Mission

Partners for Health Reformplus is USAID’s flagship project for health policy and health system strengthening in developing and transitional countries. The five-year project (2000-2005) builds on the predecessor Partnerships for Health Reform Project, continuing PHR’s focus on health policy, financing, and organization, with new emphasis on community participation, infectious disease surveillance, and information systems that support the management and delivery of appropriate health services. PHRplus will focus on the following results:

- Implementation of appropriate health system reform.
- Generation of new financing for health care, as well as more effective use of existing funds.
- Design and implementation of health information systems for disease surveillance.
- Delivery of quality services by health workers.
- Availability and appropriate use of health commodities.

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The opinions stated in this document are solely those of the authors and do not necessarily reflect the views of USAID.
Abstract

Pilot approaches have been advocated as a means to reduce the risks associated with implementing complex health system reforms; however, there is a lack of guidance about when pilots may be appropriate or how they should be designed to respond to different contexts or objectives. This report presents the findings of a literature review and in-depth review of 17 health system reform pilots. The objectives of the review were to (i) synthesize lessons regarding conditions under which pilot projects are an appropriate means to further reform development, (ii) analyze how pilot projects and their monitoring and evaluation frameworks can best respond to alternative objectives and contexts, and (iii) develop guidance for the design of pilot projects. The study was hindered in achieving these objectives by the poor documentation on pilots; frequently documentation was only partial and was not consistently organized.

Results support previous studies that suggest that frequently pilot objectives are not clear and that this is a major impediment to successful design and implementation. The study identifies a number of different factors that should be taken into account in determining the piloting approach. The most critical of these are the pilot objectives, and, related to the pilot objectives, the degree of consensus about the proposed policy reform. Other important factors that should be taken into account include country capacity, the size of the country and the degree of decentralization within the country. These factors should determine dimensions of the piloting approach including how centralized the pilot is, the type of monitoring and evaluation framework used, and the extent to which policymakers are involved in the pilot. The study finds that extensive donor involvement in a pilot is likely to shorten the time frame for the pilot, and that this can sometimes have problematic effects. While success of a pilot is often discussed in terms of whether or not the pilot was “rolled out,” the review shows that there are many other positive outcomes that pilots may achieve, and it argues that ultimately success should be judged against the objectives established for a particular pilot.
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<th>Description</th>
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<tr>
<td>BASICS</td>
<td>Basic Support for Institutionalizing Child Survival</td>
</tr>
<tr>
<td>CHF</td>
<td>Community Health Fund</td>
</tr>
<tr>
<td>GTZ</td>
<td>Deutsche Gesellschaft für Technische Zusammenarbeit</td>
</tr>
<tr>
<td>ISDS</td>
<td>Initiative for Sub-District Support</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MOPH/MOH</td>
<td>Ministry of Public Health/Ministry of Health</td>
</tr>
<tr>
<td>PATH</td>
<td>Program for Appropriate Technology in Health</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PHR</td>
<td>Partnerships for Health Reform</td>
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<tr>
<td>PHRplus</td>
<td>Partners for Health Reform plus</td>
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<tr>
<td>RCMS</td>
<td>Rural Cooperative Medical System</td>
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<tr>
<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>TEHIP</td>
<td>Tanzania Essential Health Intervention Project</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
This report has been built upon input and insights from a large number of people. The authors would like to thank all those who helped to identify health system reform pilots, provided us with material on those pilots, and agreed to be interviewed to elaborate further on their piloting experiences. David Hotchkiss, Charlotte Leighton, Marty Makinen, Mark McEuen, Nancy Pielemeyer, Pia Schneider (all of PHRplus), Karen Cavanaugh (USAID), Francois Diop (World Bank), and David Pyle (John Snow Inc) all participated in a meeting at PHRplus to discuss an earlier draft of the report and provided extremely helpful comments upon its content. In addition Charlotte Leighton (Abt Associates), Gary Gaumer (Abt) and Rich Feeley (Boston University) reviewed and provided detailed comments on drafts of this report. Our thanks go to all.
Background, Objectives, and Methods

While pilot projects have been advocated as a means to test the feasibility of a potential reform, there is a lack of guidance about the conditions under which pilots may be appropriate or how they should be designed to respond to different contexts and objectives. This paper aims to:

- Synthesize lessons regarding the conditions under which pilot projects are an appropriate means to further reform development and at what points in the reform cycle they can best contribute;
- Analyze how pilot projects and their monitoring and evaluation (M&E) frameworks can best be designed to respond to alternative objectives and contexts;
- Develop guidance for the design of pilot projects given their objectives and context.

The study is based upon a review of published and unpublished literature sources, complemented by in-depth interviews. A broad literature review was carried out first, followed by a detailed, desk-based analysis of 17 health system reform pilots.

The Rise and Fall of Pilots

Pilot projects were popular development approaches during the 1970s and early 1980s but then appear to have gone out of fashion. Pilot projects of this earlier era were criticized for absorbing excessive amounts of human and financial resources, being overly dependent upon donors, lacking clear objectives, and ultimately not contributing to broader health system reforms. However recent analyses of rapid and large-scale health system reforms in low-income and transition countries have concluded that piloting may be an appropriate strategy to test out reforms as part of a larger reform process.

Overview of Pilots Studied

Of the 17 pilots studied in-depth, six were concerned with health insurance for the informal sector and four with restructuring primary care. Size of population covered and life span of the pilot varied considerably. Half of the pilots were implemented with support from the U.S. Agency for International Development, and Abt Associates Inc. was at least partially involved in six. The pilots studied are a non-representative sample.

While the pilots generally evolved organically from previous policy developments, they occurred at different stages of the reform cycle: pilots were implemented when there was no certainty or consensus about reform direction, all the way through to situations where there was complete consensus about reform and the pilot was used mainly to fine-tune implementation processes.
In the pilots studied, different roles were played by central and local levels in the design, implementation, and evaluation processes. While in some cases designs and implementation were quite centralized, in other cases very decentralized approaches were used.

Considerable differences were also found in M&E approaches. The report distinguishes between pilots that (i) adopted a classical M&E approach, (ii) used alternative M&E approaches, (iii) neglected or ignored M&E issues, and (iv) carried out focused evaluations on different aspects of the pilot at different points in time. As for the earlier wave of pilots, in some cases very short time periods appear to have elapsed between pilot implementation and evaluation.

Information about rollout was available for 10 of the 17 pilots. In seven cases a clear decision had been made to roll out the pilot; however, it was apparent that results of pilot evaluation were not always critical determinants of rollout. In a number of cases pilot evaluation findings had been ignored or dismissed. Even for those pilots where rollout did not occur, written reports and those closely involved in the pilot identified benefits of the piloting particularly in terms of local capacity building.

Structuring Pilot Approaches

From the case studies it was possible to identify (i) key factors affecting the appropriate pilot approach, (ii) different dimensions across which the pilot approach might vary, and (iii) a range of possible pilot outcomes. Table ES-1 summarizes these different dimensions.

Table ES-1: Determinants of and Dimensions of Pilot Approach and Outcomes

<table>
<thead>
<tr>
<th>Factors affecting Pilot Approach</th>
<th>Dimensions of Pilot Approach</th>
<th>Pilot Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲ Point in the reform cycle</td>
<td>▲ Centralized versus decentralized</td>
<td>▲ Creation of demand for reform</td>
</tr>
<tr>
<td>▲ Pilot objectives</td>
<td>▲ Strong technical design from start versus more fluid, evolving design</td>
<td>▲ Rollout/scaling up of the pilot design</td>
</tr>
<tr>
<td>▲ Country capacity</td>
<td>▲ Close involvement of policymakers versus arms-length relationship with policymakers</td>
<td>▲ Replication of pilot design without clear central government supporting policy</td>
</tr>
<tr>
<td>▲ Extent of donor involvement</td>
<td>▲ Classical M&amp;E approach versus alternative one</td>
<td>▲ Rollout of alternative design that builds upon pilot experience</td>
</tr>
<tr>
<td>▲ Size of country</td>
<td>▲ Short time frame versus long time frame</td>
<td>▲ Dissemination of implementation lessons</td>
</tr>
<tr>
<td>▲ Extent of decentralization within the country</td>
<td></td>
<td>▲ Capacity building</td>
</tr>
</tbody>
</table>
The study argues that pilot objectives (that are likely to be closely related to how much consensus there is about the direction and nature of the reform) are the most important factors in determining the pilot approach, although other factors (such as country capacity and extent of decentralization) are also important. For example, for pilots where the primary objective is research, or the refinement of a health system design, M&E is a critical component of the pilot and a strong classical M&E design is desirable. In contrast, where the primary pilot objective is to demonstrate a completed design or generate a demand for reform, classical M&E approaches may not be appropriate.

Conclusions and Recommendations

The study makes the following conclusions and recommendations:

△ Pilots need to be better and more consistently documented in order to draw more lessons about how to design and implement them;

△ Pilot objectives should be clear, and will most likely relate to whatever point in the reform implementation cycle the reform has reached, and the degree of consensus about reform;

△ Pilot objectives should drive the overall piloting approach;

△ Pilot success should not be measured simply in terms of whether or not a particular reform was rolled out nationally but rather against the objectives that were initially set for the pilot;

△ For pilots where classical M&E approaches might not be appropriate, alternative M&E frameworks need to be investigated and better elaborated;

△ Evaluation findings may suffer if time frames are too short; means need to be found to ensure that bureaucratic regulations governing donor operations do not lead to excessively short time frames for evaluation.
1. Background and Objectives

The Partners for Health Reformplus (PHRplus) project and its predecessor project (Partnerships for Health Reform, PHR) have used pilot projects as a means to test the feasibility of a potential reform and evaluate its early impacts in order to inform the decision as to whether the reform should be implemented nationally (or “rolled out”). However there is a lack of guidance about when pilots may be appropriate, or how they should be designed to respond to different contexts and objectives.

Literature searches on health system “pilots” or “demonstration projects” turn up a bewildering variety of articles. The majority of papers report experience with small-scale implementation of a particular innovative approach to health service delivery. Several present evaluation findings from the pilot. The nature of the intervention being piloted varies immensely: from single focus interventions to complex multipronged ones; from extremely short-term time frames to extended ones; from precise, rigorously defined interventions to flexible interventions developed at the local level as the pilot evolves. Very little of this literature focuses on understanding the objectives of pilot projects, why a pilot approach was preferred, or at what point in the reform cycle pilots might make the largest contribution.

This paper tries to fill this gap; for a specific set of interventions (namely complex health system reforms), it provides an organizing framework and synthesizes lessons learned from experience. Given the dearth of prior literature in this area, the approach of this study is inductive: it seeks to define possible hypotheses rather than test existing ones. Its overall purpose is to review health system pilot projects and synthesize key lessons learned from experience, in particular the review aimed to:

- Synthesize lessons regarding the conditions under which pilot projects are an appropriate means to further reform development and at what points in the reform cycle they can best contribute;
- Analyze how pilot projects and their monitoring and evaluation (M&E) frameworks can best be designed to respond to alternative objectives and contexts;
- Develop guidance for the design of pilot projects given their objectives and context.
2. Methods

The current study is based upon a review of published and unpublished literature, complemented by in-depth interviews where existing data sources were inadequate. Steps in the data collection phase were as follows:

- A broad literature review of papers and articles that discussed the objectives of, and process of conducting pilots.
- An in-depth study of a sample of health system reform pilots, using published and grey literature to compile as complete a profile as possible of each pilot.
- In-depth interviews conducted primarily to fill gaps in the data available on the study pilots.
- A workshop including health system researchers and pilot implementers to discuss and review preliminary findings.

Several health system reform pilots were already known to the researchers. The researchers (i) conducted a literature search using Medline and (ii) contacted a total of 23 key informants, providing them with information about the study and requesting them to provide any information about additional health system pilots of which they were aware. For key informants the following definition of a “pilot” was given:

“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 generally undertaken with the purpose of testing the feasibility of the piloted reform and evaluating the early impacts of reforms, in order to inform the decision as to whether the reforms should be implemented throughout the country, and what if any changes should be made to reform design.”

Both the literature search and instructions to key informants limited the search to pilots implemented within the last 10 years that had taken place within a developing or transitional country context.

Eighteen health system reform pilots were identified (see Annex A, Health System Reform Pilots). Communications with the person who identified the pilot and further literature reviews then helped to put together full materials on each pilot. Where only very partial data on the pilot were available, individuals involved in the pilots (normally the authors of reports on the pilot) were contacted for further information. At this stage one pilot (number 8 in the table in Annex A, primary health care reform in Azerbaijan) was excluded from further analysis because only very basic data were available. The 17 health system reform pilots discussed here clearly constitute only a fraction of the total number of health system reform pilots implemented during the past decade. Participants at the PHRplus workshop on pilots identified further pilot experiences that had been lost to the literature due to weak or non-existent documentation.
All of the case-study pilots were reviewed using a common framework that was based on the initial literature review and the field experience of informants familiar with health systems pilot projects. The broad analytical dimensions included in this framework were:

- Pilot demographics (dates, location, focal reforms, etc.);
- Characterization of pilot (primary goal or objective, i.e., whether emphasis was upon demonstration, research, testing design, etc.);
- Design of pilot (summary of technical design, process in drawing up design and how design evolved, ownership and commitment to pilot and flexibility of design);
- Financing (who financed the pilot, what plans were made for incremental resource needs associated with the pilot);
- Implementation (what was actually implemented vis a vis initial design, by whom, and what was the timing of the implementation);
- Monitoring and evaluation (was there an M&E design, what was it, when did evaluation take place?);
- Impact (what impact did the pilot have on policies, laws, capacity, etc., was the pilot rolled out or not?).

See Annex B for a complete list of the analytical dimensions studied.

Of all of the aspects on which the review attempted to gather data, it was most difficult to collect information about how the pilots had been implemented. Documentation tended to focus much more on the technical aspects of pilot design, or alternatively findings from evaluations. Overall, documentation of the pilot experiences was found to be partial and somewhat disorganized; there was no standard fashion in which pilots were documented.

Section 3 presents the broad literature review. Section 4 provides an overview of the 17 pilots studied in-depth. Section 5 discusses findings, and Section 6 presents conclusions.
3. General Literature Review

3.1 The Rise and Fall of Pilots

Pilots and demonstration projects have been a part of development approaches for many years. In particular during the 1970s and 1980s they were much discussed in the development literature. At this time integrated rural development projects were especially popular development strategies. An integrated rural development project was defined as “a multisectoral, multifunctional development initiative placed in one or several different locations” (Honadle and VanSant 1985). Two primary concerns about these projects arose. First, rural development projects were frequently initiated with substantial support from international donors such as the U.S. Agency for International Development (USAID), and there was a concern about how sustainable such initiatives were, both in terms of financial sustainability and in terms of local commitment to the scheme and capacity to implement. Secondly there were concerns about the feasibility of “rolling out” or replicating what had taken place in a single field site to a nation or state as a whole. Integrated rural development projects appeared to go out of fashion during the latter part of the 1980s and throughout the 1990s.

There also appear to have been quite large numbers of rural health pilots during the 1970s and early 1980s (Pyle 1980, University of Ghana Medical School and UCLA 1979). These pilots, while generally focusing on service delivery issues, represented complex packages of interventions. For example, the Danfa project, a rural family health project in Ghana, included elements to: establish fully functioning family health centers, establish health information systems, establish a health education program, conduct operations research studies, promote community participation, improve quality of care, and strengthen management. A 1986 paper prepared for the World Bank identified 34 pilot projects on family planning in Africa alone (Ross 1986). However, there was also substantial criticism of pilot approaches to health system development. Tollman and Zwi (2000) summarize previous critiques as follows:

- Such projects tend to stifle other efforts, weaken the confidence of health service leaders to experiment, and delay the resolution of operational problems;
- Scarce human and financial resources tend to be excessively absorbed into pilot projects for prolonged periods;
- The search for definitive and widely applicable answers is often disappointing because of great differences in local circumstances and contexts;
- Pilot projects are often heavily funded by donors and consequently may advance schemes that are excessively influenced by external priorities, thus failing to serve local interests adequately.

During the 1990s fewer large and complex health sector pilot projects were reported in the development literature. It is unclear whether this is simply a reporting issue or whether there were indeed fewer pilots.
Several recent analyses have questioned the feasibility of implementing large-scale health system reforms (the so-called “big bang” approach) particularly in countries with weak capacity. There has been increasing advocacy for pilot approaches to health system strengthening initiatives, for example:

Although taking advantage of windows of opportunity for change may prevent opposition to change becoming entrenched over time, these experiences indicate that taking too much, or too careless, advantage of such windows can bring its own problems...it is important to consider the features of an implementation strategy that allow that strategy to enable further change rather than generate obstacles to such change. Such strategies include:...Applying flexible and gradual implementation approaches that allow policies to be adapted and strengthened in response to experience. 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. These include health insurance reform, regulation of the private sector, pharmaceutical policy, health work force reform, and the appropriate balance between public and private roles in health service financing and delivery. Incremental approaches may therefore be more appropriate, built on solid research, pilots and focused efforts to learn from experience. (Stout and Johnston 1999)

Similar arguments have been presented in the context of the former Soviet Union where pilots appear to have been a particularly common approach to reform:

The nature of the still prevalent soviet mentality requires visible successes to overcome skepticism; 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. (Abt Associates 2000)

As data on the number of pilots being implemented do not exist, it is not possible to say whether pilots are really coming back into fashion, but there does appear to be more interest in them as a possible strategy within the health sector.

3.2 Lessons from the Literature

Given the re-emergence of interest in piloting in the health sector, the lessons learned from the earlier generation of pilots can provide a basis for improving the next generation of pilot projects. A review of the earlier literature (Ghana Medical School and UCLA 1979, Pyle 1980, Honadle and VanSant 1985) suggests four principle clusters of problems/issues:

A. Clarity of Goals

Pilot projects may be initiated for different purposes. Pyle (1980) distinguishes between:

- ‘Pilot projects,’ which he defines as “the testing of a particular approach on a small scale to determine its chances of success if implemented on an expanded basis”
‘Demonstration projects,’ which “Demonstrate[s] the merits of a selected system, i.e., given certain inputs, something can be accomplished.”

‘Research projects,’ which constitute “a careful investigation aimed at identifying or testing new theories.”

Pyle’s retrospective analysis of a nutritional pilot project in India suggested that confusion about what the goals of a pilot are may lead to inappropriate implementation strategies. For example, in the Indian case, staff had been reassigned from their regular duties to work on the study intervention. While this allowed the implementers to research or establish scientifically the effectiveness of the intervention, it prohibited broader rollout and negated the ‘piloting’ objectives of the project.

B. Ownership and Commitment

Pilot projects in developing countries are frequently initiated by external donors or multi-lateral development agencies. This is often seen as legitimate given the experimental nature of these projects and the common emphasis upon contributing to a global (as opposed to a country-specific) knowledge base. However, without ownership of ideas or commitment to the approach by the national government, it is unlikely that the pilot will be either sustainable or replicable. Some authors have suggested that, in order to get real local ownership of a pilot, government needs to make a commitment of financial resources to the project, or alternatively incur a substantial risk if the project fails (Honadle and VanSant 1985).

C. Flexibility in Design

Several analysts point to the importance of flexibility in design of a pilot. However there also appear to be inherent problems associated with such flexibility. Largely for reasons of ownership Honadle and VanSant (1985) emphasize the importance of an open, collaborative, and reflective process: one that allows key stakeholders to adapt a ‘blueprint’ design to the needs of their country, that can reflect the needs of different stakeholders in order to build consensus about a design, and that allows adjustments in design as lessons are learned. Pyle points out that flexibility can lead to possible ‘overloading’ of a project. If a pilot project tries to respond to the agendas of too many different stakeholders then the primary objectives may become confused.

D. Timing

Earlier texts on the topic of pilots share a concern about the short time frames within which pilot projects are commonly required to produce results. As the study of the Danfa project reports “The development of a demonstration project and the strengthening of the host country institution is of necessity a long-term project requiring five to ten years to come to full fruition” (Ghana Medical School and UCLA 1979). Again however the issue of time frame is not entirely straightforward. Pyle observes that while too short a time frame is problematic, issues of coordination, cooperation, and commitment to a pilot become more difficult the longer the time frame of a pilot. Similarly policymakers frequently want rapid answers to policy questions and are unwilling to wait four or five years until scientific evidence can be garnered.

This issue of incompatibility between the time frames required for different pilot goals, most specifically conducting a thorough impact assessment that requires a longer time horizon versus feeding into policy (that often requires a shorter time horizon), is one of the key issues raised by Zwanziger et al. with regard to the CHAMPUS (Civilian Health and Medical Program for the Uniformed Services) demonstration in the United States (Zwanziger et al. 2001).
3.3 Health System Versus Single Intervention Pilots

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. For example, there have been numerous examples of child survival, immunization, or nutrition pilots that test improved program design or implementation in the vertical program context. Taylor (2001) discusses the problems of moving from a successful localized child health pilot to regional or national rollout, and raises issues such as national capacity to engage in the rollout, national financing strategies for rollout, and concerns about donor coordination. No guidance is presented as to how to address these concerns.

There are significant differences between pilots that focus on a single intervention or program and those that test multiple interventions in a complex health system, namely:

- The set of relevant stakeholders for a single focus pilot is constrained and more likely to share a common programmatic understanding.
- Policy goals for single issue programs are less complex and more likely to enjoy significant counterpart and political support within the vertical context.
- Donor groups that focus on the programmatic issue frequently have clear ideas of best practices that have been tested and evaluated in other developing country contexts.
- Programmatic complexity, while considerable, tends to be more manageable than a health system pilot.

Overall the piloting of new and untested single strategy interventions (as opposed to health system reforms) requires less interaction with a smaller group of local level decision makers and is substantially more straightforward (Tollman and Zwi 2000).

This paper focuses entirely on pilots that test complex health system reform strategies and programs.
4. Overview and Description of Pilots Examined

4.1 Basic Data on Case Study Pilots

Table 1 presents basic information about each of the pilots reviewed.

There was some clear clustering in terms of the health system reform topic with which the pilots were concerned. Six of the 17 pilots were concerned with health insurance for the non-formal sector, including pilots in Niger, Rwanda, Thailand, China, the Philippines, and Tanzania (Community Health Fund, CHF). Another four (Kazakhstan, Kyrgyzstan, Poland, and Egypt) focused upon restructuring primary health care and preventive services. Other topics covered by the pilots included decentralization or district capacity building, provider payment reform, and information systems.

There were large differences between pilots in terms of the population covered by the pilot intervention. In some cases only several thousand people were covered by the pilot: this is particularly true where the pilot focused upon the facility level (as in Alexandria, Egypt, and Almaty, Kazakhstan). At the other extreme, several millions of people were covered by the pilot activity (as in Poland and Russia).

There was also no standard picture in terms of the life span of the pilot. Some pilots (such as those in Niger and Rwanda) were in operation for only 12-18 months before final evaluations were conducted and technical assistance support was more or less withdrawn. Several pilots, particularly those with very focused objectives (such as the Zambia decentralized financial management pilot, and the Ukraine health information system pilot) took two to three years to implement. More complex pilots (such as the China Rural Cooperative Medical System [RCMS] and the Tanzania Essential Health Intervention Project [TEHIP]) took about five years from start to finish. There is then a further set of pilots that, while starting on a very small scale, gradually expanded their reach and coverage over time (these are referred to in the table as “phased” pilots and include Thailand, Tanzania [CHF], and South Africa [International Development Research Center, ISDS]). In several cases it was not clear when the pilot was completed. Sometimes “final evaluations” were conducted, but the pilot appears to have continued without any clear decision being made as to its future.

Of the 17 pilots examined only two appear to have been fully funded from domestic sources; the large majority, while being partly government financed, also used foreign donor or loan money. It was not possible to get detailed funding information on each of the pilots. It is the researchers’ impression that in some instances (as in Thailand) donor money played only a limited role in financing, whereas in other contexts it was the primary source of funds.

Half of the pilots involved USAID support (and six of them were at least partially implemented by Abt Associates Inc., implementer of the current PHRplus project). It is clear that this is a non-representative sample, but it also seems that USAID may be more inclined towards this approach than other donors.
<table>
<thead>
<tr>
<th>Country</th>
<th>Topic</th>
<th>Size of Pilot</th>
<th>Life of Pilot</th>
<th>External Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Niger</td>
<td>Cost recovery and quality improvement</td>
<td>Three districts with total population of 660,000</td>
<td>October 1992–April 1994</td>
<td>USAID</td>
</tr>
<tr>
<td>2. Kyrgyzstan</td>
<td>Family group practices</td>
<td>One oblast, population of 253,000</td>
<td>1994–to-date (no official end date, pilot site still used to test new interventions)</td>
<td>USAID</td>
</tr>
<tr>
<td>3. Almaty, Kazakhstan</td>
<td>Primary health care fundholding</td>
<td>Two polyclinics with catchment population of 70-80,000</td>
<td>Pilot designed 1997 but political constraints prevented implementation</td>
<td>USAID</td>
</tr>
<tr>
<td>4. South Kazakhstan</td>
<td>Family group practice</td>
<td>One oblast, population of 2 million</td>
<td>Collapsed around 1997 (after about two years)</td>
<td>USAID</td>
</tr>
<tr>
<td>5. Alexandria, Egypt</td>
<td>PHC reform</td>
<td>Five family health centers, 40,000 persons registered.</td>
<td>1999–to-date (no official end date though TA completed in 2000)</td>
<td>USAID</td>
</tr>
<tr>
<td>6. Rwanda</td>
<td>Prepayment schemes</td>
<td>Three districts with population of 1.08 million (though only 88,000 joined scheme)</td>
<td>Implementation started July 1999 Final evaluation Sept 2000 Pilot activities continue</td>
<td>USAID</td>
</tr>
<tr>
<td>7. Thailand</td>
<td>Thai health card scheme (rural insurance)</td>
<td>Initially small scale (18 villages in 1983) but grew over time</td>
<td>Phased: Small scale 8 months in 1983 Broader 1984–87 Rollout 1998 on</td>
<td>GTZ (Small)</td>
</tr>
<tr>
<td>8. Poland</td>
<td>Restructuring of PHC and prevention</td>
<td>Three regions comprising a population of 6.2 million</td>
<td>?</td>
<td>World Bank</td>
</tr>
<tr>
<td>10. China</td>
<td>Rural health insurance (RCMS)</td>
<td>About 40 townships comprising population of about 1 million (90% enrollment)</td>
<td>Initiated in 1994 Final evaluations in 1999</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>11. Philippines</td>
<td>Provincial health insurance program</td>
<td>Three municipalities, with combined population &gt;1 million, though fewer joined</td>
<td>Initiated in 1993–1994 Still functional in 1999 (no official end date)</td>
<td>USAID</td>
</tr>
<tr>
<td>12. Ukraine</td>
<td>Disease surveillance</td>
<td>Three oblasts (population?)</td>
<td>1997–1999</td>
<td>USAID</td>
</tr>
<tr>
<td>13. Russia</td>
<td>Health financing reform/ provider payment reform</td>
<td>One region of Russia, population of 3.5 million</td>
<td>1988–1991</td>
<td>None</td>
</tr>
<tr>
<td>15. Tanzania</td>
<td>Tanzania Essential Health Intervention Project (TEHIP)</td>
<td>Two districts, population of 700,000</td>
<td>1996–2001</td>
<td>Intl Development Research Center</td>
</tr>
<tr>
<td>16. South Africa</td>
<td>Initiative for Sub-District Support (ISDS)</td>
<td>Initially four sub-districts, now 21 districts (population?)</td>
<td>Phased: Initiated in 1996, with four sub-districts Still operating, now with 21 districts</td>
<td>None</td>
</tr>
<tr>
<td>17. Uzbekistan</td>
<td>Financing and management reforms of rural physician posts</td>
<td>Selected rayons of three oblasts</td>
<td>1999–2001</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
4.2 Pilot Policy Environment

In most instances the idea of a pilot appears to have evolved organically from previous policy developments and/or studies. There do not appear to be significant differences in this respect between donor funded and non-donor funded pilots. Niger provides a good example of where, prior to the pilot, there had been a long history of debate around the ideas and interventions investigated in the pilot (see Box 1). In Zambia, the piloting of financial decentralization built upon previous strategies for strengthening district management and upon prior research and discussion. Similarly in Thailand, multiple prior “attempts were made to increase the coverage and health service utilization of rural health centers” (Wibulpolprasert 1991), and after “thorough review” several substantive lessons had been learnt. The piloting of a variety of community financing schemes within the Thai health sector reflected the state of knowledge and debate at the time.

Box 1: Debate Around Health Financing Reform in Niger, Prior to the Implementation of Pilots

The issue of cost recovery first came onto the government policy agenda in the early 1980s. In 1986 two large health sector projects (World Bank and USAID funded) included substantial support for capacity building in this area. In the late 1980s European donors supported two different experiments in cost recovery. The European Development Fund used a social tax (similar to that later used in the pilot) to help finance care in one rural district, and Belgian Medical Cooperation used user fees to support one health post in Tibiri. These initiatives were later criticized for not having sufficiently clear evaluative elements. In 1989 the Ministry of Public Health, with USAID support, convened a conference on Cost Recovery in the Non-Hospital Sector with a broad group of stakeholders. One recommendation from this conference was that alternative cost recovery mechanisms be piloted. Further support came in 1991 when the new democratically elected government gave official support to local revenue raising measures within the health sector. These developments formed the foundations for the pilot that started in 1992.

Source: Diop and Baguirbi 1997

Many of the pilots reviewed were undertaken not in rapidly reforming environments, but in policy environments where there was inertia or uncertainty. Pilots seemed to be a way to get a policy process moving, even if there was not a high degree of consensus about what exactly needed to be done. This particularly appeared to be the case in the former Soviet Union during the 1990s. For example one key informant suggested that the Uzbekistan pilot was the result of a compromise between a government focused upon physical rehabilitation of facilities and outside experts who felt that some fundamental health system restructuring was necessary. Another informant suggested that in Russia “We were attempting to encourage a few people with good ideas to experiment and create examples within a generally very conservative system.” In such contexts pilots were not undertaken with great government support and a desire to “test out” a potential policy reform that would then be rolled out. Such pilots were pushed by outside actors (such as donor agency or international organization staff) as a way to generate demand for reform. The outside actors anticipated that if the general population, and sometimes health care providers, could see the benefits of the piloted reform then they might demand change from government.

Virtually all of the pilots reviewed engaged in some kind of policy dialogue or discussion with policymakers about the technical design. The use of workshops and conferences to build consensus about design and implementation was common across most of the pilots; frequently such meetings occurred at multiple levels of the health care system. However, virtually none of the pilots reviewed
had a clear strategy at the start about how to engage stakeholders and offset any potential opposition to the pilot, i.e., few pilots made explicit attempts to manage the policy environment. In a handful of instances lack of strategic focus upon engagement of policymakers did later threaten the pilot. In Egypt, for example, while the so-called D4 report on the Egypt Health Sector Reform program fully acknowledged the complexity of issues around constituency building and generating institutional and cultural change, the blueprints for the pilot reform focused very much on technical design. It was not until after work had began on implementation that it was acknowledged that the pilot would face severe problems in implementation unless much closer attention was paid to policy process issues. Thus further technical advice was sought on processes such as constituency building, how to mobilize resources for the pilot, and how to go about organizational restructuring. The non-technical “bureaucratic” issues proved to be some of the most challenging for the pilot. For example, changing the way in which staff were hired (to shift towards a more meritocratic system) faced considerable obstacles as it threatened the prevalent bureaucratic culture.

4.3 Pilot Design

Blueprints for pilot design range from the extremely detailed (as in Egypt and Rwanda) to much less detailed (as in Zambia). A further dimension across which pilots differed significantly was the extent to which design was centrally driven versus left to decentralized units. In the majority of cases reviewed, pilot design was conceived and elaborated at the central level, albeit with inputs from local actors. In just three cases, Poland, Russia, and South Africa, decentralized units appeared to be the driving force behind the design. In South Africa the agency responsible for implementing the pilots noted that: “The bottom-up and comprehensive approach to the process of health systems development is a key philosophy of ISDS” (ISDS 1998).

In South Africa, while general objectives for the pilots, a strategy for supporting sub-districts and districts, and the monitoring and evaluation framework were all devised and articulated centrally, the design of actual interventions was a district or sub-district level responsibility. In Poland, the pilot areas were selected through a competitive process that requested interested regions to prepare an outline of their proposal. In Russia, the pilot design was developed by a local (Kemerovo) research group in 1986. The Soviet Health Ministry later provided funding for this experiment and for pilots in another two regions.

Pilots in the Philippines and China demonstrated an alternative mix of central and local level control. In both these cases the central level set out broad guidelines covering the nature of the intervention (which was health insurance for people outside of formal sector employment), but local authorities were allowed substantial discretion in terms of implementational details. As a result, benefit packages, premiums, etc. varied.

4.4 Pilot Implementation

While a government agency was primarily responsible for pilot implementation, in most instances some degree of technical assistance was available to assist with the implementation. The extent of technical assistance varied (probably partly reflecting funding issues). In some cases (such as Egypt) an external technical advisory team associated with the project was resident in country. In others (such as the RCMS pilots in China) only sporadic external technical assistance was available.
Special units to manage the implementation of the pilot appear to have been established within the ministry of health in only two cases (for the health financing pilot in Niger and the health card pilot in Thailand).

Some pilots, such as the financial decentralization pilot in Zambia, appear to have adopted a philosophy that only very limited extra support should be provided to pilots during the implementation period. The stated rationale for this approach in Zambia was that in a rollout phase districts would only receive very limited support from the center, and therefore the success of the pilots needed to be determined under similar conditions. In all probability however this lack of support from the central ministry to pilot areas was equally an artifact of limited central level capacity (Bennett 1993). In the China RCMS pilot, a key informant noted that the large degree of discretion given to pilot regions was not necessarily desirable but due largely to lack of central level capacity to support the pilots.

A further implementation issue was how donor coordination efforts could slow down (or even halt) pilot implementation. This was particularly identified as an issue in Ukraine and Egypt. The Egypt pilot, while largely USAID funded, was meant to test a model that would later be rolled out by other donors (including the European Union and the World Bank). The implementation team invested considerable effort in securing the coordination and support of the various agencies involved in proposed rollout. The Ukraine pilot was largely USAID funded, but had several collaborating agencies (PATH, U.S. Centers for Disease Control and Prevention, BASICS Project) involved in the implementation. Resolving differences in strategy and vision between implementation partners turned out to consume quite a lot of energy and time.

4.5 Monitoring and Evaluation

Table 2 summarizes proposed M&E approaches and M&E actually implemented. A rough typology of M&E approaches emerges from the table.

For a subset of pilots (e.g., those in Niger, Rwanda, China, and the Tanzania CHF) a classical M&E framework was adopted. In all of these cases an impact evaluation (based upon household surveys) was complemented by other studies (particular those looking at changing attitudes amongst providers or clients, and quality of care at pilot facilities).

A second (smaller) subset of pilots appear to have rejected classical M&E designs and sought alternative approaches that were better able to reflect implementation processes. For example, the ISDS pilot in South Africa had an M&E approach that drew on participatory evaluation literature. Evaluation was seen as a means for stakeholders (including implementers) to reflect upon experience, and evaluation findings fed directly into strengthening implementation. Similarly, although no M&E framework was initially set out for the Egypt pilot, the framework finally used drew heavily upon the change management literature and considered the extent to which the pilot was able to effect sustainable change in the health care system.

Finally, a further group of pilots appear to have paid very little attention to M&E at the initiation of the pilot. Consequently any evaluative activity has had to rely on routine data and retrospective analysis. While these pilots may simply have had inadequate funding or insufficient foresight to build strong M&E activities into their plans, there is also some evidence to suggest that they did not put great stock by M&E findings, but anticipated that other aspects of the pilot (such as the capacity built) would be more important.
Table 2: Monitoring and Evaluation Approaches Proposed and Actually Used

<table>
<thead>
<tr>
<th>Country</th>
<th>M&amp;E Approach Proposed</th>
<th>M&amp;E Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Niger</td>
<td>Classic M&amp;E impact study: before/after, intervention/control design, complemented by additional studies</td>
<td>As proposed</td>
</tr>
<tr>
<td>2. Kyrgyzstan</td>
<td>Routine monitoring</td>
<td>Routine monitoring</td>
</tr>
<tr>
<td>3. Almaty, Kazakhstan</td>
<td>Routine monitoring</td>
<td>Unknown</td>
</tr>
<tr>
<td>4. South Kazakhstan</td>
<td>Classic M&amp;E impact study: before/after</td>
<td>Unknown</td>
</tr>
<tr>
<td>5. Alexandria, Egypt</td>
<td>No initial M&amp;E design</td>
<td>Later evaluation used change management evaluation framework</td>
</tr>
<tr>
<td>6. Rwanda</td>
<td>Classic M&amp;E impact study: before/after, intervention/control design, complemented by additional studies</td>
<td>As proposed</td>
</tr>
<tr>
<td>7. Thailand</td>
<td>No overarching M&amp;E design</td>
<td>Multiple policy-focused evaluations</td>
</tr>
<tr>
<td>9. Poland</td>
<td>Multifaceted M&amp;E from impact to aspects of implementation</td>
<td>Unknown</td>
</tr>
<tr>
<td>10. Zambia</td>
<td>No initial M&amp;E design</td>
<td>Retrospective evaluation combining routine quantitative information and data from interviews in case studies</td>
</tr>
<tr>
<td>11. China</td>
<td>Classic M&amp;E impact study: before/after (no controls), plus routine monitoring</td>
<td>Implemented as planned but differences across pilots in design, weakened findings as did differences in routine monitoring data</td>
</tr>
<tr>
<td>12. Philippines</td>
<td>None initially planned</td>
<td>Retrospective evaluation combining routine quantitative information and data from interviews</td>
</tr>
<tr>
<td>13. Ukraine</td>
<td>None initially planned</td>
<td>No proper evaluation conducted; routine monitoring information only</td>
</tr>
<tr>
<td>14. Russia</td>
<td>No overarching M&amp;E plan</td>
<td>Certain aspects of routine monitoring information reported.</td>
</tr>
<tr>
<td>15. Tanzania (CHF)</td>
<td>Classic M&amp;E impact study planned: before/after, complemented by qualitative studies and analysis of routine data</td>
<td>Baseline household survey available but cannot identify subsequent surveys. Qualitative and routine data reporting components completed.</td>
</tr>
<tr>
<td>16. Tanzania (TEHIP)</td>
<td>Multifaceted evaluation design from impact evaluation to changes in perceptions of community, changes in resource allocation, etc.</td>
<td>Certain parts of the evaluation package appear to have been implemented, but unclear whether complete evaluation was conducted.</td>
</tr>
<tr>
<td>17. South Africa</td>
<td>Multifaceted evaluation design with emphasis on stakeholder involvement in evaluation</td>
<td>Implemented as planned</td>
</tr>
<tr>
<td>18. Uzbekistan</td>
<td>Control/intervention design proposed, no details developed</td>
<td>Not implemented</td>
</tr>
</tbody>
</table>

Thailand’s health card scheme seems something of an exception to this categorization. While no overarching M&E design was developed, several evaluations were conducted. Most of these focused upon quite specific and highly policy-relevant aspects of the scheme. This approach reflects the fact that the health card experience was a phased pilot (i.e., it encompassed several different phases before rolling out) and that the government tried to target M&E activities around specific, current policy issues.
The Uzbekistan case is an unusual one; a full evaluation study was built into the original approach. However, once the government, which initially had been very skeptical of the pilots, realized that they were successful and politically advantageous, it was decided to roll them out without bothering with an evaluation.

No data were available on the costs of M&E vis a vis the costs of implementing the intervention.

U.S. literature on pilots has expressed concern about the short time frames within which evaluation results are required (Zwanziger et al. 2001). This is also a concern in several of the pilots studied here that followed classical M&E approaches. For example, the follow-up household survey in Niger took place a mere 6–8 months after the baseline survey. Rwanda also had barely 12 months from baseline to final surveys. In both of these cases significant findings emerged from the evaluative studies, but it is possible that the conclusions might have been different (or stronger) if a longer time period prior to evaluation had been allowed. In these contexts constraints upon timing of the final survey appear not to have been imposed by policymakers but the constraints of donor funding.

There is less discussion in the available documentation about how M&E results were used and disseminated. In some instances (as in Niger), very concerted efforts appear to have been made to disseminate and discuss findings with stakeholders at local, national, and international levels. Elsewhere much more limited dissemination appears to have occurred. In one instance there were indications that the national government found the prospect of “evaluation findings” being disseminated rather alarming. Consequently studies around the pilot were described as “research studies” rather than “evaluation studies.”

4.6 Impact and Rollout

For seven of the 17 pilots, information about pilot impact was inadequate or the pilot was too recent to be able to get a clear picture of impact and follow-up. For the remaining 10 pilots, Table 3 summarizes (i) whether the pilot was rolled out, (ii) what additional impacts (besides the core anticipated ones) were observed, and (iii) the role of the initial donor in the rollout.

In several cases it is somewhat difficult to understand what “rollout” or “scaling up” should properly be interpreted as. For example, in Niger, while a nationwide cost recovery policy was adopted shortly after completion of the pilot, this did not reflect what the pilot evaluation had suggested to be best practice. In the ISDS pilots in South Africa, it was never the intention that the set of interventions implemented in the pilot areas be rolled out “as is” across the country. However, the project worked hard to disseminate key lessons from the pilot to other areas.

In seven of the cases listed in the table (Egypt, Rwanda, Thailand, Zambia, Tanzania CHF, Ukraine, and Uzbekistan), a fairly clear-cut decision for nationwide rollout of the pilot model was made based upon the pilot experiences. In three of these cases, however, rollout has yet to be fully implemented.

Results of the pilot evaluation were not always critical determinants of rollout. There is evidence in a number of cases to suggest that findings from the pilot evaluation were ignored, overlooked, or dismissed in later policymaking. For example, in Niger the rollout model did not reflect the best practice identified by the pilot, in Zambia rollout was agreed upon prior to the evaluation, in Uzbekistan the evaluation was suspended because the government already knew that it wished to roll out the pilot, and in Tanzania rollout continued without changes in design despite several serious concerns raised in the evaluations.
<table>
<thead>
<tr>
<th>Pilot</th>
<th>Rollout/Scaling Up?</th>
<th>Additional Benefits Noted</th>
<th>Continuing Donor Support?</th>
</tr>
</thead>
</table>
| Niger            | Nationwide policy on cost recovery adopted (but policy promoted user fees not social tax favored by pilot) | Improved dialogue on health financing issues  
Positive impact on drug policy and human resource management | No, due to change in government and donor relations with government |
| Kyrgyzstan       | Rollout currently being implemented         | Model for health reforms throughout the Central Asia region                               | Yes, rollout financed by the World Bank       |
| Egypt            | Rollout planned                            | Hands-on experience of reforms at community level and with key stakeholders  
Identified barriers to effective reform implementation  
Educated policymakers and other stakeholders | Rollout to be financed by other donors (as planned) |
| Rwanda           | No clear government policy. May be rolled out as part of World Bank loan | Promoted democratic processes at local level                                              | Yes, but via a different project and less intensively |
| Thailand         | Rolled out                                 | Evaluations highlighted how scheme could be improved and Ministry of Health sufficiently flexible and responsive to make necessary adaptations | No, donor withdrew after pilots (as planned), government took over |
| Zambia           | Rolled out (decision made prior to evaluation) | Increased motivation among health workers involved in pilot. Evaluation highlighted weaknesses in policy for central government to address. | Yes, same donor involved in rollout (with others) |
| Philippines      | No (despite enabling legislation enacted prior to pilots. One evaluation suggests more technical assistance necessary) | Both technical and organizational lessons learned                                         | No                                            |
| Ukraine          | Ministry of Health agreed to roll out in 2000, but unclear whether adequate financing available | Report suggests pilots helped "institutionalize" approach, but unclear how.             | No                                            |
| Russia           | No, pilot overtaken by dissolution of USSR  | People who led pilot 1988-1991 developed new model for region post-1991. Appears to have been significant capacity building | N/A                                           |
| Tanzania (CHF)   | Yes, though quite mixed evaluation findings  |                                                                                  | Yes                                           |
| South Africa     | Pilot intervention not rolled out, but lessons being widely disseminated | Many lessons regarding, e.g., sequencing of reforms, strategies to motivate staff, case studies on how to integrate fragmented organizational structures | N/A                                           |
| Uzbekistan       | Pilot intervention rolled out               |                                                                                  | Yes                                           |
In virtually all cases, authors of reports on the pilots noted other benefits to the pilots that were not necessarily anticipated or planned for. The most commonly mentioned additional benefit was capacity building among participants. In most cases pilot implementation involved substantial formal and informal training activities. Respondents cited different elements of capacity building, from educating researchers and policymakers about alternative technical approaches, to experiential learning for providers and communities at the pilot site. Particularly for those pilots that reflected a radical departure from the status quo, it was often thought invaluable for stakeholders to “touch and feel” what the new model of health system organization looked like.

There is a very mixed picture as to whether a donor that took primary responsibility for supporting a pilot played a key role in its rollout or not. In several instances it was planned from the start that while one donor would support the pilot, another would support rollout. Such a division of labor was based upon which donor appeared best positioned to provide technical assistance versus those best able to raise large amounts of money for rollout. There were other cases, however, where donor-related bureaucratic issues appear to have stalled or at least slowed adoption of findings from a pilot.
5. Discussion

5.1 Factors Affecting the Appropriate Piloting Approach

The data showed a number of factors as important in determining the pilot approach:

- Point in the reform cycle at which the pilot project took place
- Pilot objectives
- Country capacity
- Extent of donor involvement
- Size of the country
- Extent of decentralization within the country

5.1.1 Point in Reform Cycle and Objectives

Pilots occurred at different points in the reform implementation cycle. Some of the pilots that were implemented in the former Soviet Union appear to have occurred before there was any real consensus that reform was necessary (as in Uzbekistan for example). In Niger, while there was consensus that some form of cost sharing needed to be implemented, there was no agreement about which strategy for raising revenue was the best. Hence the pilot tested two alternative approaches to revenue raising: user fees and a mandatory prepayment scheme. In other contexts, such as Rwanda, key features of the reform design had been agreed upon (all stakeholders in Rwanda were in favor of a community-based health insurance scheme), and the purpose of the pilot was more to fine-tune the reform design. Some pilots occurred at even more advanced stages of the reform cycle. For example, in Ukraine the technical design of the pilot appeared more or less fixed, but the pilot was important to ascertain what resources and support were necessary for the implementation phase.

Some pilots moved through different phases of the reform implementation cycle. For example, the Thai health card scheme started out with a broad reform direction, but little certainty or agreement about whether the precise mechanism proposed would be effective. After initial evaluations appeared to show success, emphasis of the pilots shifted much more to demonstration and capacity building.
The general literature review suggested that clarity of pilot goals was important for successful piloting. The current study strongly supports this conclusion. All partners need to be clear on the objectives in order for pilot design (and particularly M&E) to be appropriate. Frequently it appears that pilot objectives are not clear. Study researchers further propose that there is a close relationship between the point in the reform implementation cycle in which a pilot occurs and the likely objectives of the pilot. Five different types of pilot objectives emerge from the analysis:

I. **Generate demand for reform**: prior to reform even being on 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.

II. **Research**: to investigate empirically the advantages and disadvantages of an alternative mode of organization for the health system. A research approach would be used when there was a high degree of uncertainty about the benefits of a proposed system reform/policy or intervention, and no clear commitment to reform in this direction.

III. **Development or refinement of a health system design**: to develop or refine an alternative mode of organization for the health system through implementation, and monitoring and evaluation of the intervention. Generally this objective would apply when there is some degree of consensus about the need for and type of intervention, but considerable uncertainty about the details of the optimal design.

IV. **Demonstration of a completed design**: here there is considerable certainty and agreement about the alternative mode of health system organization among certain key stakeholders, but some stakeholders may have little sense of what the design actually looks like or need to be convinced of its utility. The pilot is undertaken to demonstrate how the new system would work, and demonstrate its feasibility.

V. **Capacity building**: even when there is complete certainty and agreement about a reform design, it may still make sense to undertake a pilot with the objective of building capacity among those who will be responsible for implementing the new design, and perhaps fine tuning the implementation process.

Figure 1 illustrates at what points in the reform implementation cycle these types of goals might be most pertinent. The unshaded boxes represent different aspects of the reform implementation cycle, from getting reform onto the agenda, through development of a supportive policy environment, design, implementation, and M&E. The shaded boxes represent the five main objectives of health system pilots described above and the figure shows how they commonly link to the reform implementation cycle.
5.1.2 Capacity and Donor Involvement

The extent of donor involvement is a potentially constraining factor upon what is feasible in terms of pilot approach. In general the amount of donor funding/support for a pilot appeared inversely related to the local capacity to implement a pilot. Those pilots that had substantial external funding and were located in relatively “low capacity” environments tended to have:

- A short time frame (e.g., Rwanda, Niger) – and a period of very intensive activity;
- A technical design that was clearly defined during the early phases of the activity;
- A strong classical monitoring and evaluation component;
- A more centrally driven orientation (as opposed to allowing local level experimentation within broad parameters).

By contrast, pilots without external funding (such as the provider payment reform experiment in Kemerovo, Russia, and ISDS in South Africa) tended to be at the opposite end of the spectrum on all these dimensions. Their time frames were longer, the pilot technical design was more likely to evolve over time rather than being fixed at the start, to be driven by local level priorities/concerns, and, if there was an M&E framework, it was less likely to be “classical” in nature.
5.1.3 Scale and Degree of Decentralization

A final factor affecting the pilot approach is the size of the country and consequently the feasibility of centrally planned rollout of a design. There tends to be greater local autonomy in large countries such as China, Kazakhstan, and South Africa, and pilot approaches in those countries reflected the fact that it was not generally feasible for the central level to dictate every aspect of the pilot or rollout. In fact in Kazakhstan, less-progressive elements in the central ministry favored suspending the pilot and reversing the movement to family group practices. A letter-writing campaign in support of pilot activities from the pilot region dissuaded the ministry from doing this.

In contrast, in smaller more centralized countries such as Kyrgyzstan and Niger, it may be much more feasible to first retain central control over a pilot and second roll out nationally a successful pilot design. The success of the Issyk-kul pilot in Kyrgyzstan was in large part attributed to these factors:

In Kyrgyzstan, the demonstration in Issyk-kul was very successful and has driven the entire reform process throughout Kyrgyzstan. Factors which appear to have contributed to this success include relative centralization of authority, Kyrgyzstan’s awareness of its small size, the desire of Kyrgyzstan to maintain one system throughout the country, and the lack of other health reforms occurring before the demonstrations were introduced. (O’Dougherty et al. 1999)

5.2 Dimensions of the Piloting Approach

Depending on the pilot objectives, the pilot approach could differ in a number of respects. From the studies reviewed here it seems that the main dimensions across which pilot approaches vary are:

- Centralized versus decentralized approach;
- Strong technical design from the start versus a more fluid evolving design;
- Strong effort to involve policymakers throughout the development and implementation of the pilot versus a more arms-length relationship with policymakers;
- A classical monitoring and evaluation approach versus a non-classical one;
- Time frame for completing the pilot.

5.2.1 Degree of Decentralization and Fluidity in Design

Pilot processes varied considerably in the extent to which they were decentralized. As for the health system itself, different aspects of pilots can be decentralized. In some cases the decision to conduct pilots, pilot design, and pilot M&E were all centralized, although the design allowed some sensitivity and adaptation to local contexts. This was broadly the case with the Rwanda pilot. In other cases the pilot design was much more open and fluid and allowed local level decision makers to

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1 For example the overarching pilot objectives, the details of the technical design, implementation responsibility, and monitoring and evaluation may all be more or less decentralized.
decide how they wished to proceed with implementation. This is the case with the South African ISDS pilot.

Decentralized approaches seemed problematic when there was a lack of a common M&E framework. For example a key informant on the China RCMS noted that it had been difficult to get comparable data upon even a core set of very simple indicators, because there was no commonality across pilots in monitoring systems. This problem was largely attributable to the lack of central level capacity to manage the pilot. A similar problem occurred in the Philippines, where substantial variation between pilots was also allowed. An evaluation of the Health Financing Development Project in the Philippines observed that a lot of basic information (such as enrollment rates), particularly for the Guimaras scheme, was missing (Taylor et al. 1997).

One positive consequence of allowing a more decentralized approach with considerable variation in pilot design was the scope for “cross pilot” learning. This was a clear design feature for the South African ISDS. In China “super-pilots” emerged, i.e., certain pilot areas had progressed much faster than others and were effectively used as models for the others.

In general it seems that more decentralized and fluid approaches to pilot design are appropriate when there is substantial local capacity, and the country in which the pilot is taking place is also large and rather decentralized. Logically, such pilots would also be appropriate at earlier stages in the reform implementation cycle, when objectives of the pilot focus more upon creating demand for reform and exploring alternative reform designs.

5.2.2 Policymaker Engagement

If a pilot is implemented primarily to get an issue onto a policy agenda then substantial policymaker engagement early on in the piloting process is unlikely. In such a situation, emphasis should be upon getting policymakers to understand and appreciate findings from the pilot. Similarly if a pilot is implemented at a late stage in the reform implementation cycle, with a primary objective of building capacity, much of the policy level work may have already been accomplished and policymakers may not need to be extensively engaged.

5.2.3 Monitoring and Evaluation

For pilots where the primary objective is research or the development or refinement of a health system design, M&E is a critical component of the pilot, and a strong classical M&E design is desirable. For example, in Niger, the objective of the pilot was to learn which of two competing designs for cost recovery was better, and the classical M&E framework used addressed this issue. For other pilots, where the primary objective is to demonstrate a completed design or generate a demand for reform, classical M&E approaches may not be appropriate, but M&E should still be undertaken to determine whether the pilot did achieve the objectives it set out for itself. For such pilots, alternative M&E approaches, such as the participatory evaluation approach used in the ISDS in South Africa, may be preferred.

Even with appropriate M&E, a direct relationship between evaluation findings and policy is unlikely: evaluation findings may only be partially, or not at all, incorporated into policy. There are several reasons for this:
Implementation is strongly politically driven, so, for example, in Zambia, rollout was agreed upon prior to pilot evaluation and in Uzbekistan evaluation was dropped when the government recognized the political success of the pilot;

It is easy to ignore negative results from pilots as it can be argued that implementation was part of the learning process and when rolled-out the design and implementation will be better;

It may be difficult to interpret the results of impact evaluations as not all exogenous factors can be controlled for; for example, in Zambia, an early study suggested negative impacts of decentralization on immunization in some districts, but this was most probably attributable to factors other than decentralization.

Both government and donor mentality/culture reduces the probability of people focusing on “negative” outcomes. For example, in Tanzania, the findings regarding CHF were certainly mixed, but the government, with World Bank support, still agreed to move ahead.

5.2.4 Length of Pilot

The length of time for which a pilot functioned seemed to be determined by the interests and relative power of different stakeholders. In some of the pilots studied, heavy donor involvement led to a shorter time frame than would otherwise have been the case. Short time frames may mean that evaluation results are not as reliable as they would otherwise have been. In situations where the programming of a particular donor prevents an adequate evaluation time frame, alternative solutions that extend the evaluation time frame should be explored.

There were considerable differences in the sample of pilots studied between ‘one shot’ pilots and pilots that were part of a much longer evolutionary process. The Rwanda and Niger pilots typify the ‘one shot’ ones, whereas the Thai health card scheme, the ISDS in South Africa, and Issyk-kul in Kyrgyzstan typify the evolutionary approach. The evolutionary approach is almost like a series of overlapping pilots, with various amendments made to the design and implementation process as problems, successes, and policy goals become clearer over time. Policy reform itself tends to be an ongoing continuous process (Walt 1994) and the substantial donor involvement in pilots in developing countries has perhaps distorted the piloting process, making it appear more like a one time implementation of reform, rather than an ongoing process.

5.3 Pilot Outcomes

“Rolling out” or “scaling up” the pilot intervention is not the only desirable outcome of a pilots. Indeed, as suggested by the pilot objectives (see section 5.1), the primary goal of a pilot may not necessarily be rollout of the tested intervention. A number of different pilot outcomes appear possible including:

- Creation of a demand for reform;
- Rollout or scaling up of the pilot design;
- Replication of pilot design without clear government policy supporting scaling up;
Rollout of a another design that has “learned from” the pilot design or was an alternative option to the pilot design;

Dissemination of implementation lessons – how and how not to go about implementing the intervention;

Capacity building – development of a self-sustaining capacity for policy analysis and implementation in the field of the pilot.

For reforms in reform-resistant policy environments or highly decentralized contexts, it may be unlikely that the government itself develops and implements policy to roll out the reform nationally. Nonetheless it is possible that well-designed reforms will be taken up and replicated without such central level intervention. This is what appears to have happened in Kazakhstan. This may also be the case if the reforms have a strong private sector focus and therefore do not depend substantially upon government intervention.

It was very common for those involved with the pilot to view capacity building to be a very important outcome. Sometimes informants felt that there was significant value to having an operational model that people could visit and see functioning. For reforms that reflect a particularly radical departure from the status quo, pilots were important to allow people to experience and hence understand better the reform. Pilots may play an important role in building/consolidating technical skills among counterparts as well as strengthening their ability to plan and strategize. Pilots also appear frequently to deliver benefits in terms of enhancing understanding how to go about implementing reforms. There was evidence that both government and donors learned from implementation modalities/processes adopted in the pilot.
The four lessons derived from pilots implemented during the 1970s and early 1980s still appear important today; pilot goals must be clear, local ownership and flexibility in implementation are important factors to consider, and short time frames can be problematic. This review builds upon the previous lessons in a number of important respects and leads to the following conclusions and recommendations:

**Improve documentation**

The process of pilot design and implementation are frequently only partially documented. Much of the pilot documentation that exists is in the gray literature and not easily accessible. There is no standardized or agreed format for reporting pilots. Without more standardized and complete documentation, it will be very difficult to move beyond the inductive approach used here to derive hard and fast conclusions about how pilots should be designed and implemented. Documentation of pilots should, at a minimum, cover the broad analytical dimensions included in the framework used for this study. Annex C contains a suggested framework for documenting pilots in the future.

**Be clear about pilot objectives**

There needs to be clarity about the objectives of pilots (and not just the technical objectives of the intervention). For health system reform pilots, objectives will probably reflect whatever point in the reform implementation cycle the reform has reached and the degree of consensus about the proposed reform. Hence pilot objectives may range from demonstrating alternative reform approaches with the aim of creating a demand for reform, to testing specific reform designs, to building capacity to implement reform. There is not any one “right time” in the reform implementation cycle to conduct a pilot, but exactly what the pilot is trying to achieve with respect to the reform process needs to be clearly articulated.

**Let pilot objectives drive overall pilot approach**

There is no single blueprint for a pilot approach. Instead, the objectives of the pilot should drive the overall pilot approach. For example, a pilot that aims to test an alternative health system design with the aim of refining the design and subsequently rolling it out nationwide will probably require substantial engagement with policymakers to ensure that the designs tested are acceptable, a rigorous classical M&E approach to identify the effects of reform, and a relatively centralized and inflexible approach. By contrast, a pilot that aims to create a demand for reform does not need the same level of policymaker engagement and could be highly decentralized in approach.

**Measure overall success of a pilot against its own objectives**

There is a tendency to perceive pilot success in terms of whether or not the pilot was adopted as government policy and rolled out nationally. However, even well-designed and well-implemented pilots will not necessarily be decisive in influencing policy take-up. Furthermore, pilots may achieve a variety of other outcomes, such as capacity development, adoption of an alternative reform design,
change in organizational culture, and development of a political consensus, all of which may be as important as rollout of the initial design. Ultimately, the success of a pilot is best measured against the objectives that were set for it. This adds further importance to being clear from the start about the objectives of a particular pilot.

**Investigate and further elaborate M&E approaches for pilots**

For pilots that focus upon enhancing understanding of how alternative health system designs affect health and system level outcomes, classical M&E approaches are appropriate. However, for pilots that have alternative objectives (such as creating demand for reform or demonstrating a design to stakeholders or building capacity for reform), different M&E approaches are needed that measure the extent to which the pilot achieved its initial objectives. Currently there is no best practice regarding M&E for these different objectives, and alternative M&E approaches needed to be experimented with and elaborated further.

**Prevent donor timetables from driving piloting approaches**

Bureaucratic regulations governing donor funding tend to lead to a “short-termist” approach that casts pilot projects as one shot interventions that occur and are evaluated within a relatively short time frame. In situations where donor funding is not critical to the implementation of the pilot (as was the case with pilots in Thailand, South Africa, and Russia – as well as demonstration projects in the United States) pilots are much more likely to be conceived as part of a continually evolving policy process. The short-termist approach is problematic if there is insufficient time from intervention to evaluation. If this is clearly the case, then alternative funding sources for evaluation need to be explored. Furthermore, understanding pilots to be part of an ongoing process to refine policy and build capacity for policy implementation would probably lead away from a fixation upon rollout or scaling up as the only desirable outcome, to a greater appreciation for the other outcomes of a pilot that include capacity development, and development of consensus about reform direction.
# Annex A: Health System Reform Pilots

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|           | 7. Thailand                     | Thai health card scheme<br>Initiated in the early 1980s on a pilot basis as the "community health fund," this voluntary health insurance has now grown to become an integral part of Thailand’s health insurance coverage | Thai government + GTZ, USAID and others over time | 7.1 Myers C.N. 1986. “Thailand’s Community Finance Experiments: Experience and Prospects.” Unpublished. Bethesda, MD: PRICOR, URC.  
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| 14. Russia   | Health financing reform       | Kemerovo City has since 1986 acted as an area in which to pilot complex health   | Russian government               | 14.1 Isakova et al. 1995. “Health insurance in Russia – the Kuzbass experience.” Health Policy 31: 157-159  
| 16. Tanzania | Essential Health Intervention Project (TEHIP) | To test World Development Report proposal that US$12 per head, if spent wisely, could lead to health gains, and that burden of disease and cost-effectiveness analysis data can be used in district planning. | Tanzanian government + World Bank and others | Gilson, L. 1997. TEHIP Consultant Report. South Africa: Centre for Health Policy, University of Witwatersrand and London School of Hygiene and Tropical Medicine. IDRC website: www.idrc.ca/tehip/TEHIPNews. |
17.3 ISDS website: http://www.hst.org.za/isds |
Annex B: Dimensions for Analyzing Pilot Projects

A. Demographics

Location – country, region
Size of country (region, etc.)
Date/duration
Focus
Contact agency or organization, if available
Pilot completed or ongoing?
Pilot rolled out?

B. Conceptualization

How would the project best be characterized?

- Pilot: “the testing of a particular approach on a small scale to determine its chances of success if implemented on an expanded basis”

- Demonstration: “demonstrates the merits of a selected system, i.e., given certain inputs, something can be accomplished.”

- Research: “a careful investigation aimed at identifying or testing new theories”

- Experiential: “designed to give stakeholders a hands-on sense of how a particular system might operate in a particular context”

- Mixed or unclear

Was a goal or purpose defined?
What was the goal or purpose?
How flexible were these goals, i.e., did goals shift during the project?
Was the pilot part of a broader reform strategy?

C. Design

How much relevant information for planning purposes was available to assist with the design process (e.g., a household survey, national health accounts, situation assessment)?
Was there a document providing clear direction on the broader reform strategy?
What type of planning activities were conducted and by whom?
Summarize the project design:

- To what extent did the project design represent a **radical** departure from the way in which the health system had previously operated? (This is related to the experiential goal – radical reforms may need pilots as people are not able to imagine what they look like.)

- How was the pilot area selected?

- To what extent were activities in pilot areas coordinated centrally versus allowing each pilot area to implement alternative interventions of their own design?

- To what extent was there consensus around the project design? To what extent was the project design contested?

- Were amendments made to the project design in order to make it more acceptable to certain groups of stakeholders?

Did the project engage in conscious consensus building efforts?
Did implementation of the pilot require the government to seek special dispensation from or amendment of existing laws?

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**D. Financing**

Who financed the pilot?
What resources costs were incurred by government?
Was there a strategy for government to absorb additional recurrent costs associated with the pilot?
Were the objectives of the project matched by the resources committed to it?

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**E. Implementation**

What was implemented? To what extent did implementation adhere to the original design?
Who implemented which components of the pilot? Did the implementation agencies selected appear appropriate?
Were changes to the implementation strategy deliberately made over time? If so, what were they and why?
Were changes to implementation responsibilities (who did what) made during the course of the project? If so what were they and why?
What was done during the life of the project to build organizational capacity to sustain reforms?
To what extent did successful project implementation require a shift in bureaucratic or organizational culture? To what extent was the project successful in achieving this?
Did bureaucratic obstacles to implementation exist? If so, to what extent were bureaucratic obstacles “bypassed” (as opposed to addressed) during implementation?
Were the staff directly involved in implementation enthusiastic/motivated by the project?
Who were project implementers accountable to and for what?
F. Monitoring and Evaluation

Which aspects of the project were subject to routine monitoring?
To what extent was this monitoring information disseminated and discussed among stakeholders?
Was there an initial evaluation design? If so, summarize briefly the evaluation design.
Were baseline studies conducted?
Was a final evaluation actually implemented?
Who conducted the evaluation?
To what extent were stakeholders consulted about and involved in the evaluation and evaluation design?
When was the final evaluation conducted and did this timing appear appropriate?
What were the evaluation findings?
How were evaluation findings disseminated (in-country workshops, academic articles etc…what was the balance between these alternative forms of dissemination?)

G. Impact

Was there a link to policy?

- Were laws or regulations changed as a result of the pilot?
- Was a conscious decision NOT to change policy made as a result of the pilot?

Did findings of pilot result in major policy changes? If so, what are the changes and when did they take place?
Was the piloted intervention rolled out to other areas?
What do different stakeholders in the pilot view to be the pilot’s primary benefits?
Annex C: Outline for Documenting Pilots

1. Pilot context
   ▲ Policy context: how did the idea of a pilot emerge, from whom, to what degree was there consensus around the idea?
   ▲ Who were the main actors involved in agreeing and setting up the pilot, what were their relative roles, in particular what role did donors play?

2. Pilot objectives
   ▲ What was the pilot trying to achieve (in terms of getting reform onto the agenda, researching a system strengthening strategy, refining a strategy, demonstrating, and capacity building)?

3. Pilot design
   ▲ What were technical aspects of pilot design?
   ▲ Was this a radical departure from the previous design?
   ▲ Were amendments made to the design to make it more acceptable to certain stakeholders?
   ▲ Was M&E an integral part of the pilot design?

4. Implementation and financing
   ▲ What was implemented and did it match the initial design?
   ▲ Who implemented which components of the pilot?
   ▲ How centralized/decentralized was the process?
   ▲ What was the time frame? (Please add table of chronology for whole pilot from conception to completion – see Niger case study, for example.)
   ▲ Did the pilot strategy change over time or remain fixed to initial vision?
   ▲ To what extent was capacity building part of implementation?
   ▲ Did bureaucratic obstacles affect implementation?
   ▲ Who financed the pilot?
   ▲ Were resources in line with the objectives of the pilot?
   ▲ How resources were spent? (Break down roughly, especially between implementation and M&E.)
5. M&E
   ▲ What was monitored and evaluated? If not much, why not?
   ▲ What was the evaluation design? (Summarize briefly.)
   ▲ Who conducted the M&E?
   ▲ What were the principal findings?
   ▲ How were M&E findings disseminated? To what extent were stakeholders involved in the M&E process?

6. Outcomes
   ▲ What were the primary outcomes of the pilot (in terms of changing policy and stakeholders’ views, capacity building, etc)?
   ▲ Was the pilot considered to be effective by the stakeholders involved?
   ▲ Update: what is happening now? What were the lasting effects?
Annex D: Bibliography


ISDS website: http://www.hst.org.za/isds


