, and others).

At the district and local levels, volunteer health committees were elected at every public health facility in the districts in which interventions would take place. Individual committees selected a young villager to be trained to serve as the paid representative, responsible for managing the cost recovery revenues.

To strengthen management capacity, technical assistance to the MPH and the pilot was provided by USAID's HFS project. A project health economist served as long-term in-country technical advisor to the MPH during the preparation, implementation, and evaluation of the pilot test. The advisor worked closely with the CMB and made quarterly visits to the pilot sites. Other HFS staff made frequent visits to Niger to contribute expertise.

Within the USAID Mission, an effective and energetic locally hired “technocrat” made it his responsibility to keep the pilot idea alive. Thanks to his efforts, planning continued in the early 1990s, even though political turmoil prevented implementation.

Other international actors also played a role. The World Bank provided a grant for start-up pharmaceutical products, which were procured through UNICEF, and the European Economic Commission (EEC) worked with the National Office of Pharmaceutical and Chemical Products (ONPPC) to enable it to do future competitive generic drug procurement. Belgian Cooperation provided support for training health facility staff in diagnostic and treatment practices (DTPs).

Pilot Objectives

The primary objective of the Niger cost recovery pilot, as formulated by participants at the 1989 cost recovery workshop, was clear and comprehensive: to inform the Ministry of Public Health and other Nigerien policymakers on the advantages and disadvantages of alternative mechanisms by which consumers would help to finance the primary health care that they received, with the most advantageous option to be adopted for implementation as national policy. It was important to make an informed choice of payment policy, especially in regard to consumer preferences, so as not to undermine overall health policy objectives identified by the MPH (1989):

- ▲ Improve the quality of primary health services;
- ▲ Increase the demand for health services in general;
- ▲ Promote equitable access to health services for target groups;
- ▲ Generate financial resources to cover recurrent costs of the pilot interventions;
- ▲ Rationalize and then maintain primary health care costs at low levels, so that quality improvements are sustainable.

To do this, the pilot test would include a component to evaluate the financing mechanisms and accompanying measures in terms of their ability to fulfill the overall policy objectives.

In adopting this approach, the Niger pilot encompassed several of the policy objectives attributed to pilot projects in Chapter 1 of this volume. The primary objective was to inform governmental decision makers, who in Niger had already agreed that some form of cost recovery was necessary to generate the resources needed to improve the quality of and access to primary care services, on which financing mechanism was best; in other words, pilot findings were intended to enable policymakers to *refine an existing consensus*. In addition, the pilot project served a *research* purpose, by empirically investigating advantages and disadvantages of the payment alternatives tested.

Chapter 1 also discusses pilots that have the objective of *capacity building*, while this was not an objective in Niger in and of itself, it could be termed an intermediate objective, as capacity building was requisite to pilot success. At the central level, the pilot improved MPH

articulate and implement new strategies, develop a new health information system, and do research and analysis. At the local level, facility personnel were trained in DTPs and management of finances, staff, and equipment and supplies (especially the drug inventory); community representatives were trained in basic financial accounting procedures, and communities in general were encouraged to participate in health care decision making.

Pilot Design

Pilot design was done by a team of officials from the MPH Directorate of Research and Programs and technical advisors from the HFS project. The planning team set out three financing mechanisms to test, each complemented by quality improvement and management capacity-building measures (Table 3.2). It also recommended the pilot sites, designed the implementation framework, and developed a strong evaluation component.

Table 3.2: Methodology of Niger Pilot, per District

	Level of Intervention	Social financing (tax + small fee) (Boboye district)	Private financing (fee-for-service) (Say district)	Control (free care) (Illéla district)
Intervention				
Public awareness campaign and organization of local health committees	Population	Yes	Yes	No
Training in standardized diagnosis and treatment protocols	Health facility	Yes	Yes	No
Training in financial and drug-stock management	Health facility	Yes	Yes	No
Initial stock of pharmaceuticals	Health facility	Yes	Yes	No
User means of payment for care	Population	Head tax: 200 FCFA/year	No	No charge
	Health facility	Small fee: Adult: 50 FCFA /episode Child: 25 FCFA /episode	Fee: Adult: 200 FCFA /episode Child: 100 FCFA /episode	
Evaluation				
Baseline survey	Population	Yes	Yes	Yes
Final survey	Population	Yes	Yes	Yes
Health facility data	Health facility	Yes	Yes	Yes

Source: Diop, Bitran, and Makinen 1994; Diop n.d.

Note: FCFA = Franc de la Communauté Francophone d'Afrique

Technical Features

In the process of working toward the health policy objectives listed above, the design of the implementation framework had to deal with four political and bureaucratic issues:

- ▲ In promoting policies to institute user fees and raise taxes, the MPH was engaging in activities normally the purview of the Ministries of Finance and Interior.
- ▲ With no experience in cost recovery, the MPH lacked the institutional capacity to implement the proposed policy.
- ▲ Many MPH bureaus and decentralized entities and many international donor organizations were interested in a cost recovery policy for the health sector, and these stakeholders needed to be coordinated.
- ▲ The MPH needed to rally support for the policy change from a broad range of interest groups, beyond those that attended its meetings.

Interventions under the pilot test constituted a comprehensive package of financial, technical, and administrative reforms aimed at strengthening the capacity of the health district's care delivery system, essentially by mobilizing new resources, rationalizing use of existing resources, and then using the resources to sustain an improved quality of care. The MPH remained mindful of repercussions that cost recovery might have on equity of access to health care, and it built in mechanisms to ensure access for certain vulnerable groups.

Cost Recovery Interventions

The thrust of the pilot project was to test alternative cost recovery mechanisms for the financing of primary care. Three alternatives were proposed originally, though the Steering Committee eventually decided to forgo the third option:

- ▲ A private financing mechanism based on a direct user fee;
- ▲ A social financing mechanism based on a head tax and a small user fee (co-payment);
- ▲ A voluntary prepayment mechanism based on the sale of an annual health card. This option was dropped because its implementation would have required administrative capacities not available in rural health districts of Niger.

The user fee for service, implemented in the district of Say (Tillabéri department) (Table 3.3), consisted of a direct fee paid by users at the public health facility level for each episode of illness. The fee was considered affordable to all residents; patients under five years of age paid FCFA 100 (US\$ 0.33) per episode; all other patients paid FCFA 200 (US\$ 0.66).

The head tax plus co-payment, implemented in the district of Boboye (Dosso department), consisted of an additional FCFA 200 (US\$ 0.66) paid as tax, with the entire amount earmarked for the district health fund, and a small co-payment (FCFA 25, US\$ 0.08 for patients under five; FCFA 50, US\$ 0.16 for others) per episode of illness.

Table 3.3: Profile of District Health Systems in the Pilot Districts, 1993

	Districts		
	Boboye Dosso Province (tax + small fee)	Say Tillabéri Province (fee-for-service)	Illéla Tahoua Province (control)
Population	250,000	210,000	200,000
Number of public health facilities	10	8	5
Number of medical centers	1	1	1
Percentage of population living less than 5 km from a primary health facility	27	16	16
Physicians in post	1	1	1
Nurses in post	20	18	11
Midwives in post	6	3	3
Annual allocation (FCFA) in the central budget: drugs and medical equipment	FCFA 4,500,000	FCFA 6,000,000	FCFA 5,000,000

Source: Diop, Bitran, and Makinen 1994.

In both districts, certain categories of individuals were exempted from the co-payment: schoolchildren, handicapped, military personnel, prisoners, and the “indigent,” the identification of whom was left to local health committees and providers. In Boboye, elderly and handicapped residents were exempted from paying the head tax.

A third district, Illéla (Tahoua department) served as the control district for the purpose of monitoring and evaluating the pilot test (see section below on monitoring and evaluation). No interventions were implemented there.

Complementary Interventions

Complementary technical reforms to improve quality of service delivery as well as administrative reforms to improve management, rationalize the use of resources, and motivate staff were considered integral to the near-term success of the cost recovery pilot, and to sustain achievements in the long term.

Health personnel were trained in the use of standardized diagnosis and treatment protocols, guidelines aimed at ensuring quality of care and rationalizing the utilization of health resources

in general, and the use of drugs in particular. The DTPs had been developed in the late 1980s by medical personnel of the department of Dosso (where Boboye district is located) with the technical assistance of the Belgian Medical Cooperation Agency. Personnel also were trained to improve their communication with patients.

The availability of essential drugs was improved at pilot facilities and districts with the financial support of a World Bank project that provided pilot districts an initial stock of generic drugs to cover needs for an entire year. The drugs were purchased through UNICEF's UNIPAC. Procurement through an international bidding process managed by ONPPC had been attempted; it was unsuccessful for the pilot period but instructive in introducing the agency to such purchasing practices.

Administrative capacities were strengthened through the installation of a simple drug-stock management system and a system for management of cost recovery receipts, as well as through training in the systems. Revenues were managed jointly by health personnel and local health committees.

A health district-level revolving fund for receipts was used rather than multiple health facility funds. This was due in part to the fact that management capacities were relatively poor at the facility level and because the revenue-generating capacities of health facilities would depend on the financial well-being of their respective populations.

Oversight and supervision of the medical districts also was strengthened: the chief medical officer of the district was to improve use of DTPs, and the CMB's office of supervision and training was to strengthen the management of drugs and financial management.

Design Modifications

Some modifications were made prior to implementation of the pilot. As noted above, a third cost recovery financing mechanism, prepayment based on a health card system, was rejected by the Steering Committee as too complicated for local-level personnel to successfully administer. In addition, the number of test districts was reduced from the six proposed initially to the final three: Say, where the user fee system was instituted; Boboye, which used the incremental head tax and co-payment; and Illela, the "control" district, where no quality improvements were implemented and care continued to be offered "free of charge." This smaller scale, with all sites relatively close to the capital city, allowed MPH officials to better manage the tests and devote more attention to the development of national policy. It also saved resources that would have otherwise been needed for additional training, personnel, travel to the sites, etc.

As also noted, the original intention for ONPPC to procure generic drugs through an international bidding process was modified, and procurement was channeled through UNICEF. While having drugs available at health facilities was integral to the issue of quality improvement, this shift in procurement responsibility was not part of the pilot design per se.

No other notable changes were made to the design once implementation began. To a great extent, especially with the social health insurance option, the pilot built on the local administrative and fiscal (tax collection) mechanisms that had existed in Niger for many decades and thus was not a dramatic change in the system. Health and treatment protocols also had been in place in one of the test districts (Boboye) and so were familiar to health staff in those health facilities.

Monitoring and Evaluation

A strong monitoring and evaluation component to provide information on the outcomes and to strengthen consensus on cost recovery policy was part of the design. Evaluating the cost recovery and quality improvement interventions in terms of the objectives, criteria, and indicators specified by the 1989 National Workshop on Cost Recovery required several evaluation techniques and a substantial amount of information from varied sources. The pilot test followed a quasi-experimental design, whereby a different financing mechanism was implemented in each of the two test districts, similar quality improvement interventions were implemented in both districts, and no new financing or quality intervention was implemented in the control district.⁷

In addition, two instruments were developed to generate data for the measurement of performance indicators. The first yielded data on the demand for health services based on a baseline household survey conducted in late 1992, approximately six months before the introduction of cost recovery in the pilot districts, and a final household survey carried out a year after the baseline survey. The second instrument yielded monthly data on utilization, costs, and revenues of public health facilities collected throughout the year before the initiation of the pilot, i.e., the base year, and through the test year in the three districts.

The use of all these instruments made it possible to use several evaluation techniques to reach conclusions about the pilot test.

Implementation

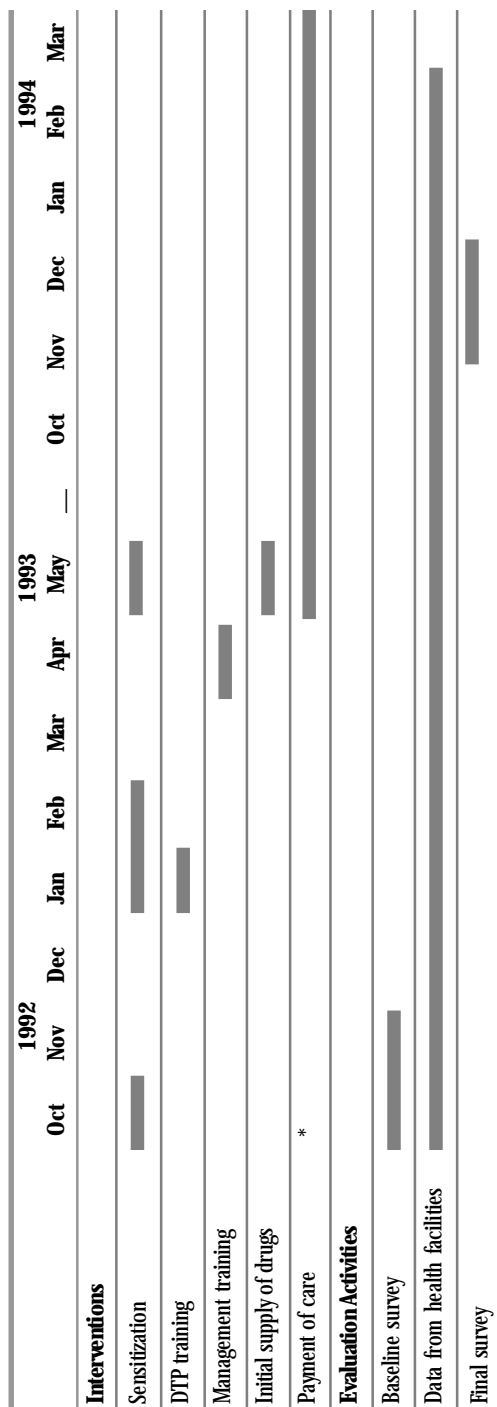
As described above, due to changes in government and donor issues, preparations and approvals at the central level were not completed in time to permit pilot test start-up in 1991, as had been the original plan.

Implementing the Pilot Design

Implementation of certain interventions, complementary to the cost recovery component, began in late 1992 (Figure 3.2). In October, a baseline household survey was carried out that

⁷ As noted above, health personnel in the Boboye district had been administering the DTPs for several years; the DTPs were introduced into the Say district only as part of the pilot.

Figure 3.2: Timeline of Pilot Interventions and Evaluation Activities in Niger



Source: Diop, Makinen, and Bitran 1994

* As a result of a breakdown in coordination between the central and local levels, the surcharge on the tax was collected in 1991 after the people has already been sensitized: preparations at the central level were not completed in time to permit overall pilot start-up in 1991.

would later be used to measure changes in health service utilization and the impact of those changes on different socioeconomic groups, especially the poor.

To convince users of primary care that the implementation of cost recovery would not exacerbate inequities in access to care, a sensitization campaign begun in late 1992 was used to introduce changes to the residents of the two districts in which the interventions would be tested. Radio spots, meetings at the local and district levels, and printed materials were used to inform the populace. Media coverage took place periodically throughout the implementation phase.

After some final delay, in May 1993, an MPH decree instituting the pilot test was adopted and approved by the Ministry of Finance and the Ministry of the Interior. The CMB launched the tests in that same month, at which time payments in all the test health facilities started.⁸

To encourage continuous policy dialogue on cost recovery and coordination of activities, the CMB held two interim workshops, and a final meeting in July 1994. Concerted effort made to disseminate and discuss findings with stakeholders at local, national, and international levels.

Implementation Roles

The National Steering Committee on Cost Recovery provided oversight of the cost recovery activities and policy development, and it coordinated the involvement of various government and international agencies. Decisions regarding the implementation of the pilot interventions were made during Steering Committee meetings between 1991 and 1993.

The Central Pilot Test Monitoring Bureau was responsible for implementing and reporting on the pilot activities decided by the Steering Committee. The HFS long-term technical advisor worked closely with the CMB to build its capacity to manage implementation of the pilot and, it was expected, of later roll-out of cost recovery activities. The CMB produced quarterly reports and technical notes on pilot results for the Steering Committee. It also held two interim workshops during the pilot period, to present results and discuss their policy implications, to identify constraints to implementation of cost recovery, and to discuss nationwide implementation of cost recovery.

At the local level were health facilities and communities. Each district had one medical center, coupled with a maternal–child health center, and one medical post, which served as referral points for rural dispensaries. Villages (elders and other traditional leaders, women’s and youth groups, and others) elected one health committee per facility. Committees had executive boards consisting of president, vice president, secretary, and treasurer. Service was voluntary except for the paid treasurer.

⁸ As a result of a breakdown in coordination between the central and local levels, the health surcharge on the head tax began to be collected in Boboye in 1991.

Issues of Centralization and Decentralization

Design of Niger's cost recovery pilot experiment, though implemented on the local level and encouraging of local input and participation, was clearly driven by the central government, namely by the Ministry of Public Health in coordination with the Ministries of Finance and Interior. The MPH created the Steering Committee that guided the pilot, and the Central Pilot Test Monitoring Bureau, tasked with following the pilot's progress. Pilot sites were chosen in great part based on their proximity to the capital city, to allow central MPH staff to visit the sites. The CMB also was the reporting agency for pilot test results. Workshops organized by the CMB presented results, led discussion of policy implications, and planned for roll-out of the reforms.

Timeframe

While the need for reforms was recognized and conceptualized over a period of years (Table 3.4), the implementation phase of the cost recovery interventions was brief, barely more than one year. Some sensitization took place late in 1992. DTP training took place in January 1993, management training in April, and officially sanctioned collection of fees began in May, lasting until April 1994. Indeed, the second (final) household survey was conducted only 5-6 months after initiation of user fees. A final evaluation conference to discuss results was held in July 1994, and a law on cost recovery was adopted a year later, in July 1995.

Table 3.4: Chronology of Health Financing Reform Process in Niger

1986	August	USAID Bilateral Grant for Health Sector Development
1987	March	Bamako Initiative adopted by African public health ministries
1989	Unknown	Cost recovery experiments implemented in Dosso (Tbiri province) and Zinder (Mirriah)
	November	National Workshop on Cost Recovery in the Non-Hospital (Primary Care) Sector held (the "Kollo" conference)
1991	March	National Steering Committee on Cost Recovery created
	July	National Conference on Transition to Pluralistic Democracy held
1992	April	Central Monitoring Bureau created within the new MPH/ Directorate of Studies and Programs to monitor cost recovery pilot activities
	October	USAID HES project health economist designated long-term technical advisor to MPH for preparation, implementation, and evaluation of cost recovery pilot activities
	October	Sensitization activities begun (through May 1994)
	October	Monthly health facility data collection initiated (through February 1994)
	October-December	Baseline household survey on health care utilization, costs, and revenues conducted

(Continued on the next page)

(Table 3.4 Continued)

1993	January	DTP training held
	April	Management training held
	May	Ministries of Finance and Interior approve and adopt MPH decree instituting pilots in three districts and Bamako Initiative in Maradi. MPH/USAID cost recovery pilot implemented in Boboye and Say districts, with Illéla district as control (through April 1994)
	October-December	Follow-up household survey on health care utilization, costs, and revenues conducted
1994	January	FCEA devalued by 50 percent
	January	Bamako Initiative launched in Maradi Province instituting direct user fees (same mechanism as MPH/USAID pilot in Say)
	February	Monthly health facility data collection completed
	February	Interim policy workshop held to develop action plans and coordinate planning activities for nationwide implementation of cost recovery
	April	Cost recovery pilot completed
	July	Final evaluation and policy workshop on cost recovery pilot held in Niamey
	October	Draft cost recovery law presented to National Assembly
	November	National Assembly dissolved
1995	July	Law on cost recovery for primary health services by National Assembly

Capacity Building

Capacity building was integral to the Niger cost recovery pilot, as the lack of adequate technical and administrative capacity at both the national and local health system levels had been a major impediment to in-country designing, advocating, and implementing a pilot test and ultimately using findings from the pilot to formulate national policy. As one consultant described it, “Where most developing countries lack human resources, with only five trained persons” for example, in a ministry of health, where many more skilled persons are needed, “Niger had one [person]” (Makinen 2004). Therefore, parallel to the pilot was a separate, donor-supported process aimed at reorganization and institution building within the MPH.

The process of transferring knowledge and adapting international and regional experience on health care financing began even prior to the Cost Recovery Workshop in 1989, with the donor assistance programs described above. The process intensified during debates over equity and efficiency issues, drug procurement policy, resource mobilization, and financial sustainability, all of which strengthened MPH management capacity. Work with the HFS and other technical experts brought in to assist with the pilot test – and especially the ongoing presence of a resident advisor – clearly contributed to the development of the MPH’s capacity to manage the

implementation of the policy package. Progress was documented in reports by the HFS resident advisor, other consultants, and in-country personnel.

Workshops and other meetings held during the pilot planning, implementation, and evaluation phases allowed the MPH to interact and inform other government agencies and stakeholders of the pilot process and advocate for support for the alternative financing mechanisms. In particular, the Ministries of Finance and Interior ceded taxing and other authority that were normally their purview to the MPH.

At the district and facility levels, capacity building was done in DTPs, and financial and drug inventory management, all of which aimed at improving the efficiency of district health facilities by upgrading the quality of care provided and rationalizing the use of drugs in order to sustain costs at levels that users could afford. Specifically, the following capacity-building activities took place:

- ▲ The technical staff of the health facilities in pilot districts were trained in the use of diagnostic and treatment protocols, therapeutic decision-making tools designed to rationalize the use of resources in the delivery of care in general and the use of drugs in particular.
- ▲ The administrative capacity of the two test districts was strengthened by installing a financial and drug inventory management system. The system was based on a dual control principle: an internal control based on the management records kept by the technical head of the facility and the manager, and outside supervision by the local health committee set up for each facility. The technical staff of the health facilities and the managers – ex officio members of their respective local health committee – were trained in how to apply the management system.
- ▲ Supervision of the medical districts was strengthened in two ways: the chief medical officer of the district was trained to monitor use of the DTPs, and the CMB's office of supervision and training strengthened the management of drugs and financial management.

Communities were engaged in operations and budgets and their elected representatives received financial management training and authority.

HFS organized periodic workshops to support the training activities; in addition, all health facilities and health committees received on-the-job training during the first month of implementation of cost recovery to support initiation of the new systems.

Implementation Constraints

Initial constraints on the piloting of cost recovery mechanisms for primary health care were broad, and both technical and political: As noted above, Nigerien policymakers and the MPH began to recognize the need for alternative financing in the mid- to late 1980s, but MPH technical capacity was lacking to design and implement the pilot and accompanying surveys, to

anticipate consequences of individual reforms on broad reform objectives, to win support for change from a broad group of stakeholders, and to coordinate the work of multiple international donor programs in the health sector. Discontinuity at the highest levels of government precluded needed political and legal changes. Once there was a government that backed reform and a donor – the USAID HFS project – that offered assistance specifically for a broad pilot, the work proceeded quickly.

The major obstacle that arose once serious activity began was regarding drug procurement; though it was, strictly speaking, not part of the cost recovery exercise, it certainly had bearing on improving the quality of care, an important determinant of the popular acceptance of cost recovery. The MPH developed an essential drug list for rural health districts to use during the pilot. ONPPC was required to manage the purchase of essential generic drugs through an international bidding process for the first time. Despite initial problems, by six months into the pilot process, ONPPC had established a generic drug management unit with support from the European Economic Community and was beginning to import and manage significant quantities of generic drugs. The information generated by the drug management system developed in the pilot districts helped to first reveal capacity gaps in the drug supply system and then helped to address the gaps and support drug policy decisions and negotiations with the EEC.

Another constraint – particularly to the reliability of evaluation of long-term impact of the policy changes – was the extraordinarily short time between implementation of the primary (financing) component of the pilot experiment (which began in May 1993) and the second household survey (held in October and November of the same year). Because the survey measured health care utilization (among other things), and utilization was dependent on the seasonal income of Niger's majority rural populations (rural dwellers typically used health care most heavily in the period following the harvest, when they had cash to pay for the services of traditional healers or for the informal fees – for drugs, etc. – related to “free” MPH care), the second household survey had to be conducted at the same time of year as the baseline survey in order to keep survey context constant. Despite this constraint, changes measured in health district performance over the year provided a strong base for inference about long-term impact.

It should be noted that short timeframes are not untypical of donor-funded pilot experiments, and they offer certain advantages, for example, less time for consensus to be lost, and prompt results, which pleases policymakers.

Implementation Resources

Despite the fact that technical aspects of the Niger cost recovery pilot test were well documented, available documents do not specify funding resources that were consumed by the experiment. Indeed, it would have been difficult to account for *all* the resources even at the time of the experiment, as so many entities contributed to it. For example, the pilot benefited from earlier pilot efforts, such as the previously discussed smaller-scope user fee pilots and DTP development and training of health personnel in one MPH pilot district (Boboye).

The government of Niger, and especially the Ministry of Public Health, dedicated an appreciable human resource base to the experiment. Staff participated in planning, implementation, oversight, evaluation, and dissemination meetings, reports, and technical encounters. Indeed, the ministry created a new unit, the Central Monitoring Bureau, and other entities to work with the pilot. Other ministries, local health facility personnel, and communities also assumed various coordination, technical, administrative, and managerial responsibilities. Most community labor was voluntary.

Clearly, donor financial and technical resources were appreciable and indispensable. Belgian Cooperation did additional training on DTPs and developed trainers' manuals. The World Bank provided \$500 thousand for the purchase of essential drugs for the one-year pilot period, and USAID purchased vehicles for MPH and consultant visits to pilot sites. USAID's contribution through the HFS and earlier projects provided a resident technical advisor as well as the short-term expertise of other technical experts. In addition to USAID's contributions during the pilot period, their training (organized programs and manuals) and technical assistance built capacity on the national and local levels that was intended to yield benefits after the pilot ended.

Monitoring and Evaluation

The performance of the pilot experiment was evaluated according to the objectives and criteria selected during the Cost Recovery Workshop in 1989. The criteria reflect a desire to develop a local financing system that would be viable, efficient, and equitable.

Monitoring and Evaluation Design

The classical quasi-experimental design of the pilot allowed measurement using two instruments: The first instrument – two household surveys,⁹ one conducted before the introduction of payments and another one year after the baseline survey (five months after the financing mechanisms were implemented) by the CMB and HFS – yielded data on health care demand. The second comprised quantitative data on utilization activity and costs and revenues, collected and submitted by health facilities each month throughout the project year. The same facility-based information was collected retrospectively for the year before the project year, the base year. These varied empirical data allowed answers to the research questions in Box 3.2, which, in turn, became key in the decision-making process because they informed policymakers of the advantages and disadvantages of each of the alternative financing mechanisms in regard to the overall health policy objectives.

⁹ The baseline household survey on demand for health care was conducted in October-December 1992 in the two pilot districts (Boboye and Say) and in the control district (Ilela). Some 600 households (4,500-5,000 individual household members) were interviewed in each district.

Box 3.2: Research Questions for Niger Pilot Monitoring and Evaluation

1. What effect does each cost recovery method have on the demand for curative and preventive services? What effect does each method have on the quantity of care received?
2. What effect does each cost recovery method have on travel costs and frequency of travel to seek care? What effect does each method have on treatment expenses?
3. What is the difference between the extent of these effects under a given cost recovery method and under the status quo of “free” care? What difference in scale is there between these effects under a given cost recovery method and the alternative system?
4. How are demand for health care and expenses affected by factors such as the seriousness of the illness, the distance from the health facility, household income, age and sex of patient, and perceived availability of drugs?
5. What effect does each cost recovery method have on the satisfaction level of the patients?

The evaluation made several types of comparisons: The first was the control method based on observations in the district of Illela, where no activity other than data collection took place. The second method was the historical before-and-after control method whereby each district serves as its own control. Last was the historical method, which used monthly series covering the year preceding the start-up of the tests and the year of actual testing, where each district and health facility served as its own control.

In addition, a quality of care study was held 16 months after the introduction of cost recovery and quality improvement interventions in the pilot districts.

Findings

- ▲ *Quality of care:* Basic health infrastructure improved as a result of strengthened management, and as well as increased funding that contributed to improved drug stocks, equipment, and supplies. Both patient satisfaction and health worker morale increased, primarily because of the availability of medicine. The process of care delivery continued to exhibit deficiencies (in the monitoring of vital signs and diagnostic exams by personnel), suggesting that improvements in the structural aspects of care are easier to make than are process improvements.
- ▲ *Access:* Interventions stimulated demand for modern health services. Utilization of services increased by 40 percent among all populations in the district of Boboye (social financing), and it doubled among the poorest people. The increase was accompanied by shifts in the demand for health services from informal providers to modern public providers. Prenatal care enrollment increased as a byproduct of improved quality and less-constrained financial access to public health services. In Say (user fee), utilization

improved slightly for people in villages located far from health facilities but deteriorated slightly for the poorest people. In Illela (control), utilization of public health facilities was unchanged and showed signs of decline among specific social groups.

- ▲ *Efficiency*: Efficiency was measured in terms of service delivery and utilization. In Boboye, utilization of resources and of cost-effective services (modern health care and preventive services) improved. In Say, results regarding the use of cost-effective services were ambiguous.
- ▲ *Financial protection*: Interventions resulted in reduced private expenditures for health care in both test districts (a 50-percent reduction in illness-related expenditure, excluding the additional fee in Boboye and 40-percent reduction in Say), while private outlays remained constant at high levels in the control district. Reduced private expenditures were a consequence of the availability of lower-cost medications in public facilities. Ninety percent of residents of both districts voiced willingness to continue paying for quality improvements. Given the choice, 84 percent of residents expressed preference for the social financing alternative (6-8 percent preferred user fees), for they reported that budgeting and paying for health services was easier that way than paying fees at each unforeseeable episode of illness. Total operating costs increased by 30 percent in the two pilot districts, primarily because facilities had an adequate drug supply (also because of training and new equipment). However, in Boboye the increased utilization of services resulted in a decline of unit costs per visit as the productivity of health personnel, the largest share of district operating outlays, increased.
- ▲ *Financial sustainability*: The capacity to generate revenues was twice as high in the district with social financing as in the district with user fees. In Boboye (social financing), receipts from the additional head tax and small co-payments covered 89 percent of the additional recurrent costs resulting from the pilot interventions (150 percent of drug costs alone). In Say (user fees), user fee receipts covered only 35 percent of drug and management costs (52 percent of drug costs alone).

Pilot Outcomes

Based on the initial data generated and debate in the Ministry of Public Health over replication of cost recovery, the MPH reached consensus that cost recovery should be rolled out nationwide. This decision came at a relatively early point in the pilot process, prior to the completion of all elements of the evaluation. An interim workshop for MPH central, regional, and district officials in February 1994 focused on identifying constraints to nationwide implementation of cost recovery and developing strategies to implement health care financing policy change. It also planned the National Workshop on the Financing of Primary Health Care, which took place in July and presented evaluation results although plans for roll-out were already proceeding. This latter workshop was attended by more than 100 participants from central government administration, the Office of the President, the National Assembly, municipal

entities, health sector trade unions, and international donor agencies, who made several recommendations to the government, including the following:

- ▲ Create a legal framework for cost recovery;
- ▲ Institute cost recovery nationwide;
- ▲ Promote implementation of social financing in rural health districts;
- ▲ Find ways to increase the availability of pharmaceuticals to facilitate implementation of cost recovery, i.e., to win public acceptance.

A few months after the workshop, the government presented a law on cost recovery for primary health services to the National Assembly. Despite support for the social health insurance mechanism from the the Minister of Public Health and workshop participants, the eventual policy regarding roll-out of cost recovery was to let local government units choose the mode of cost recovery they wished to implement for their area; the MPH could only inform that choice. Adoption of the law was slowed by political problems in Niger that resulted in the dissolution of the National Assembly in November 1994. In July 1995, the law was finally enacted by a new National Assembly. However, failure to start implementing district-level training for one year due to lack of MPH authorization of money for gasoline, a military coup, and suspension of USAID support for health policy reform through the Partnerships for Health Reform project (successor to HFS) further delayed roll-out.

In 1996 Niger began to implement a national program for strengthening primary health care and instituting cost recovery, managed by the CMB (which became the Directorate of Community Health). Most districts opted for user fees, supported by health professionals and UNICEF. The coup d'état had created local-level mistrust of the center, and user fees promised to be the financing mechanism that allowed most local control.

Conclusions: Learning from the Niger Pilot

The Niger rural primary health care cost recovery and quality improvement pilot offers an example of the value of pilots as a tool for policy development and management. When examined from the perspective of its objectives – to *build capacity* in the Ministry of Public Health so that it could *demonstrate* alternative health care financing mechanisms and provide health policymakers with empirical *research*-based evidence on which to select the most appropriate mechanism to replicate throughout the country, so as to realize health sector goals – Niger suggests that policy changes may be achieved effectively through the use of pilot testing or small-scale demonstration. Assuming that the necessary institutional framework is established for implementing the pilot, institutions initiating the policy change may use the experience to generate data providing evidence about the consequences of new courses of action, to mobilize support from stakeholders, and to strengthen consensus about the policy change. In addition, a pilot can serve as an instrument for preparing implementing institutions to operationalize the

policy. Moreover, a pilot allows issues not identified during policy debates to be identified and resolved before reform is rolled out nationwide.

Several factors kept the pilot process going in Niger:

- ▲ Political support from high levels of the national government;
- ▲ The willingness of the MPH to reorganize around the needs of the pilot initiative;
- ▲ The involvement of technical units of the MPH in every phase of the pilot process;
- ▲ The reaching out to all stakeholders in order to build consensus and plan policy;
- ▲ Continuous policy debate based on field research, solid data, and objective analysis and evaluation;
- ▲ The emergence, sometimes serendipitously, of talented and committed individuals who moved the process forward;
- ▲ The organized participation of the communities in the pilot;
- ▲ The coordinated efforts of international donors and their long-term financial and technical support, especially the provision by USAID of an in-country advisor who worked as part of the MPH team.

Clearly the presence of extensive, coordinated external assistance – in providing technical, training, and financial support – was indispensable to the MPH implementing a process that Nigerian policymakers had discussed for several years but lacked the institutional capacity – technical, administrative, and financial – to implement. The short period of actual implementation of the pilot, typical of experiments with donor involvement, was limiting in some respects, for example, in terms of the long-term evidence preferred by social scientists, but attractive in others, especially to policymakers, for its promise of rapid results.

Additional lessons from the pilot are regarding its contributions to the development of health policy, programs, and human resource capacity in Niger:

- ▲ Improving dialogue on policy issues among a range of stakeholders;
- ▲ Strengthening the MPH's managerial capacities so that it could plan, coordinate, and implement future activities;
- ▲ Improving the coherence of sectoral policies, including financing, drug, and human resource management, thus moving the country toward a more efficient health system;
- ▲ Providing the impetus for a national law on primary health care financing that provides a legal framework for community participation in the financing and management of health services.

All these factors contributed to the development of the cost recovery policy, the institutional and legal framework that allowed for implementation of the policy, and a human resource base to carry the implementation forward. But they also offer long-term benefits; the knowledge, skills, and experience gained during the pilot provided capacity for later change. For example, despite the abrupt removal of USAID assistance, the MPH was able to build upon the pilot's achievements with a national support program for primary health care. The MPH unit established to monitor the pilot test (the CMB) is now a full MPH directorate, of community health, which is implementing the President's Special Health Initiative under the Poverty Reduction Strategy.

Finally, despite the rigorous evaluation design adopted for the pilot and the clear-cut evaluation findings, the evaluation results did not feed into policy in a very direct manner. The decision to roll out community financing was made before all evaluation results were in, and, despite the fact that the social health insurance option was found to have the most advantages, it was not generally adopted: While a pilot experiment can test and evaluate a proposed policy, how the information it produces is used is determined by the political environment in which it operates.

Bibliography

- Bennett, S. June 2004. *Primer for Policymakers: Designing, Implementing, and Evaluating Health System Reform Pilots*. Bethesda, MD: Partners for Health Reformplus (PHRplus) project, Abt Associates Inc.
- Bitran, R. 1989. "Grant for Health Sector Development: Pilot Cost Recovery Tests in the State Health Centers, Proposed Methodology." Mimeo. Niamey, Niger: Ministry of Public Health, Bureau of Studies and Programming, Tulane/Abt Technical Assistance.
- Diop, FP. February 2003. Interview.
- Diop, FP, A Yazbeck, and R Bitran. 1995. "The Impact of Alternative Cost Recovery Schemes on Access and Equity in Niger." *Health Policy and Planning* 10(3): 223-240.
- Diop, FP, R Bitran, and M Makinen. October 1994. *Evaluation of the Impact of Pilot Tests for Cost Recovery on Primary Health Care in Niger*. Technical Report No. 16. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.
- Diop, FP. n.d. "Health Financing Reform in Niger: The Role of Pilot Testing." Unpublished.
- Diop, FP, M Kailou, and O Oumarou. May 1994. *Pilot Tests on Cost Recovery in the Primary Care Sector: Data from the Public Health Facilities in Niger*. Technical Note No. 31. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.

- Diop, FP. May 1994. *Pilot Tests on Cost Recovery in the Primary Care Sector: Patterns in the Use of Health Care: Comparative Analyses of the Household Survey on the Demand for Healthcare – Boboye, Illéla, and Say Districts, Niger*. Technical Note No. 37. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.
- Diop, FP. May 1993. *Cost Recovery Pilot Tests in the Primary Care Sector: Household Survey of the Demand for Health Care in Three Districts in Niger*. Technical Note No. 27. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.
- Gilson, L. n.d. *Designing and Implementing Health Financing Reform*. Executive Summary Series. Bethesda, MD: Partnerships for Health Reform project, Abt Associates Inc.
- Leighton, C and FP Diop. August 1995. *Protecting the Poor in Africa: Impact of Means Testing on Equity in the Health Sector in Burkina Faso, Niger, and Senegal*. Technical Note No. 40. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.
- Makinen, M. February 2004. Interview.
- Ministry of Public Health. 1990. "Policy on Health Care Cost Recovery in Niger." Draft. Committee No. 4 of Study Workshops, Republic of Niger.
- MSN Learning & Research: Niger. Accessed January 2003. <http://encarta.msn.com/encnet/refpages/>
- Partners for Health Reform *plus*. n.d. *Strengthening Health Systems: The Role of Demonstration Projects*. Issues and Results. Bethesda, MD: PHR*plus*, Abt Associates Inc.
- Republic of Niger. 1987. *Study on Cost Recovery*. Ministry of Planning, Bureau of Project Evaluation and Programming. Project of the Improvement of Economic and Financial Management, Africa/Asia Bureau.
- Weaver M and K MacInnes. 1989. *Questions techniques relatives à l'évaluation des tests pilotes des systèmes de recouvrement des coûts*. Mimeo. Niamey: Ministère de la Santé Publique, Direction des Etudes et de la Programmation, Assistance Technique Tulane/Abt.
- Willis, CY and C Leighton. 1995. "Protecting the Poor Under Cost Recovery: The Role of Means Testing." *Health Policy and Planning* 10(3): 241-256.
- Wouters, A. 1995. "Improving Quality through Cost Recovery in Niger." *Health Policy and Planning* 10(3): 257-270.
- Wouters, A and A Kouzis. December 1994. *Quality of Health Care and Its Role in Cost Recovery in Africa: Cost Recovery and Improved Drug Availability in Niger – Implications for Total Patient Treatment Costs (Phases 2 and 3)*. Major Applied Research Paper No. 12. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.
- Yazbeck, A and M Wenner. December 1994. *Social Financing and Fee-for-Service Cost Recovery in Niger (Phases 2 and 3)*. Major Applied Research Paper No. 15. Bethesda, MD: Health Financing and Sustainability project, Abt Associates Inc.

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Chapter 4. The Role of Pilots: Community-Based Health Insurance in Rwanda

Margaret K. Saunders

Introduction

The purpose of this case study is to contribute to greater understanding of the process of piloting health reform initiatives as part of broader health system reform efforts. The case study seeks to draw out the determinants and dimensions of the pilot process in Rwanda for the purpose of improving understanding of how pilots may contribute to the implementation of complex health system reform efforts. The case study reviews the Rwanda pilot process to determine the factors that were involved in the development of the pilot approach (the pilot context, objectives, and design); dimensions of the pilot approach (the implementation, monitoring, and evaluation process); and the nature of pilot outcomes. It relies primarily on material drawn from technical reports as well as a number of interviews with individuals (largely external technical assistance providers) involved in the pilot.

The pilot introduced a community-based prepaid health financing scheme into three districts, to determine feasibility of such schemes in Rwanda. These prepayment schemes, or PPS, established an insurance program that entitled beneficiaries to preventive care services, maternity benefits, and selected curative care services, at a health center linked with the program and designated by the beneficiary as his or her “home” center. People paid an annual premium (either for a family of up to seven members, or on an individual basis) that allowed beneficiaries access to these health care services for a full year, one month after joining a PPS, with a very minimal co-payment at the time of service delivery. For the beneficiary, the PPS aimed to provide access to health services, and eliminate the barriers posed by user fees at the time of service delivery.

For the health center, the PPS sought to provide a mechanism (capitation payment) that created a reliable financing source. The PPS created administration and financial responsibilities to be handled by newly established community PPS bureaus managed by community volunteers and health center staff. The pilot featured community participation at the local level through gatherings of the general assemblies of PPS members that were responsible for selecting governing rules and regulations, and overseeing the financial and administrative management of the schemes. Local PPS bureaus belonged to a Federation of PPS bureaus that handled payment for hospital services covered under the plan, and that pooled health risks at the district level for covering hospital services. The PPS aimed to include vulnerable members within their schemes, and donors could cover premiums of vulnerable households. Concurrent with the establishment

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of the PPS schemes, quality improvement measures such as staff training, and improved logistics for the supply of drugs, were implemented.

The objectives of the pilot PPS in Rwanda were to reduce financial barriers to access to quality health care for the poor and to increase capacity to mobilize additional financial resources for health services operation through community participation. In addition it was hoped that piloting of such schemes would promote community participation and strengthen administrative and financial management capacities in health centers and district hospitals (Schneider, Diop, and Bucyana 2000).

Pilot Context

Emergence of the Pilot Concept

The idea of designing and testing a pilot for community-based health insurance in Rwanda emerged out of the country's political and social context, and the government's interaction with international donors. Prior to 1994, health services in public health facilities were subject to user charges at the point of service delivery. In 1994, Rwanda experienced enormous political and social upheaval with a war that culminated with the tragic genocide. In response to these events, donors rushed to provide humanitarian aid, and, for the next two years, public health care was provided free of all charge in public health facilities, financed by donors and by the Rwandan government. Ministry of Health (MOH) priorities immediately following the war focused on reconstructing health infrastructure and services, and decentralizing the health sector to districts to improve access to services (Schneider, Diop, and Bucyana 2000).

Table 4.1: Background to the PPS Pilot Process in Rwanda

1994	Civil strife and genocide In response to genocide, primary health care free in public facilities, financed by donors and government
1995	MOH health policy revision includes consideration of alternative financing mechanisms
1996	MOH reintroduces pre-war-level user fees in health centers and hospitals
1998	Utilization of primary care services at low point, indicating lack of access by poor to services International donors announce plans to decrease assistance MOH considers prepayment schemes for eventual scaling up to national levels PHR representatives meet with MOH and USAID in Rwanda to plan for technical assistance. Long-term adviser hired to head PHR/Rwanda

In 1996, the Rwandan government faced a dilemma, as donors announced that humanitarian aid would be scaled back and the government would have to assume the responsibility of financing public health care once again. In response, the MOH reintroduced

user fees in health centers and in hospitals, based on a fee schedule for health services that had been set prior to the war. The policy allowed for people to be exempt from fees if they were certified as indigent by the local commune, or if they were civil servants or soldiers. However, as a result of the war and turmoil, many Rwandans had become even poorer and the percentage of the Rwandan population falling below the poverty line had risen sharply, from 53 to 70 percent from 1993 to 1997 (Schneider, Diop, and Bucyana 2000). By 1997, the average income of poor households was further below the poverty line than before the genocide. Re-introduction of user fees at public health facilities could potentially create barriers to service use, as poor households would be unable to cover fees when services were needed. At the same time, Rwanda had extremely high rates of infant and maternal mortality in comparison with similar countries in Africa, a high burden of preventable diseases and infections, and high levels of malnutrition. HIV/AIDS had become widespread.

Table 4.2: Health Outcome Indicators in Rwanda compared with Sub-Saharan Region and Low-Income Countries, 1997

Region/Country	Maternal Mortality Ratio per 100,000	Mortality Rate under Age 5 per 100,000	Infant Mortality Rate under Age 1 per 100,000	Estimated HIV Prevalence	Life Expectancy in Years
Sub-Saharan Africa	430	161	91	9%	49
Low-income countries	308	100	80	5%	61
Rwanda	810	203	130	11%	48.5
Rwanda (1991)	300 (1988)	150	84	n/a	46

Source: Schneider, Diop, and Bucyana 2000

By 1998, utilization of primary health care (PHC) services in Rwanda was at an all-time low. Application of user fees was erratic. Fees charged were not standardized. Health centers were demanding payment for preventive care services at prices similar to those for curative care. In addition to paying for health care services, patients paid high prices for drugs at private pharmacies because they were unavailable in public health centers. It became clear that user fees were acting as a barrier to the many poor people in the country. An MOH Action Plan established a series of priority activities and objectives aimed at improving the health status of Rwanda's citizens. Health reform was a major priority for the new plan, with a strategic emphasis on development of human resources, decentralization, and institutional strengthening to improve health system performance (Schneider, Diop, and Bucyana 2000). The MOH was in the process of revising Rwanda's National Health Policy; the new draft policy allowed for the development and implementation of community-based health financing schemes as part of the broader health reform initiative (Schneider, Diop, and Bucyana 2000).

The decision to conduct a pilot was made and implemented rapidly (particularly compared to the experience in Niger described in Chapter 3). This rapid decision making presumably at least partially reflected the crisis situation emerging in the health sector.

The Contribution of the Pilot to the Reform Process

The Ministry of Health chose to initiate a pilot of prepayment schemes for community-based health insurance in 1998 at a point when there was certainty that health financing reforms were necessary, and reform elements should consist of community-based PPS, in the context of decentralization of health system management. To some extent, the MOH was drawing on scattered country experience with self-help organizations based in communities called *mutuelles*. Many of these *mutuelles* had been set up and managed by mission health care providers to help protect community members from the financial risks imposed by paying for health care services and to generate revenue to cover operating costs; others had developed organically from communities to cover different health care expenses. Although no data were available to draw conclusions about Rwanda's experience with *mutuelles*, the existence of these organizations provided an indication of community interest in prepaying for health services to obtain protection from the financial impact of seeking health care. At the same time, health care providers in health centers run by the MOH and by missions were in need of a more sustained source of revenue for service operation. The MOH anticipated that PPS might improve access to health services for poor Rwandans and offer a reliable source of financing for service provision.

Although the decision to pilot community-based health insurance was made by the MOH at the central level, several health districts had actually requested technical assistance from the MOH in establishing health insurance programs. The interest in community-based health insurance amounted to a consensus among MOH officials, among donors, and among service providers and other stakeholders at the district level to pursue health insurance as one possible alternative to the user fee model. The pilot was deemed necessary to resolve complex design and operational questions and to build capacity for a national program, before large-scale implementation of community-based health insurance could be launched.

Principal Actors in Pilot Design

The principal actors in the design and development of the pilot at the national level were the Ministry of Health of Rwanda, USAID, and, through USAID, the Partnerships for Health Reform (PHR) project. The MOH recognized that technical assistance would be required to develop the administrative capacity to introduce the pilot and to train human resources to carry out its implementation. Since the aim was to scale up the program nationally, technical assistance would allow for a firm basis on which to build a national program. USAID/Rwanda was interested in supporting the Rwandan government's plan for health sector reform, and requested the assistance of PHR. PHR was a global USAID-funded project designed to support and promote reform in health policies, regulations, financing, and to improve the quality, organization, and management of health services in low- and middle-income countries. In October 1998, PHR

appointed a long-term advisor to head a PHR team, and, by the end of 1998, the team was in place in Rwanda to provide ongoing technical assistance through September 2000.

The pilot design and development was led by an active steering committee, chaired by the MOH. Rwandan representatives on the committee came from the central MOH, *Office National de la Population* (ONAPO), the national statistical agency, the health regions, and the three pilot districts (once they had been selected). Representatives from international organizations and the donor community included the World Health Organization (WHO), the European Union, and Belgian Cooperation, in addition to USAID and PHR.

The committee was responsible for the selection of the three districts that would be the pilot sites and the two control districts. The principal criteria for selection included expressed interest of the population and authorities in collaboration on a community-based program and prior experience with PPS (through local *mutuelles*) (Schneider, Diop, and Bucyana 2000). Districts selected for the pilot had profiles that were representative of the country's social and economic characteristics.

Pilot Objectives

In Rwanda, the decision to launch a pilot process was primarily based on the premise of *developing or refining a new health financing mechanism* as a supplementary approach to government financing. Health reform had been on the political agenda for many years, and the situation had evolved to the point where there was a commitment on the part of the government to reform, as well as a commitment of donors to support the process. There was also a fairly widespread consensus that alternative, decentralized, community-based health insurance mechanisms were necessary to improve health care access and financing. Yet the exact operational mechanisms necessary for creating a functional program at the community level, across districts, in the Rwandan context, were unclear. The pilot was to ascertain a reasonable design for the organization and management of prepayment schemes, that could be extended to national coverage, while providing evidence, through their implementation, that schemes could function at the community level and accomplish the intended MOH objectives.

In important respects, the Rwanda pilot also served a *demonstration function* for a design to convince stakeholders that an alternative community-based health system was feasible in a setting of highly limited resources. A demonstration effect was necessary to convince local populations, in addition to health care service providers at the district and community level, that the new pilot program would adequately respond to health system problems. Providers had considerable reservations about the potential for community-based health insurance to actually contribute to improved service delivery and improve their financial standing for health service operations; they were also specifically concerned that the requirements of the pilot programs would increase their own tasks and responsibilities.

The Rwanda pilot also aimed to build capacity for subsequent implementation of a national program of community-based health insurance. The issue of capacity building in Rwanda was a serious one, as human resources within the MOH with expertise on health insurance mechanisms were very limited, hampering the ability of the ministry to lead design and implementation. At the initiation of the pilot the PHR team made a conscious decision to focus upon building human capacity to implement the pilot at the local level rather than at the central MOH, which was perceived to be very overstretched. The decision to focus upon capacity building at the local level was also driven by a belief in the importance of ensuring that the pilot was community-led, even though communities initially lacked experience and training in the organizational, managerial, and financial requirements to carry out the necessary functions. Capacity building was integral to the pilot design, and heavily focused on establishing capacity at the local level.

Pilot Design

Table 4.3: Chronology of Preparatory Steps in Rwanda

February 1999	MOH collaboration with PHR begins with workshop in Bethesda, Maryland, USA to design pilot prepayment schemes
March 1999	MOH establishes Steering Committee as the strategic decision maker, with central and regional levels represented Three pilot and two control districts selected based on criteria of interest and prior experience in PPS Preparation of new administrative and management tools for pilot
March-June 1999	Twelve community meetings in three pilot districts to discuss schemes, present basic framework, inform on process, and decide on district design Kabutare and Byumba choose schemes co-managed by providers and population; Kabutare chooses schemes managed directly by population
June 1999	Initial survey on behavior change of health center managers prior to introduction of PPS and capitation payment

Technical Features

The Rwanda pilot program drew on extensive donor involvement during the preparatory phase, to supplement limited country technical capacity. A strategy workshop with senior Ministry of Health policymakers and international technical advisors was held in the United States in February 1999 to set out objectives for the pilot program and develop initial strategies. The resulting design of the prepayment scheme was tailored to address the priority areas for the MOH Plan of Action. Specifically, it was thought that the PPS would:

- ▲ Improve access to basic health care services by reducing financial barriers at point of use for package of priority services;
- ▲ Increase community participation in the health sector through the extensive community consultations during the design period, the sensitization and awareness campaigns

associated with the launch of the schemes, and the governance arrangements of the schemes that required popular participation;

- ▲ Improve the quality of health service delivery, both through the increased resources available to health providers due to the new financing mechanism and via separate initiatives aimed at improving quality of care;
- ▲ Strengthen administrative and financial management capacity at local levels through new tools and training.

In turn, these interventions would increase utilization of priority services and potentially promote democracy.

Improving access to basic health care services in Rwanda was addressed in the pilot design by aiming to reduce financial barriers to seeking curative health services when ill, while promoting use of preventive care services.

- ▲ *Services covered:* The pilot design featured a more comprehensive benefit package than pre-existing mutuelles, covering preventive and basic curative care services provided by nurses in the health center and all drugs on the essential drug list. Hospitalization at the health center, and ambulance transfer to a district hospital, were also covered. Members selected a preferred health center, and that center served as a gatekeeper to higher-level care.
- ▲ *Payment methods:* Membership categories were developed for individual, family, or group subscription. Payment of the annual fee entitled members to one year of benefits,

Table 4.4: Health Center and Hospital Benefit Package

Package	Kabutare	Byumba	Kabgayi
Health Center	At health center of first contact: <ul style="list-style-type: none"> ▲ Preventive and basic curative care provided by nurses in health center ▲ Drugs on essential drug list ▲ Hospitalization at health center ▲ Ambulance transfer to district hospital 	Same as Kabutare	Same as Kabutare
District Hospital	Covered with health center referral: <ul style="list-style-type: none"> ▲ Consultation with physician ▲ Overnight stay per night ▲ Cesarean section 	Same as Kabutare	Covered with health center referral, treatment of 3 diagnoses (everything covered) per episode: <ul style="list-style-type: none"> ▲ Cesarean section ▲ Pediatric cases (<5 years) ▲ Malaria (>5 years)

following a one-month waiting period, with only a minor co-payment at the time of service. Annual premiums were calculated to cover the costs of operating expenses for health centers, while remaining accessible to the target communities of rural poor.

- ▲ *Covering the indigent:* An opportunity was provided within the system for charitable groups and possibly donors to subsidize the premiums of specific vulnerable groups.

Improving community participation in the health sector was one of the principal aims of health reform for the Rwandan government. An extensive series of community discussions and workshops was launched during the preparation phase to present the basic framework for the new health insurance programs, and inform communities and leaders about the purpose and means of establishing community-based health insurance. Through community representatives, districts then took decisions on the management, administration, and the basic benefit package, according to the interests and needs of the district.

The pilot design called for a sensitization campaign to inform communities about the purpose and operation of PPS and to inspire trust in the new schemes. Information was shared on the rights and responsibilities of members to manage their own schemes, and how those rights would be exercised. To support community education, the pilot design called for the development of informational materials and radio spots during the lead-up to the pilot, and during project implementation.

Improving the quality of health service delivery was an essential design element of the pilot. Improving health care quality was particularly important for local health centers. Strategies implemented as part of the pilot included:

- ▲ *Intensive training of health care providers on application of standardized treatment protocols* for the five most common diagnoses, along with more effective use of available resources and correct prescription of drugs.
- ▲ *Reliable provision of drugs for care.* Loans to district pharmacies to improve the availability of drugs were arranged to respond to expected increases in demand for drugs from PPS members.
- ▲ *Training to improve management capabilities in providers,* to ensure that administrators and nurses in health centers and hospitals would be knowledgeable about the new system.

Improved administrative and financial management capacity at the health center, district hospitals, and prepayment bureaus was considered to be a key element to successful implementation of the new PPS. The pilot plan called for the development of new financial and administrative systems, with tools specifically designed for improved accounting and administration during the pilot that might also be useful to subsequent expansion. A number of new management tools were developed and health care providers and scheme managers were trained in the use of these tools. Regular support for the correct implementation of procedures

was provided through follow-up workshops and supervisory visits by technical advisors every two months.

Prior to implementation, there was an intensive preparation phase for the pilot, from early March through June of 1999. The Rwanda pilot employed extensive use of workshops to move rapidly on preparation of the pilot at policy, program, and community levels. The preparation phase was characterized by a period of concentrated activity for the purpose of developing tools, sensitizing communities, drafting contracts (between PPS and health facilities) and by-laws, defining scheme parameters, and training health center staff, community representatives to prepayment bureaus, and financial and administrative staff of prepayment bureaus.

Flexibility of Pilot Design

The pilot design was created from a strong technical design that established a broad framework for administration and management of PPS, with flexibility for local adaptation of the model. This allowed for modifications of the final design in each district, according to the needs and interests of stakeholders. The details on benefit packages, financing arrangements, and management modalities were actually selected by the districts themselves, through open discussions between stakeholders. Consequently, there was significant flexibility and variation in scheme design at the local level.

No significant amendments or revisions were made to the initial pilot plan. However, once preliminary results on implementation progress were available for review during a workshop in Rwanda in March 2000, adjustments were made to support expansion and intensification of sensitization campaigns, and to continue with organizational support through training workshops and focused supervision. Plans were also developed for additional data collection through a series of surveys in the last months of the pilot.

Monitoring and Evaluation

A classical monitoring and evaluation plan was an integral part of the pilot design for prepayment schemes in Rwanda. The plan was ambitious, as it called for the design and development of a series of new survey instruments and tools that would be created and implemented, simultaneous to the implementation of the pilot. This required that tools be designed, tested, revised, and ready to use, with those responsible trained to use them, within a very short timeframe of about four months, commensurate with the launch of the pilot phase. The rigorous quasi-experimental design aimed to evaluate PPS performance by monitoring impact on utilization, cost, and financing of care in the three pilot districts and to compare performance with data from neighboring control districts.

Monitoring of performance was intended to be central to pilot operations, with monthly feedback on performance provided to all stakeholders for discussions of findings and revisions to improve performance. The Steering Committee was to encourage open discussion about pilot performance improvements based on monitoring results at its monthly review meetings.

Implementation

Table 4.5: Chronology of Pilot Implementation in Rwanda

July 1, 1999	53 PPS bureaus, partnered with health centers, formed in three districts, and begin to sign up members
July 1999	District PPS federation created from elected members of the executive bureau of each scheme The by-laws for the legal basis of schemes, and the designed contract between prepayment schemes and providers produced
August 1999	Data collection: qualitative focus group survey in pilot districts
August 1999- July 2000	Data collection: collection of monthly utilization, cost, and finance data for health centers and hospitals in pilot and control districts (previous year data collected as a baseline for comparison)
August 1999- July 2000	Four interventions to support pilots begin: health care providers trained on effective use of resources; schemes encouraged to give loans to district pharmacies to ensure drug availability; bureau members and health center personnel trained before and after launch; financial and organizational management capacity of providers strengthened
January 2000	After first six months, more than 50,000 people registered with the schemes in the three districts Data collection: second survey on behavior change of health center managers
March 2000	Preliminary evaluation workshop in Rwanda. MOH then strengthened the implementation phase and responded to other regions interested in launching schemes
June 2000	In first year, 54 PPS in three pilot districts enrolled more than 88,000 members. Performance measured and analyzed under a quasi-experimental design, with qualitative and quantitative data gathered from households, stakeholders, patients. Quantitative data from health centers, hospitals, and PPS bureaus collected and analyzed
July 2000	Data collection: beneficiary survey in selected communities in pilot districts Data collection: third survey on behavior change of health center managers
August 2000	Data collection: patient exit interviews in health centers in pilot and control districts
September 2000	Data collection: household survey in pilot and control districts
September 30, 2000	Final workshop in Rwanda; information on utilization and access to health care, cost, and financing of health care services reported from PPS evaluation and relevant policy lessons discussed
November 2000	Completion of data collection

Summary of Implementation

The pilot was implemented according to design in three districts from July 1, 1999, through the end of September 2000. From July 1, 1999, members could start signing up with one of 53 PPS bureaus linked with health centers, designate a preferred provider health center, and pay their annual premiums. Once signed up, members could access covered health services for a period of one year, following an initial waiting period of one month. PPS bureaus collected funds through membership premiums, and they paid providers a capitation fee for members. Each bureau had a contract for services with health center providers (public and mission health centers, district hospitals) that stipulated services covered, means of reimbursement, and conditions for contract implementation.

Each PPS developed a legal document that established a “mutuelle” under Rwandan law, with purpose, codes of conduct, and means of operation clearly delineated. Administrative councils for each PPS bureau were established, originally with individuals identified from the community by health center managers, and subsequently with members elected by general assemblies composed of scheme members. In addition to local prepayment bureaus, federations of PPS bureaus were established for each district to provide ongoing support to the local bureaus.

The implementation phase featured continual training of PPS and health center managers through a series of 59 workshops in the three districts (July 1999-September 2000). During these workshops, new methodological tools were introduced with hands-on training aimed to ensure smooth functioning of the pilot start-up, and to press for ongoing improvements in management and administration. Sensitization campaigns for communities on the benefits of membership also were carried out on a continual basis.

After six months, 50,000 people had become members of the PPS, and this increased to 88,000 people after one year. These figures were significantly lower than anticipated and represented less than 10 percent of the target population.

The pilot implementation complied with the original design emphasis on data collection for monitoring and evaluation purposes. Monitoring of the pilot was strengthened through monthly financial reports to each PPS and attached health center to facilitate internal control. Data collection for evaluation was initiated immediately following the introduction of pilot, with data collected on monthly utilization, cost, and financing for health centers and hospitals.

Nine months into the pilot, two areas were identified as weak and in need of greater support in the pilot districts: sensitization campaigns and organizational development (Schneider, Diop, and Bucyana 2000). During a high-level three-day workshop to review pilot implementation in March 2000, it became clear that sensitization efforts had to be intensified to reach a wider population, and key political and religious leaders needed to assume a greater role in convincing the population of prepayment benefits. Plans were developed to address required improvements in organizational development and evaluation during the remaining months of the pilot process.

Implementation Roles and Resources

The MOH led the initiation of the pilots and guided the development of the strategic framework. However, during the implementation stage, the Steering Committee became the key decision-making organ with respect to the pilots. The interests of the MOH in the pilot were represented by the Director of Health Care, who served as chair of the Steering Committee. The Steering Committee advised on implementation issues, met frequently to review findings from monitoring, and, at the conclusion of the pilot, led the final evaluation workshop and identified follow-up actions. During the intensive phase of the pilot the Steering Committee met frequently, sometimes once or twice a week. PHR staff in Rwanda, including the expatriate advisor and a local advisor, acted as the executive arm of the Steering Committee. PHR provided data and documentation to the Steering Committee and was responsible, in collaboration with local counterparts, for implementing steering committee decisions.

The pilot implementation process was very decentralized to the three pilot districts. During implementation, technical assistance was provided by PHR directly to the districts. This strategy reflected the early decision to focus on capacity building at the local level. During the implementation phase, the health centers and hospitals in the three pilot districts were responsible for service delivery to members (along with non-members), and with complying with obligations of new contractual arrangements. PPS bureaus were managed by community representatives. In two of the three districts, representatives of the local health services also supported PPS management. The communities were actively involved through the election of representatives to the PPS bureaus, and through general assembly meetings that were held periodically in communities to review pilot progress.

As the lead provider of technical assistance for the pilot, the PHR project was heavily involved in all stages of pilot design, implementation, and assessment. PHR hosted two in-country workshops (in March and September 2000), designed the evaluation plan, and organized and managed the data collection for the evaluation, in collaboration with the ONAPO, health centers, and district hospitals. Data analysis was carried out by PHR, and the project also produced a series of reports on different aspects of pilot program development and evaluation.

Full information on the financing of the pilot, such as the USAID contributions of PHR technical support during pilot design and implementation or the contributions of the Rwandan government in covering household surveys and other expenses, was not available. While the pilot benefited from considerable USAID-funded technical support in design and implementation, it should be noted that there was not a substantial amount of money available in-country to support health system reform processes at this time.

Constraints of the Pilot

The key constraints during the implementation of PPS in pilot districts related to the quality of leadership at the district level and in communities, and the ability of executive teams to lead

PPS bureaus through the organizational development process and conduct sensitization and awareness campaigns (Schneider, Diop, and Bucyana 2000). Dynamic teams reached out to communities with regular general assemblies, led active sensitization and awareness campaigns in conjunction with invited local leaders, and were organized and accessible to local populations. These bureaus tended to have steady enrollment rates and good organizational functioning. In bureaus where strong leadership was lacking, there were organizational problems that in some cases led health centers to take over management responsibility. Bureaucratic obstacles were not reported to be a problem overall in the implementation of the pilot.

The planning, implementation, and evaluation of the pilot PPS in Rwanda were constrained by the extremely compressed time period of less than two years. This constraint was due to the closing of the PHR project at the end of September 2000 and the termination of support of the pilot with project closure. As depicted in the chronology of the pilot process, this deadline led to an initial intensive period of planning, design, development of tools and materials, and training during the first six months of 1999, followed by a period of implementation from July 1, 1999, through July 2000, followed by evaluation, assessment, and development of recommendations for policy lessons in September. Although PHR support ended at that point, ONAPO continued to carry out a household survey in pilot and control districts through November 2000, as part of the final evaluation.

Monitoring and Evaluation

Evaluation Design

A final version of an evaluation plan for the pilot schemes based on a classical quasi-experimental design was approved by the Steering Committee in September of 1999. The research questions were based on the four objectives of the Ministry of Health in developing the prepayment schemes (i.e., improved access to care, increased community participation, improved quality of services, and strengthened administrative and financial management capacity). The evaluation plan used a “before and after” design; scheme was derived by comparing results at the end of the first year to the baseline year, the year before the pilot. A control district was included in addition to the three intervention districts.

Data Collection

Information was gathered through monthly routine data collection and special surveys. When the researchers came to analyze the data, the four main research questions identified above were broken down into seven sub-questions. Table 4.6 summarizes the source of data for different evaluation questions.

Table 4.6: M&E Questions and Information Sources

Evaluation Questions	Sources of Information
Have the PPS improved financial access to health care?	Health facilities monthly routine data Household survey
Have the PPS improved quality of care?	Health facilities monthly routine data Patient exit interviews Focus group survey
Have the PPS promoted community participation?	Health facilities and PPS routine data Focus group survey Household survey
Have the PPS strengthened financial sustainability?	Health facilities monthly routine data PPS monthly routine data Household survey
Have the PPS improved democratic governance?	PPS monthly routine data Focus group survey
Has capacity in financial management been built?	PPS monthly routine data Health facilities monthly routine data Focus group survey
Have the schemes contributed to improved social and civic fabric?	PPS monthly routine data Focus group survey

Source: Schneider, Diop, and Leighton, 2001

Routine data from health centers and district hospitals in the pilot and control districts was collected for years prior to and after the introduction of the PPS. Data covered service utilization for a range of primary health care services; admissions, hospital days, outpatient visits, deliveries, laboratory, and x-rays for hospitals; and drugs prescribed from the MOH essential drug list.

Data on costs for health centers and hospitals were also collected, as were data on revenues collected from government; user fees; PPS contributions; donors; and others. Prices for services and drugs for nonmembers were also collected. Prepayment bureaus gathered data on new members, by each enrollment category, and tracked monthly expenditures and revenues.

The pilot monitoring process received intensive technical assistance from PHR throughout the data collection period. Technical assistance included initial training for health staff and PPS bureau workers in filling out forms correctly, in addition to ongoing support and assistance with ensuring validity of responses and analyzing data results (Schneider, Georges, and Butera 2000). PHR carried out validity tests, data entry in MS Excel software, and data analysis.

ONAPO conducted all surveys: the focus group research in the three pilot districts; the beneficiary survey in selected communities of the pilot districts; the patient exit interviews in health centers in pilot and control districts; and the household survey data collection in pilot and control districts.

Principal Findings

The results of the evaluation of the pilot demonstrated that PPS are a viable means of achieving MOH objectives in Rwanda. Key evaluation findings for the PPS pilot were as follows:

- ▲ *Improved financial access to health care:* The pilot did improve financial accessibility to health care for PPS members. This contributed to improved equity in access to care, as family and group care enrollment was affordable for many, and some indigents were effectively brought into the system by communities and donors (such as the church). Once they became members, beneficiaries reported up to five times higher health service use than non-members; analysis showed improved equity in access to maternal, preventive, and curative care for beneficiaries, while out-of-pocket spending per episode of illness decreased (Schneider and Diop, 2001a).
- ▲ *Improved quality of care:* The pilot contributed to better quality of care in health centers through improved availability of drugs and medical equipment, improved use of trained personnel, and greater continuity of preventive care services. Further, PPS members became more educated about their rights, and more demanding of better quality of care from service providers.
- ▲ *Improved community participation:* PPS members successfully managed the finances and administration of PPS, on a voluntary basis. They elected representatives to the PPS administrative councils, held general assemblies to review results and plans, and became important interest groups that brought health issues and health care financing into the political agenda of the pilot districts (Schneider, Diop, and Leighton 2001).
- ▲ *Strengthened financial sustainability:* The pilot PPS improved the efficiency of resource use among providers and strengthened financial sustainability. Health facility productivity improved, as beneficiaries sought care earlier, fewer drugs were prescribed than for non-members, who were waiting longer to seek care, and beneficiaries received more preventive care services to keep healthy (Schneider, Diop, and Leighton 2001). Health centers affiliated with the PPS received an important additional source of financing, thereby contributing to improved financial sustainability.
- ▲ *Improved democratic governance:* PPS were found to promote better understanding of the rights and duties of democratic governance, through the institutionalization of democratic processes at the community level and the secondary effects of the development of strong interest groups in communities.
- ▲ *Capacity built in financial management:* The pilot provided extensive training on health insurance and financial management to community members so that, with little prior formal education, they were able to manage schemes. At the central MOH level, technical assistance was provided to increase MOH capacity to support the development of the PPS.

- ▲ *Improved social and civic fabric:* Membership enrollment included all ethnic groups. It was thought that this contributed to greater social cohesion in a society that had been deeply divided by war and genocide. The pilot established mechanisms for bringing poor and vulnerable groups into the program to ensure access to health care, thereby strengthening community solidarity.

Dissemination of Findings

The pilot implementation process was designed to encourage stakeholders to learn from ongoing monitoring results to strengthen technical support and training to pilot districts. Dissemination and discussion of monitoring findings were conducted regularly, and local stakeholders (health staff, PPS bureaus, and, through general assemblies, communities) were involved in the process. Monitoring was carried out on a monthly basis throughout the pilot, with reports provided by PHR/Rwanda to the executive bureau of PPS for analysis and discussion in their review meetings. The Steering Committee, representing a wider group of stakeholders, reviewed progress and performance and offered suggestions and guidance on an ongoing basis based on the results of these reports.

Evaluation results for the pilot PPS contributed to continuing policy discussions of alternatives for health care reform and future health policy development. Results were disseminated in the March 2000 and September 2000 workshops with Steering Committee members and representatives from the pilot districts. The final workshop served as the presentation platform for evaluation results to all stakeholders, with recommendations for future health policy development elaborated. Substantial changes were recommended for the pilot design. These changes, however, largely reflected the fact that there had been major reforms in the context during the pilot period. In particular, a new set of structures for local government had been put in place, and it was necessary to adapt the PPS design to reflect these structures.

Pilot Outcomes

Immediate Outcomes

As a result of the pilot process, specific policy recommendations were developed that contributed to planning for health policy reform in Rwanda. In terms of financing strategy for the Rwanda health sector, it was recommended that prepayment with providers paid by capitation be endorsed as a financing alternative to out-of-pocket user fees (Schneider, Diop, et al., 2001). Further, it was recommended that PPS provide a means to finance vulnerable groups, and to finance maternal care in a targeted way. Specific proposals were offered to address health service delivery issues identified during the pilot, including the further development of basic health care service packages, of organizational requirements of health care delivery, of the public/private mix of services, and of specific strategies to improve quality of care in health centers and hospitals.

At the program level, immediate outcomes of the pilot included the PHR proposal that the MOH consider the replication of prepayment schemes nationally in the 37 remaining districts of Rwanda. The pilot had a strong demonstration effect within the region where it was implemented, and several districts that were neighbors of the PPS pilot districts had expressed interest in establishing PPS, building upon the piloted models. PHR suggested an immediate roll-out of the model to districts bordering the pilot districts, areas that would draw upon support from the pilot districts. Although there was immediate interest in roll-out, the Rwanda pilot, unlike the Niger one, did not have any plan for nationwide roll-out agreed by the end of the pilot period.

Evaluation results also helped develop recommendations for further improvement of the existing PPS, specifically to address weaknesses in the model that had been pilot-tested. Particular emphasis was placed on: strengthening capacity building; continuing improvements in quality of care to attract and retain members; developing efforts to involve leaders in PPS promotion; proposing new calculations on annual premiums; and increasing educational efforts on program benefits to communities.

An additional outcome was the creation of a pool of trained human resources at local and district levels capable of developing, administering, and managing PPS. Specific strategies for drawing on this new capacity for expansion purposes were outlined by PHR, including use of trained community, health center, and MOH staff from the pilot areas as the “pillars” of the extension, serving as experienced trainers and resources for a national roll-out.

Update: First- and Second-Generation Pilots

Immediate constraints to a national roll-out of the plan were significant and included a lack of funds to support a national program from the MOH operating budget; a lack of support from donors to expand the program; and the limited capacity of the MOH to support, oversee, and regulate the scale-up to a national program. However, further development of health PPS has become a core element of the Rwandan government’s proposed poverty reduction strategy program. In 2002, the Rwandan president announced that PPS-type schemes would form a core element of government strategy. In response to this, during 2003, the Ministry of Health, with support from the new USAID-funded PRIME II project, developed a national strategy for roll-out. Financing for the program may be forthcoming from the World Bank, in conjunction with support for poverty reduction and debt relief efforts.

Donor support to the development of prepayment schemes in Rwanda remains a critical issue in future expansion or roll-out due to the significant requirements for financing and technical assistance. As noted above, USAID/Rwanda has provided funding to PRIME II to support the strengthening of the first-generation pilot districts through provision of technical assistance specifically focused on improving the quality of service provision (Killian 2003). PRIME II has sought to follow up with the MOH on PHR recommendations by designing and

facilitating advocacy campaigns, assisting with the development of short-term micro-credit loans from rural banks to allow members to pay premiums on a monthly basis, revamping the organizational structures and district federations of PPS, and conducting training workshops to further strengthen administrative and management capabilities. However, support to the Rwanda PPS program is less intense financially and technically than it was during the pilot phase.

As of December 2003, the first-generation of PPS, established during the pilot, continue to function, and the schemes are making progress in addressing the major weaknesses of the original pilot. The program has gradually expanded to 62 PPS and added one new district. PPS membership also continues to grow gradually; there were 162,000 members at the end of December 2002 (Diop and Butera 2003). Data on utilization of services shows that members continue to access services for family planning and reproductive health more often than non-members who must pay user fees. The growth in PPS membership has contributed to improved health center revenues, and quality of services; some PPS now are generating up to 75 percent of total revenue for their corresponding health center (Nelson and Nolan 2002). There has been progress in obtaining the interest of a wider group of nongovernmental organizations (NGOs), religious groups, and international and bilateral projects in funding premium payments for indigents.

A “second generation” model of the PPS pilot in a new district builds on the earlier model by further strengthening social control and decentralizing the revenue collection for the PPS to the cellule, thereby placing the administrative unit closer to the population (Diop and Butera 2003). Community leaders are more systematically involved in advocacy efforts to bring the population into the schemes. Indigents and the vulnerable population groups are systematically identified for inclusion; NGOs have been actively subsidizing their premiums. After the first year of operation, 53,000 people, or 32 percent of the target population, have been brought into the program.

At the central level, little additional capacity to manage health insurance reforms has been established. There was a proposal to institutionalize the PHR technical assistance posts as MOH positions, but due to lack of funding this never occurred. However, the capacity built during the pilot period at the local level has paid dividends. During the period 2002-2003 there was relatively little policy-level development in the PPS concept, but local-level actors experimented with a view to improving certain aspects of design. Links were developed with the Banque Populaire as a means to facilitate premium payment, and new initiatives were developed to improve the coverage of indigents. The PPS federations in the pilot areas are now providing support to other districts that are attempting to introduce PPS, and local-level actors such as the PPS federations have become active and articulate stakeholders in the national policy arena.

Conclusions and Lessons Learned

Conclusions from the Rwanda Pilot

As a result of the pilot process implemented in Rwanda, many of the compelling questions about the feasibility of prepayment schemes in the country, and their impact upon Ministry of Health objectives, were answered. Specific weaknesses in the initial PPS design and approach were identified and solutions to rectify them proposed. The pilot served to demonstrate the functionality of the model to stakeholders at the local and national levels. Further, the pilot introduced considerable development of capacity at local levels to serve as a base for subsequent program expansion.

One of the main factors in the effectiveness of the pilot process was the classical monitoring and evaluation process. At the completion of the pilot, there was detailed, in-depth information from program monitoring on PPS implementation effects in each health center and hospital of the pilot districts. Further, an array of surveys provided additional evidence that stakeholders thought the pilot was effective in achieving its goals, although there were remaining concerns about the quality of care provided at health centers (Diop et al. 2000). These evaluation findings have been widely quoted at the international level, as well as been useful to national decision makers.

There are a couple of cautionary notes in terms of interpreting and understanding the findings from the evaluation. Firstly, the number of people who joined PPS was far below enrollment levels anticipated by the MOH in its original projections; about 90 percent of the population in the pilot districts did not join the schemes. The annual premium of 2,500 francs was a major financial barrier (Schneider and Diop, 2001b), and management committee members also cited lack of support from political, administrative, and religious authorities as an impediment to increasing enrollment rates (Schneider and Diop, 2001b). Thus, the policy and operational conclusions from the pilot phase were based on schemes that were still in an embryonic phase. Secondly, the pilot design and implementation were constrained by the extremely tight timeframe of the pilot, dictated by the closing of USAID funding for the PHR project.

The repercussion of this compressed timeframe and the unusual intensity of activity that it necessitated during the piloting phase are also, with the perspective of time, very evident. During the piloting period there was an intensity of activity in the pilot sites that was critical for the successful implementation and evaluation of the pilots. Despite a conscious focus during the piloting period on enhancing local capacity to develop financing policy, plan and implement pilots, and significant apparent success in this respect, capacity constraints at the national level remain a critical barrier to roll-out. Pilots elsewhere have been criticized for being resource intensive, and drawing on financial and technical support that was unlikely to be available for national program development (Bennett and Paterson 2003). The Rwandan pilot was probably

implemented in a manner that could not be directly replicated elsewhere in Rwanda without comparable levels of donor input. Nevertheless, the achievements of the pilot, in terms of creating policy consensus, a technical model of how prepayment schemes could operate in Rwanda, and developing local-level capacity, are real and lasting achievements that could not have been made without this period of intense activity.

A further constraint to roll-out has been the lack of coordinated and concerted donor support. Donor representatives were kept informed about the pilot and were actively engaged in its implementation through the national Steering Group. However, there does not appear to have been early attention to the issue of how to support roll-out of a successful design. On the other hand, too early a focus on planning for roll-out might have diverted the primary goal of demonstrating a technical success.

Although roll-out of the design has not yet occurred, the ongoing discussions between donors and the government about the potential for prepayment schemes in Rwanda suggest that roll-out is still likely – it will just happen at a rather slower pace than might initially have been envisaged.

Lessons from the Rwanda Pilot

Pilot objectives and approach

The Rwanda pilot was elaborated with clear objectives in line with the health reform implementation cycle in Rwanda. The pilot benefited from and built upon a consensus that had emerged earlier on in the reform cycle on developing alternative health financing mechanisms and improving community participation. Through initial engagement in workshops with policymakers, and technical expertise drawing on international experience and research, the pilot was initiated with clear objectives closely linked to MOH priorities, and with strong policy-level support.

The pilot approach was linked to pilot objectives. The pilot aimed to refine a design and applied a rigorous classical monitoring and evaluation framework to identify effects of the pilot. The pilot approach provided for an important degree of flexibility within a structured pilot framework that allowed for greater decentralization of implementation, with opportunity for community participation in design and program management.

The importance of capacity building

One of the important lessons from the pilot was the degree to which it engaged in capacity building at the decentralized district and community levels. Capacity building is not always a central element in pilot programs, and it may be concentrated more heavily at central ministry levels when it is introduced. In Rwanda, support to develop local capacity enabled communities to manage program operation and provided an effective demonstration that the plan was feasible.

However, despite concerted efforts to build capacity during the pilot, capacity is still seen as one of the principle barriers to roll-out. Plans for consolidating and further enhancing capacity after the end of the pilot need to be established.

Donor timetables constrained the pilot approach

Even though operating under a very limited timeframe, the pilot provided considerable information for further development of the program, and potential expansion. While the Rwanda pilot evaluation findings are powerful, the pilot faced constraints due to the fact that intensive donor funding was available only over a short-term period. When pilots are less donor-driven, available evidence indicates they may tend to be more evolutionary in nature, addressing succeeding policy and program issues, and continuing to build capacity over time (Bennett and Paterson 2003). In a sense, an evolutionary approach has developed in Rwanda, with the continuing operation of the pilot programs following the completion of the initial pilot, together with newer iterations of the original model currently being developed by the communities on a more gradual basis.

Securing donor commitment for support in the post-pilot phase

In the Rwandan context, donor support has not only affected the timeframe for the pilot, but also is a key issue in the prospects for roll-out. Closer attention during the pilot phase to financing of post-pilot activities, perhaps through a consortium of donors, may have helped. At the same time, it should be acknowledged that prior to the completion of the pilot there may have been uncertainty as to recommendations regarding roll-out.

Bibliography

- Bennett, S and M Paterson. 2003. *Piloting Health System Reforms: A Review of Experience*. Technical Report No 019: Bethesda, MD: Partners for Health Reform *plus*, Abt Associates Inc.
- Diop, F and JD Butera. 2003. Presentation at Abt Associates Annual Retreat.
- Diop F, P Schneider, and D Butera. 2000. *Summary of Results: Prepayment Schemes in the Rwandan Districts of Byumba, Kabgayi, and Kabutare*. Technical Report No 59, Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.
- Killian, R. 2003. From a telephone interview carried out by the author.
- Nelson, D and N Nolan. 2002. *Results Review*. Chapel Hill, North Carolina: IntraHealth.
- PRIME II web-site: <http://www.prime2.org>
- Schneider P, and F Diop. 2001a. *Impact of Prepayment Pilot on Health Care Utilization and Financing in Rwanda: Findings from Final Household Survey*. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.

- Schneider P and F Diop. 2001b. *Synopsis of Results on The Impact of Community-Based Health Insurance on Financial Accessibility To Health Care in Rwanda*. Health, Nutrition and Population (HNP) Discussion Paper. Washington, DC: The World Bank.
- Schneider P, F Diop, D Maceira, and JD Butera. 2001. *Utilization, Cost, and Financing of District Health Services in Rwanda*. Technical Report No 61. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.
- Schneider P, W Schott, M Bhawalkar, AK Nandakumar, F Diop, and JD Butera. 2001. *Paying for HIV/AIDS Services: Lessons from National Health Accounts and community-based health insurance in Rwanda, 1998-1999*. UNAIDS Case Study. Geneva: UNAIDS.
- Schneider P, F Diop, and C Leighton. 2001. *Pilot-testing Prepayment for Health Services in Rwanda: Results and Recommendations for Policy Directions and Implementation*. Technical Report No 66. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.
- Schneider P, F Diop, and S Bucyana. 2000. *Development and Implementation of Prepayment Schemes in Rwanda*. Technical Report No 45. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.
- Schneider P, P Georges, and JD Butera. 2000. *Final Country Report, Rwanda*. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.

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