

**LOCAL ACCOUNTABILITY**

by

**Martina Björkman, Ritva Reinikka and**

**Jakob Svensson**



**INSTITUTE FOR INTERNATIONAL ECONOMIC STUDIES**  
Stockholm University

Seminar Paper No. 749

Local Accountability

by

Martina Björkman, Ritva Reinikka and Jakob Svensson

Papers in the seminar series are published on the internet  
in Adobe Acrobat (PDF) format.

Download from <http://www.iies.su.se/>

ISSN: 1653-610X

Seminar Papers are preliminary material circulated to  
stimulate discussion and critical comment.

November 2006  
Institute for International Economic Studies  
Stockholm University  
S-106 91 Stockholm  
Sweden

# Local Accountability

Draft: November 2006

Martina Björkman\*, Ritva Reinikka<sup>o</sup>, and Jakob Svensson<sup>#</sup>

**Abstract:** Identifying and implementing incentives that give rise to a strong relationship of accountability between service providers and beneficiaries is viewed by many as critical for improving service delivery. How to achieve this in practice and if it at all works, however, remain open questions. Systematic evaluation of service delivery innovations to increase accountability can show what works, what doesn't and why, a first step to scaling up success. This paper discusses one such attempt: a randomized evaluation of a Citizen Report Card project at the community level in primary health care in Uganda. The Citizen Report Card project collected quantitative information on the quality and quantity of health service provision from citizens and public health care providers. This information were then assembled in "easy access" report cards that were disseminated, together with practical information on how best to use this information, in community, staff, and interface meetings by local community organizations in order to enhance citizens' ability to monitor the health care providers. The intervention improved both the quality and quantity of health service provision in the treatment communities: One year into the program, average utilization was 16 percent higher in the treatment communities; the weight of infants higher, and the number of deaths among children under-five markedly lower. Treatment communities became more extensively involved in monitoring providers following the intervention, but we find no evidence of increased government funding. These results suggest that the improvements in the quality and quantity of health service delivery resulted from increased effort by the health unit staff to serve the community.

---

This paper draws on Björkman and Svensson (2006). The project, Citizen Report Cards, was a collaborative effort involving many people. Foremost, we are deeply indebted to Frances Nsonzi for her contributions in all stages of the project. We also would like to acknowledge the important contributions of Gibwa Kajubi, James Kanyesigye, Ivo Njosa, Abel Ojoo, Omiat Omongin, Anthony Wasswa, Carolyn Winter, and the field and data staffs that we have worked with over a number of years. We wish to thank the Ugandan Ministry of Health, Planning Division, the World Bank's Country Office in Uganda, and the Social Development Department of the World Bank for their cooperation. Finally, we wish to thank the BNPP and Knowledge for Change Trust Funds and the Swedish International Development Agency, Department for Research Cooperation for their generous funding for this research.

\*IGIER - Bocconi University and CEPR. Email: [martina.bjorkman@unibocconi.it](mailto:martina.bjorkman@unibocconi.it).

<sup>o</sup>World Bank. Email: [rreinikka@worldbank.org](mailto:rreinikka@worldbank.org)

<sup>#</sup>Institute for International Economic Studies, Stockholm University, NHH, and CEPR. Email: [jakob.svensson@iies.su.se](mailto:jakob.svensson@iies.su.se).

# 1 Introduction

It is becoming increasingly clear that improvements in health and educational outcomes in developing countries require more than additional funds. A wealth of anecdotal, and recently more systematic evidence, show that provision of public services to poor people in developing countries is constrained by weak incentives of service providers - - schools and health clinics are not open when they are suppose to; teachers and health workers are frequently absent from schools and clinics and when present spend a significant time *not* serving the intended beneficiaries; equipment, even when functioning, is not used; drugs are misused; and public funds are expropriated.<sup>1</sup>

As argued in Chaudhury et al. (2006), this evidence is symptomatic of failures in "street-level" institutions and governance, i.e. the relationships of accountability at the provider level are dysfunctional. However, although these failures are a direct hindrance to economic and social development, until recently, they have received much less attention in the literature than have weaknesses in macro institutions. In this paper, we try to partly close this gap.

Two important relationships of accountability in service delivery are those of provider-to-state (which in turn is partly driven by that of politicians-to-citizens) and that of provider-to-the citizen/client.

On the former, the policymaker provides resources and delegates powers and responsibility for collective objectives to the service providers. Enforceability and answerability (getting information about performance) come into play when the policymaker also specifies the rewards (and possibly the penalties) that depend on the service provider's actions and outputs. In practice, enforceability and answerability is achieved through delegation, i.e. someone in the institutional hierarchy is assigned to monitor, control, and penalize/reward agents further down in the hierarchy (i.e. the provider). The tacit assumption is that more and better enforcement of rules and regulations will strengthen the providers' incentives to increase both the quantity and quality of service provision. This is by far the most common approach to hold providers accountable. However, in many poor countries, the institutions assigned to monitor the providers are typically weak and malfunctioning, and

---

<sup>1</sup>For anecdotal and case study evidence, see World Development Report 2004 (World Bank, 2004). Chaudhury et al. (2006) provide new and systematic evidence on the rates of absenteeism based on surveys in which enumerators made unannounced visits to primary schools and health clinics in seven developing countries. Averaging across countries, 35 percent of health workers were found to be absent. Banerjee et al. (2004) and Duflo and Hanna (2005) confirm these findings. On misappropriation of public funds and drugs, see Reinikka and Svensson (2004) and McPake et al. (1999).

may themselves act under an incentive system that provides little incentives to effectively monitor the providers.<sup>2</sup> As a result, the relationship of accountability of provider-to-state is in many developing countries is ineffective.

Partly in response to the failures of these traditional mechanisms of enforceability and answerability, it has been argued that more effort must be placed on strengthening beneficiary control, i.e. strengthen providers accountability to citizen-clients.<sup>3</sup> In theory, beneficiary control, or community-based monitoring, have at least three advantages. First, it is likely to be cheaper for the beneficiaries to monitor the providers since they (at least as a group) are better informed about the staff's behavior than the external agent assigned to supervise the provider. Second, they may have means to punish the provider that are not available to others, such as verbal complaints or social opprobrium (Banerjee and Duflo, 2006). Third, to the extent that the service is valuable to them, they should have strong incentives to monitor and reward or punish the provider - - incentives that the external agent assigned to supervise the provider may lack. However, there are also potentially large problems associated with community-based monitoring. Assembling information about performance ("answerability") and acting on this information are subject to possibly large free-riding problems: the community would like to ensure that the provider performs, but everyone would rather have someone else collecting information and monitoring performance. Second, beneficiary control is unlikely to work if citizens do not have a high demand for the service or have access to easily available (and affordable) options (private providers). In that case, the expected relative return to monitoring the public provider will be low. Third, the community must also have some direct or indirect way of sanctioning or rewarding the provider (or some higher level arm of the state). Finally, any project, and maybe community-based interventions in particular, may be subject to capture. For example, the elite may corrupt the collection or dissemination of information or may prevent citizens from speaking out or putting pressure on the provider. Thus, in the end, if and to which extent providers accountability to citizen-clients can be strengthened and if so to what extent such an institutional reform improves outcomes is an empirical question.

Empirically, the challenges when establishing whether strengthening providers'

---

<sup>2</sup>As an example, most anticorruption programs rely on legal and financial institutions – judiciary, police, and financial auditors – to enforce and strengthen accountability in the public sector. In many poor countries, though, these legal and financial institutions are often corrupt themselves. Not surprisingly, there is scant evidence that devoting additional resources to existing legal and financial government monitoring institutions reduce corruption (Svensson, 2005).

<sup>3</sup>See, for example, the 2004 World Development Report (World Bank 2003).

accountability to citizen-clients can improve outcome are twofold. First, an intervention has to be designed so that, if properly implemented, it enhances citizens/clients ability to monitor and control the provider. Second, to evaluate the impact of the intervention, one needs to establish a credible comparison group – a group of observational units (e.g. communities) which would, in the absence of the intervention, have had outcomes similar to those exposed to it.

Our approach to deal with the first challenge is to induce variation in two important elements of the accountability relationship: access to information, and participation and local organization capacity. Improved access to information about the beneficiaries' (as a group) experiences and entitlements is critical for citizens' ability to monitor service providers. Although people know whether their own child died or not, and whether the health workers did anything to help them, they typically do not have information on aggregate outcomes, such as how many children in their community did not survive beyond the age of 5 or where citizens, on average, seek care. Provision of information on outcomes and performance also improves users ability to challenge abuses of the system, since reliable quantitative information is more difficult for service providers to brush aside as anecdotal, partial, or simply irrelevant. Enhanced participation and local organization capacity is intended to minimize collective action problems and thus to get citizens to act on the information being provided.

Citizen report cards, which is the community-based program evaluated in Björkman and Svensson (2006), is one intervention where these elements take a central focus.<sup>4</sup> A Citizen report card is a tool to collect feedback from the users (and potential users) of public services (in this case primary health care providers) and disseminate this information back to the citizens/users so they have reliable information about how their community at large views the quality and efficacy of service delivery. It also provides the community with an opportunity to compare service delivery in their community vis-à-vis other communities, or across districts and municipalities in the country at large. The citizen report card methodology also emphasizes the active dissemination

---

<sup>4</sup>The best known examples of citizen report cards is probably those developed by the Public Affairs Centre in Bangalore, India (Paul, 2002). Citizens were asked to rate service access and quality and to report on concerns about public services, general grievances, and corruption. The information was summarized in report cards that were reported in the press and in civic forums. Citizen report cards have spread beyond Bangalore to cities in Kenya, Mozambique, the Philippines, Ukraine, and Vietnam. They have been scaled up in India to cover urban and rural services in 24 states. Overall, the citizen report cards have stimulated considerable media and political attention, and there is, despite any scientific evidence to back this up, general acknowledgment in policy circles of their positive contribution to service improvements (see e.g. World Bank, 2003).

of information in order to create awareness and invoke participation of the community.

We rely on a randomized design to deal with the second challenge. By randomly assigning communities into a treatment group (i.e. communities in which the Citizen report card project were implemented) and a control group (i.e. communities in which the Citizen Report Card project was not implemented), we are relatively confident about the absence of confounding factors. In addition, the intervention we evaluate was run on a large scale - - approximately 5,000 households from 50 "communities" from nine districts in Uganda have been surveyed in two rounds, and in total there are approximately 110,000 households residing in the treatment and control communities.<sup>5</sup> This increases our confidence in the external validity of the results.

Björkman and Svensson (2006) show that the community-based monitoring intervention (Citizen report card project) increased the quality and quantity of primary health care provision and resulted in improved health outcomes. One year into the program, utilization (for general outpatient services) was 16 percent higher in the treatment facilities. We also find significant differences in deliveries at the treatment facilities, and in the use of antenatal care and family planning. Treatment practises, as expressed both in perception responses by households and in more quantitative indicators (immunization of children, waiting time, examination procedures) improved significantly in the treatment communities. We find a small but significant difference in the weight of infants and a markedly lower number of deaths among children under-five in the treatment communities. No effect is found on investments or financial or in-kind support (from the government), suggesting that the changes in the quality and quantity of health care provision are due to behavioral changes of the staff. Moreover, we also find evidence that the treatment clinics started sharing information about treatment practises, availability of drugs, and service delivery in general, in response to the intervention and that the treatment communities began to monitor the health unit more extensively. This reinforces our confidence that the findings on the quality and quantity of health care provision resulted from increased efforts by the health unit staff to serve the community in light of better community monitoring.

---

<sup>5</sup>A "community" is operationalized as the households (and villages) residing in the five-kilometer radius around the facility; see section 5.

## 2 Literature Review

There is a growing empirical literature on the relationship between information dissemination (through the media) and accountability. Almost exclusively this literature studies the relationships of accountability of politicians to citizens and deal with one - - periodic elections out of several mechanism through which citizens can make politicians and policymakers accountable. For example, Strömberg (2003, 2004) considers how the press influences redistributive programs in a model of electoral policies, where the role of the media is to raise voter awareness, thereby increasing the sensitivity of turnout to favors granted. Besley and Burgess (2002) focus on the media's role in increasing political accountability, also in a model of electoral policies. Ferraz and Finan (2005), study the effects on the probability of the incumbent winning the election of making information about corruption in the local governments public. Besley and Prat (2005) study the interdependence between media and government accountability, but focus on the reverse relationship: how the government can influence what information will be provided. Our work differs in several important dimensions. First, we focus on mechanisms through which citizens can make providers, rather than politicians, accountable. Thus, we do not study the design or allocation of public resources across communities or programs, but rather how already existing resources are utilized. Second, we use micro data from households and health clinics rather the disaggregated national accounts data. Finally, we identify impact using an experimental design, rather than exploiting non-experimental data. The source of identification will thus come directly from a randomized experiment.

Reinikka and Svensson (2005a) also study the relationship between information, accountability, outcomes at the provider level. They exploit a newspaper campaign aimed at reducing the capture of public funds by providing schools (parents) with information to monitor local officials' handling of a large education grant program (capitation grant). They find that the newspaper campaign was highly successful. Head teachers in schools closer to a newspaper outlet are more knowledgeable of the rules governing the grant program and the timing of releases of funds by the central government. These schools also managed to claim a significantly larger part of their entitlement after the newspaper campaign had been initiated. Reinikka and Svensson (2005b) and Björkman (2006) take these results as a starting point to explore the effects of increased "client power" on school outcomes. They show that the reduction in capture had a positive effect on both enrollment and student learning. The newspaper campaign in Uganda, however, may not be easy to scale up in other sectors or for more complex government programs.



Specifically, the capitation grant is a very simple entitlement project and a relatively small item in a vast government budget. They also identify impact using a non-experimental approach, rather than an experimental design as we do here.

Improving governance and public service delivery through community participation is an approach that has gained prominence in recent years. For example, the 2004 World Development Report is entirely devoted to the concept of increasing poor citizens' voice and participation in service delivery in order to help them monitor and discipline providers. However, despite the enthusiasm for community participation and monitoring, there is little credible evidence on the impact of policy interventions aimed at achieving these. On the one hand, most comprehensive community based monitoring initiatives have not been rigorously evaluated. On the other hand, the few studies relying on rigorous impact evaluation strategies have not evaluated more comprehensive attempts to inform and involve the community in monitoring public officials.

On the latter issue, Olken (2005) evaluates different ways of monitoring corruption in a road construction project in Indonesia. In one of the experiments, invitations were sent out to village-level meetings where project officials documented how they spent project funds for local road construction. However, although the invitations increased the number of people participating in the meetings, the meetings were still dominated by members of the village elite. Moreover, corruption is not easily observable and project officials may very well be able to hide it when reporting on how funds were used. The data also reveal that corruption problems were seldom discussed in these meetings.<sup>6</sup> Thus, it is unclear to what extent non-elite community members were really more informed about corruption in the project, or if they had any means of influencing outcomes, in response to the intervention. Given these constraints, it is not surprising that Olken (2005) only finds minor effects of the intervention.

Using a randomized design, Banerjee, Deaton and Duflo (2004) evaluate a project in Rajasthan in India where a member of the community was paid to check once a week, on unannounced days, whether the auxiliary nurse-midwife assigned to the health center was present in the center. Unlike Olken's study, getting reliable information is not a concern here. In fact,

---

<sup>6</sup>The information problem is illustrated in the novel but burdensome way in which Olken (2005) estimates the extent of corruption. Specifically, Olken (2005) assembled a team of engineers and surveyors who dug samples in each road to estimate the quantity of materials used and then, using price information from local supplies, estimated the extent of "missing" expenditures. The corruption estimates were not reported in the village meetings.

external monitors confirmed the absence rates documented by the community members assigned to the project. The issue is rather how the informed community member could use his or her information on absenteeism to invoke community participation. The intervention had no impact on attendance. Thus, having one informed person, even if this is done in a structured and regular way, may not have much impact.

Jimenez and Sawada (1999) examine how decentralizing educational responsibility to communities and schools affects student outcomes. They study El Salvador's Community-Managed Schools Program, EDUCO, and its effect on students' achievement on standardized tests and attendance as compared to students in traditional schools. EDUCO schools are managed autonomously by community education associations whose elected members are parents of the students. The community education associations are responsible for hiring (and firing) teachers, closely monitoring teachers' performance, and equipping and maintaining the schools. The results show that enhanced community and parental involvement in EDUCO schools improved students' language skills and reduced student absences. A key estimation issue in this paper is endogenous program participation and although the authors instrument for program participation by using the proportion of EDUCO schools in a municipality, it is not obvious that they manage to obtain the causal treatment effect.

### **3 Community-based Monitoring**

How is accountability achieved in the public sector? To begin to answer this question, compare how accountability is achieved in many market contexts. In the market, dissatisfied consumers can successfully use the exit option; i.e., if the price is too high or the quality too low, the consumer can choose not to buy the good or buy from another producer. If many consumers act in the same way, this will influence the producer's profitability and, in the end, its survival in the market. The exit mechanism, however, may not work well in the public sector. First of all, in some cases there may be no easily available alternative to the local public provider - - say a primary health clinic. More important, the link between the public provider's performance and its financial position (or its staff's remuneration) is often weak or non-existent. Typically, public money does not follow the patients and hiring, salaries, and promotions are determined largely by educational qualifications

and seniority.<sup>7</sup>

In theory, governments have tried to compensate the lack of a well-functioning exit mechanism (or competition effect) by increasing control and supervision, i.e. to strengthen the relationship of accountability of the provider to the state. The political agency literature demonstrates that when individuals and households are well informed and have mechanisms to sanction politicians - - for example the right to vote them out of office - - politicians have potentially strong incentives to monitor and pressure public institutions to do what individuals and households, whom they represent, want.<sup>8</sup> However, the mounting evidence of failures in "street-level" institutions across the developing world suggest that this mechanism is clearly not enough.

Why doesn't the political system generate demands for stronger supervision and control of providers? There are at least three explanations for this. First, supervision and control are not performed solely by politicians themselves but instead delegated to various institutions and agencies. However, many poor countries lack the trustworthy machinery/institutions (judges, court personnel, police, auditors) needed to supervise and enforce rules. Thus, politicians, even if they wanted, are restricted (at least in the short run) in their attempts to supervise and control providers. Second, while well-functioning legal and financial systems can curtail obvious cases of mismanagement, they only partially constrain the discretionary powers of public sector managers and employees. The complexity of the tasks performed by a typical public sector unit and its informational advantage relative to the users of public services make it nearly impossible to design legal and accounting measures to address all types of misuse and thus to curtail less obvious cases of mismanagement (such as shirking, budget prioritization in favor of staff, political considerations). Third, campaigning on cracking down poor performance of health staff may not be a winning strategy as noted in Chaudhury et al. (2006). The providers are an organized interest group, whereas clients, particular in health, are diffuse. Those poor enough to use public clinics may have less political power than the organized and middle class health workers. In many countries, including Uganda, those who are moderately well off use private clinics. This pattern may create a self-reinforcing cycle of low quality, exit of the politically influential from the public sector, and further deterioration of quality (Chaudhury et al. 2006, Hirschman 1970). This effect is compounded by the fact that people lack information on service delivery outcomes. As stressed by Khemani (2006), although people

---

<sup>7</sup>This is the case in the health sector in Uganda but also the case more generally in developing countries, as discussed in Chaudhury et al. (2006).

<sup>8</sup>For references and textbook treatment of the literature, see Persson and Tabellini (2000).

have private information about health outcomes and whether the provider did anything to help them, they are unlikely to hold their remotely located politician accountable for this private experience. They typically do not have information on aggregate development outcomes, such as how many children in their community did not survive beyond the age of 5, where citizens, on average, seek care, and extent of immunization of children in the community, that are more likely to be linked to the actions of their political representatives. And even if they can guess that others in their neighborhood are suffering similar tragedies, people might be sceptical of using these estimates of actual development outcomes as an indicator of politicians' performance, focusing instead on simple actions they can directly observe, such as announcement of a price subsidy, provision of jobs, or infrastructure projects. Politicians will respond accordingly: they will focus attention to inefficient, and sometimes ineffective, policies of targeted transfers, shifting effort and resources away from supervision and reform of the public sector (Keefer and Khemani, 2005). The public, in turn, realizes these incentives and their expectations of what they can get from the providers that are meant to serve them are therefore low.

As mentioned earlier, partly in response to the failures in "street-level" institutions, it has been argued that more effort must be placed on strengthening beneficiary control.<sup>9</sup> In theory, beneficiary control, or community-based monitoring, have at least three advantages. First, it is likely to be cheaper for the beneficiaries to monitor the providers since they (at least as a group) are better informed about the staff's behavior than the external agent assigned to supervise the provider. Second, they may have means to punish the provider that are not available to others, such as verbal complaints or social opprobrium (Banerjee and Duflo, 2006). Third, to the extent that the service is valuable to them, they should have strong incentives to monitor and reward or punish the provider - - incentives that the external agent assigned to supervise the provider may lack.

In practise, community-based monitoring can take a variety of forms.<sup>10</sup> However, the different innovations share some common features. Specifically, a key ingredient is better information about the beneficiaries' (as a group) experiences and entitlements. Access to such information is viewed as critical for citizens' ability to monitor service providers. It also improves

---

<sup>9</sup>See, for example, the 2004 World Development Report (World Bank 2003).

<sup>10</sup>Examples of this approach include participatory budgeting in Porto Alegre, Brazil; citizen report cards in Bangalore, India; right to information on public works and public hearings or jan sunwais in Rajasthan, India; public information campaign to reduce capture of school funds in Uganda; and community scorecards in Malawi (see Reinikka and Svensson, 2004; World Bank, 2003; Paul, 2002; and Singh and Shah, 2002).

users ability to challenge abuses of the system, since reliable quantitative information is more difficult for service providers to brush aside as anecdotal, partial, or simply irrelevant. However, better information in itself may not be enough. For beneficiary control to be effective, the expected return to monitoring must be higher than to the alternatives - to either do nothing (for example, self-treatment rather than visiting the dysfunctional public health care provider) or use alternative providers (private for-profit or not-for-profit health providers). The relative returns depend on a variety of factors. Foremost, it depends on the community's ability to take collective action. Community-based monitoring is subject to possibly large free-riding problems: the community would like to ensure that the staff do their job, but everyone would rather have someone else to do the monitoring. For these reasons, many community-based monitoring initiatives place a strong emphasis on encouraging active participation by community members as a way to minimize the collective action problem. Second, if the beneficiaries do not have a high demand for the service, or if there are easily available options (private providers), the expected relative return to monitoring the public provider will be lower. Finally, the relative returns also depend on citizens' ability to either directly or indirectly sanction or reward the provider (or some higher level arm of the state).

Thus, there are both clear potential advantages and potentially large problems associated with community-based monitoring. In the end, if and to which extent community based monitoring works is therefore an empirical question. We turn to this next.

## 4 Institutional setting

Uganda, like many newly independent countries in Africa, had a functioning health care system in the early 1960's. Accessibility and affordability were relatively extensive. The 1970's and 1980s saw the collapse of Government services as the country underwent political upheaval. Health indicators fell dramatically during this period until peace was restored in the late 1980s. Since then, the Government has been implementing major infrastructure rehabilitation programs in the public health sector. Some health indicators have improved, while others have not. For example, the infant mortality rate stagnated at 88 deaths per 1,000 live births during the latter half of the 1990s (Republic of Uganda 2002, Moeller 2002) and maternal mortality has remained high and immunization rates stagnant since the late 1990's. This is despite a GDP growth rate of 64 percent and a 40-percent reduction in

consumption poverty in the 1990s (Appleton 2001)

As of 2001, public health services are free of charge. Anecdotal and survey evidence (see below), however, suggests that users still encounter varying costs and that such costs defer many, especially the poor, from accessing services.

The health sector in Uganda is composed of four types of facilities: hospitals, health centers, dispensaries (health center III), and aid posts or sub-dispensaries. These facilities can be government, private for-profit, or private not-for-profit operated and owned. The focus of this impact evaluation is on the dispensary (level III). Dispensaries are closest to the users and the lowest tier of the health system where a professional interaction between users and providers takes place. Most dispensaries are rural (89 percent). According to the government health sector strategic plan, the standard for dispensaries includes preventive, promotional, outpatient care, maternity, general ward, and laboratory services (Republic of Uganda 2000). Dispensaries are manned by a clinical officer (who can be a medical doctor). In our sample of facilities, on average, a dispensary was staffed by a clinical officer, three nurses (including midwives), and three nursing aids or other assistants.

The health sector in Uganda is decentralized and supervision and control of the dispensaries are governed at the district level. A number of actors are responsible for the functioning of the dispensaries. The most important local actor is the Health Unit Management Committee (HUMC), which is the main link between the community and the health facility. Each dispensary has an HUMC which consists of members from both the health facility staff (the in-charge) and non-political representatives from the community (elected by the sub-county local council). The HUMC should monitor drugs and finances disbursed to the facility, as well as the day-to-day running of the health facility (Republic of Uganda 2000). The HUMC can warn the health facility staff on matters of indiscipline, rudeness to patients and misappropriations of funds by recommending that the staff be transferred from the health facility. However, the HUMC has no authority to dismiss the health facility staff. In cases of problems at the health facility, the working practice is that the chairperson of HUMC raises the issue with the in-charge. If there is no improvement, the matter should be referred to the Health Sub-district which, if it fails, will refer the errand to the Director of District Health Services. The Health Sub-district monitors funds, drugs and service delivery at the dispensary. Supervision meetings by the Health Sub-district are supposed to appear quarterly but, in practise, monitoring is infrequent. The Health Sub-district, as well as the Director of District Health Services, have the authority to reprimand, but not dismiss, health facility staff for indiscipline. Cases of dismissal are reported to the Chief Administrative Officer of the

District who will then report such cases to the District Service Commission, which is the appointing authority for the district and has the authority to suspend or dismiss staff.

Community Based Organizations (CBOs) are also important actors in the health service delivery system at the local level. CBOs involved in health mainly focus on undertaking health education activities in antenatal care, family planning, HIV/AIDS prevention, etc.

## **5 The Program: Citizen Report Card**

In response to perceived continued weak health care delivery at the primary level, a pilot project (Citizen report cards) aimed at enhancing community involvement and monitoring in the delivery of primary health care was initiated in 2004. The project was carried out by staff from the World Bank and Stockholm University, in cooperation with a number of Ugandan practitioners, 18 community-based organizations, and the Uganda Ministry of Health, Planning Division. The 50 project facilities (all in rural areas) were drawn from nine districts in Uganda (see Björkman and Svensson, 2006, for details). Defining the catchment area (or the “community”) of each dispensary as the households (and villages) residing in the five-kilometer radius around the facility, approximately 110,000 households reside in the communities supposedly served by these 50 facilities.

The facilities were first stratified by location (districts) and then by the number of households residing in the catchment areas. From each group, half the units were randomly assigned to the treatment group and the remaining 25 units were assigned to the control group. Hence, within each district, there exist both treatment and control units.

The Citizen report card project had four components: (a) collecting quantitative information from users (citizens) and service providers using micro survey techniques; (b) assembling this information in "easy access" report cards; (c) disseminating the report cards to users and providers in such a way as to create awareness and invoke participation; (d) providing communities with practical information on how to best use the information to monitor and, in the end, improve the quality and quantity of service provision. These components are discussed next.

Data collection was governed by two objectives. First, data were required to assemble report cards on how the community at large views the quality and efficacy of service delivery. We also wanted to contrast the citizens' view with that of the health unit staff. Second, data were required to rigorously evaluate

the impact. To meet these objectives, two surveys were implemented: a survey of health care providers and a survey of health care users. These surveys were implemented both prior to the intervention (data from these surveys formed the basis for the intervention) and one year after the project had been initiated.

A quantitative service delivery survey (QSDS) has been used to collect data from the health service providers. The QSDS collected detailed quantitative data on performance and outcomes from the providers. In many respects, a QSDS is similar to a standard firm-level survey. The key difference is that it explicitly recognizes that agents in the service delivery system may have a strong incentive to misreport (or not report) key data. To this end, the data are obtained directly from the records kept by facilities for their own need (i.e. daily patient registers, stock cards, etc.) rather than from administrative records submitted to the local government. The former, often available in a highly disaggregate format, were considered to suffer the least from any incentive problems in record-keeping.

The user/household survey collected quantitative, and some perception based, data on both households' health outcomes and health facility performance. It included indices of performance parameters such as availability, access, reliability, quality and satisfaction. Data were collected on all different services provided by the health facility, i.e. daily out-patient service, family planning, immunization, and antenatal care. To the extent that it was possible, household responses were supported by patient records; i.e., patient exercise books and immunization cards. These records helped the household recall details about its visits to the health facility and also minimized the problem of misreporting. The post-intervention household survey also included a shorter module on health outcomes, including data on under-five mortality, and all infants in the surveyed households were weighed.

A stratified random sample of households within the catchment area of the facility were surveyed. In total, roughly 5,000 households have been surveyed in each round. In a typical community, households from six villages were surveyed.<sup>11</sup>

The data from the two pre-intervention surveys were analyzed and a smaller subset of the findings were assembled in report cards for the treatment localities.<sup>12</sup> The data included in the report cards were identified as key areas subject to improvement and include utilization, services, drugs and user charges and comparisons vis-à-vis other health facilities in the dis-

---

<sup>11</sup>See Björkman and Svensson (2006) for a detailed explanation of the design and implementation of the surveys.

<sup>12</sup>Thus, the design and size of the surveys were largely driven by the second objective – to evaluate impact.



trict and the country at large. Each treatment facility and its community had a unique report card summarizing the key findings from the surveys in a format accessible to the communities.

The report cards were translated into the main language spoken in the community.<sup>13</sup> To support the illiterate community members, posters were specifically designed and painted by a graphical artist so that otherwise complex information and concepts were easily understood. As the information in the report card was largely statistical, the posters conveyed the principal ideas such as where people go to seek medical care, reasons for this behavior etc.<sup>14</sup>

The information in the report cards was disseminated to citizens and providers using a "participatory rural appraisal approach".<sup>15</sup> The information dissemination process was facilitated by staff from Community-based Organizations (CBO). These facilitators were perceived to be a good conduit through which the Citizen Report Card project could be delivered, since they were in constant interaction with the communities and had a mandate drawn from a long-term presence on the ground working with the community. In addition, they could easily make follow-up visits and provide support to the communities.<sup>16,17</sup>

The objective of the dissemination process was threefold. First, to allow the community members themselves to analyze and draw conclusions from the summary findings in the report cards. Second, to develop a shared view on how to monitor the provider by discussing and decomposing the various elements of accountability in the primary health sector (*who* is accountable to *whom*; *what* is a particular actor accountable *for*; *how* can these actors account for their *actions*, and how are these elements reflected in the report card findings). Third, to ensure that the process is not captured by the

---

<sup>13</sup>In the end, the report cards were translated into six different languages: Ateso (Soroti), Lusoga (Iganga), Lango (Apac), Luganda (Masaka, Wakiso, Mukono and Mpigi), Runyankore (Mbarara) and Lugbara (Arua).

<sup>14</sup>See Björkman and Svensson (2006) for prototypes of these posters.

<sup>15</sup>Participatory rural appraisal (PRA) is a label given to a growing family of participatory approaches and methods with the common aim of enabling people to make their own appraisal, analyses, and plans. PRA evolved from a set of informal techniques used by development practitioners in rural areas to collect and analyze data (World Bank, 1996).

<sup>16</sup>The CBO facilitators were trained for seven days in data interpretation and dissemination, utilisation of the participatory methodology, and conflict resolution and management. In addition, a trained enumerator recorded the findings and the process of the CBO facilitated intervention.

<sup>17</sup>It should be noted that various CBOs (including some participating in the project) also operate in the control districts. Thus, the presence (and numbers) of CBOs in the project communities is similar across treatment and control groups.

elite or any other specific sub-group of the community. To this end, a variety of methods were used, including maps, diagrams, role-play, focus group discussions and action planning.<sup>18</sup>

The information dissemination process was conducted in three separate meetings: a community meeting; a staff meeting; and an interface meeting.

The community meeting was a two-day (afternoons) event with approximately 100 invited participants drawn from the surveyed villages in the catchment area of the health facility. The invited participants from each village consisted of a selection of representatives from different spectra of society (i.e. young, old, disabled, women, mothers, leaders). The facilitators mobilized the village members by cooperating with Local (Village) Council representatives in the catchment area. Invited participants were asked to spread the word about the meeting and, in the end, a large number of uninvited participants from other villages who had found out about the event also attended the meeting. A typical village meeting was attended by more than 150 participants per day.

In the community meeting, the facilitators shared the information in the report card with the community members using methods that aimed to solve the collective action problem. These participatory methods enabled the community members to make their own appraisals and plans for action and monitoring (see Björkman and Svensson (2006) for information on the specific methods used in the information dissemination process). In addition to disseminating findings in the report card, the facilitators also presented information on patients' rights and entitlements.<sup>19</sup> At the end of the meeting, the community's suggestions for improvements (and how to reach them without additional resources) were summarized in an action plan. The action plan contained information on health issues/services that had been identified as the most important to address; how these issues could be addressed; and how the community could monitor improvements (or lack thereof). After this two-day meeting, participants from each village were given posters and copies of the report card to bring back to their villages and share with their village members.

---

<sup>18</sup>See Björkman and Svensson (2006) for a more detailed description of the various methods.

<sup>19</sup>Information on patients' rights and entitlements was based on the Yellow Star program. In 2000, the MoH developed a quality of care strategy called the Yellow Star Program with the aim of improving and maintaining basic standards of care at government and NGO health facilities. The rationale behind this strategy was the general consensus that the quality of health services had been a major deterrent to service utilization. The Yellow Star Program lists a set of basic standards of quality. The standards fall into six categories: Infrastructure and Equipment; Management systems; Infection prevention: Information, Education and Communication; Clinical skills; and Client services.

The health facility staff meeting was a one-day (afternoon) meeting held at the health facility with all health facility staff present. In this meeting, the facilitators contrasted the information on service provision as reported by the provider with the findings from the household survey, i.e. the report card. The meeting enabled the providers to review and analyze their performance, and compare their performance with other health clinics in the district and across the country.

Following the community and the health facility meeting was an interface meeting with participants (chosen at the community meeting) from villages in the catchment area and all health facility staff. The objective of this meeting was to agree on a strategy for improved health care provision, based on the action plan developed in the community meeting and the discussions from the health facility meeting. During the interface meeting, the community and the health facility staff presented and discussed their suggestions for improvements. A role-play was used to disseminate the results from the survey and in this play, the community and the staff took reverse roles. The participants discussed their rights and entitlements and their roles and responsibilities as patients or medical staff. The outcome of this meeting was a joint action plan describing how the staff and the community collectively can best improve service delivery within the existing resource envelope. The plan contained and reflected the community's and the service provider's consensus on what needs to be done, how, when, and by whom. The joint action plan identified how the community was to monitor the provider and a time plan. Copies of the action plan were kept with the community and the health facility to support the monitoring process that followed.

The Citizen Report Card process involved both follow-up and repeat engagements with the aim of institutionalizing the process. To this end, the facilitators supported the communities with follow-up meetings. This was done as an integrated part of the CBO's ordinary work in the villages. Each community had approximately two follow-up meetings in the subsequent months.

After a period of six months, the communities and health facilities were revisited and a mid-term review was conducted. The mid-term review was a repeat engagement on a smaller scale which included a one-day community meeting and a one-day interface meeting and it aimed at tracking the implementation of the action plan, possibly drawing new areas for concern, and coming up with a new set of recommendations for improvement. The action plans made in the earlier intervention were printed on posters and they formed the ground for the discussions in the mid-term review. The facilitators presented the information on the printed action plans, followed by focus group discussions on the progress. During the interface meeting, the health facility staff and the community members jointly discussed sug-

gestions on actions for improving or sustaining the progress of the previously determined action plan. In cases where improvements had not been made, new recommendations were agreed upon and noted in the updated action plan and in cases where improvements had been made, suggestions for sustainability were recorded in the plan. The updated action plan was kept with the community and the health facility to assist in the continued work and monitoring process.

## **6 Evaluation Design and pre-treatment characteristics**

Empirically, the challenge when establishing whether (and if so which) institutional arrangements can foster a stronger degree of accountability between service providers and citizens, is to establish a credible comparison group – a group of observational units (e.g. communities) which would, in the absence of the intervention, have had outcomes similar to those exposed to the intervention. To achieve this, we rely on a randomized design, i.e. facilities were first stratified by location (districts) and then by the number of households residing in the communities. From each group, half the units were randomly assigned to the treatment group and the remaining 25 units were assigned to the control group. Since treatment status was randomly assigned across health units (and their catchment areas), program participation is not correlated in expectation with either the observed or the unobserved health unit or community characteristics.

Prior to the intervention, the treatment and the control groups were similar in most characteristics. Thus, the randomization appears to have been successful. As reported in Björkman and Svensson (2006), there are no statistically significant differences across the two groups in utilization (number of outpatient treated and deliveries per month), use of different service providers (including drug shops) in case of illness, waiting time, equipment usage, government funding, citizens' perceptions of staff behavior, catchment area characteristics (such as the number of villages and households in catchment area), distances from the health facility to the nearest local council and government facility, supply of drugs, user-charges, or health facility characteristics (such as type of water source, availability of drinking water at the facility, whether a separate maternity unit is available, electricity shortages).

## 7 Results

Because of the randomized design of the project, causal effects can be determined by simply comparing means across treatment and control groups. Below we discuss the main findings reported in Björkman and Svensson (2006). Björkman and Svensson (2006) study four sets of outcomes: utilization (or quantity of health care), treatment practises (as a measure of quality of health care), health outcomes (a measure of both quantity and quality), and price setting. They also study what observable initiatives were taken by the communities to strengthen their role as monitors of the health provider.

The intervention had large and significant effects on utilization. Björkman and Svensson (2006) exploit two sources of information on utilization. First, detailed information on the number of out-patients, the number of deliveries, the number of antenatal care patients, and the number of people seeking family planning services were assembled by counting the number of patients from health facility's daily patient records, maternity unit records, the antenatal care register, and the family planning register. Second, detailed information on each household member's decision of where to seek care in case of illness that required treatment were collected in the household survey.

Based on facility level records, the differences in means across treatment and control groups are positive and significant across all four services (out-patients, deliveries, antenatal care patients, and people seeking family planning services). One year into the program, utilization (for general outpatient services) is 16 percent higher in the treatment facilities. The difference in the number of deliveries at the facility (albeit starting from a low level) is even larger (68 percent). There are also positive and significant differences in the number of patients seeking antenatal care (20 percent) and family planning (63 percent).

A similar pattern is evident from the utilization data collected from households. There is a positive and significant difference in the use of the project facility between the treatment and control facilities following the intervention. The increase, 15 percent higher in the treatment group as compared to the control group, is similar to that found using facility records. The utilization pattern derived from the household data also reveals that households in the treatment community reduced the number of visits to traditional healers and the extent of self-treatment following the intervention, while there are no statistically significant differences across the two groups in the use of other providers (not-for-profit and for profit facilities). Thus, households in the treatment communities switched from traditional healers and self-treatment to the project facility in response to the intervention.

Björkman and Svensson (2006) use two complementary approaches to

measuring the quality of care. First, they study behavioral (and measurable) changes at the facility level, such as immunization of children, waiting time, examination procedures, and household's perceptions of the quality of care. Second, they study changes in health outcomes (which is a function both of the quality and quantity of care).

Households in the treatment communities reported large improvements in the quality of care. For example, a majority (54 %) of the households surveyed report that the quality of services provided at the project facility has improved in the first year of the project, while most households in the control communities (53 %) perceive that the quality of services provided at the project facility has become worse (or at least not improved). Similar changes are apparent in households' perceptions about the change in staff politeness during the first year of the project, change in availability of medical staff, attention given to the patient by the staff when visiting the project facility, and whether the patient felt he/she was free to express herself when being examined.

The results using perception data are confirmed by looking at quantitative indicators of service delivery. For example, most (50 percent) of the patients in the treatment community reported that equipment (for instance thermometer or blood pressure equipment) was used during the examination. However, in the control communities a majority (59 percent) reported that no equipment was used the last time the respondent (or the respondent's child) visited the project clinic. The difference in mean outcomes are statistically different.<sup>20</sup>

Another indicator of quality is waiting time, defined as the difference between the time the user left the facility and the time the user arrived at the facility minus the examination time. On average, the waiting time was 133 minutes in the control facilities and 117 in the treatment facilities. Again the difference is significant.

Immunization coverage is another quality measure. The household survey collected information on how many times (doses) in total each child has been

---

<sup>20</sup>There is no easily measured indicator that can be used to evaluate whether and how patients in the project facilities receive better treatment. Naturally, the relevant treatment is conditional on illness and the condition of the patient. However, since the project was randomly allocated across communities, there is no reason to believe that the type of illness and the condition of the patients should be systematically different across groups. It is possible that, due to the intervention, patients with more severe illnesses seek care at the project facilities in the treatment area and that this, in turn, can have a direct impact on observed treatment practises. However, the evidence does not support this claim. We have information on reported symptoms for which the patient seeks care (from the household survey). There are no systematic differences in reported symptoms across treatment and control communities. See Björkman and Svensson (2006) for details.

immunized with polio, DPT, BCG, and measles. To the extent that this is possible, these data were collected from immunization cards.

According to the Uganda National Expanded Program on Immunization (UNEPI), each child in Uganda is suppose to be immunized against measles (one dose at 9 months and two doses in case of an epidemic); DPT (three doses at 6 weeks, 10 weeks and 14 weeks); BCG (one dose at birth or during first contact with health facility); and polio (three doses, or four if delivery takes place at the facility, at 6 weeks, 10 weeks, 14 weeks). To account for these immunization requirements, we create dummy variables taking the value one if child  $i$  of cohort (age)  $j$  had received the required dose(s) of measles, DPT, BCG, and polio, respectively, and zero otherwise. We then compare mean outcomes, i.e., the share of children for each age group (0-12 months, 13-24 months, 25-36 months, 37-48 months, and 49-60 months) that has received the required dose(s) of measles, DPT, BCG, and polio, respectively.

There are significant positive differences between the treatment and the control community for all four vaccines, although not for all cohorts. Approximately 40 percent of children under one year have received at least one dose against measles. There is no significant difference between treatment and control groups. For one-year old children (13-24 months), however, we find a significant difference. In the control group, 83 percent of the children have been immunized, while the corresponding number in the treatment group is 5.2 percentage points higher. A smaller, but significant, difference also shows up in the cohort of three year old children (37-48 months). For polio we find positive and significant differences in all but the oldest age group (regressions 6-9). The difference is largest for the youngest cohort (4.7 percent points). This corresponds to a 13 percent increase in the treatment group compared to the control group. For DPT, we find a significant positive difference in two out of five cohorts and for BCG we find a positive and significant difference (7 percentage points) in the youngest cohort. Thus, while we do not find significant differences in all cohorts, immunization coverage increased significantly following the intervention.

The main objective of the community-based monitoring project was to improve health outcomes in rural areas of Uganda where health indicators have been stagnating. To achieve this objective, the project intended to enhance communities' abilities to monitor the public health care provider, thereby strengthening providers' incentives to increase both the quality and the quantity of primary health care provision. As reported above, the project was successful in raising both utilization and, to the extent that this can be measured, quality of services. Next, we turn to health outcomes.

Data on two health outcomes were collected. First, we collected infor-

mation on whether the household had suffered from the death of a child (under five years) in 2005 (i.e., the first year of the community monitoring project). Second, all infants (i.e. all children under 18 months of age) and children (between 18 and 36 months of age) in the surveyed households were weighed.<sup>21</sup>

3.2 percent of the surveyed households in the treatment community had suffered from the death of a child in 2005. The corresponding number in the control community is 4.9 percent. The difference, 1.7 percentage points, is statistically significant. With a total of approximately 55,000 households residing in the treatment communities, the treatment effect (0.017) corresponds to 546 averted under-five deaths in the treatment group in 2005 following the intervention.<sup>22</sup>

Given the sample size, we pool the data on the weight of infants and study the differences in the average weight of infants between 1-18 months and 19-36 months, respectively. The intervention resulted in an average increase in weight of 0.13 kilograms for the group 1-18 months. For the average child (age nine months and weight 7.9 kilograms), this represents a 1.6 percent increase in weight between the treatment and the control group one year into the program. Albeit small, the difference is statistically significant. There is no significant difference in weight of children between 18-36 months of age.

As of 2001, public health services are free of charge. However, the survey evidence indicates that patients still encounter varying costs, although a large majority of patients do not pay (informal) user fees. In the pre-treatment data, 7 percent of the households surveyed reported having to pay user charges for out patient services; approximately 15 percent had to pay for injections (when needed); and 67 percent paid for delivery.<sup>23</sup>

The intervention had no significant effect on the share of households that needed to pay for drugs or delivery. However, it had an impact on general out patient services as well as on injections

Although the Citizen report card project was a structured intervention, it left plenty of room for the communities to choose if and how to react to the information being disseminated. The aim of the project was that the report card information would provide a spark for community action but also provide citizens with hard data through which the health facility could

---

<sup>21</sup>See Björkman and Svensson (2006) for details.

<sup>22</sup>Note, though, that since villages closer to the facility were oversampled, the sample of treatment villages is not fully representative of the total population in the treatment communities.

<sup>23</sup>Average payment (for those that had to pay) was UGX 1,435 (USD 0.80) for out-patient service, UGX 370 (USD 0.21) for injections, and UGX 4,955 (USD 2.75) for delivery.



be evaluated/monitored. We turn now to some evidence on if new initiatives and processes were initiated or strengthened as a result of the intervention.

To avoid influencing local initiatives, we chose not to have enumerators spending time in the field after the first round of meetings. Therefore, we were not able to document all actions taken by the communities in response to the intervention. Still, we have two sources of information on how processes in the community changed following the intervention. First, the CBOs involved in disseminating the report card information submitted reports on what type of changes they observed. The evidence from these reports suggests that the project influenced the way in which the providers were being monitored. This evidence is supported by facility and household survey data as well as data assembled through a Local (village) council survey.

According to the CBO reports, the community-based monitoring process that followed the first set of meetings (community, facility and interface meetings) was a joint effort mainly managed by the village local councils, HUMC (Health Unit Management Committee) and the community members. In the communities, the performance of the health facility was discussed during village meetings. The Local Council survey confirms this claim. A typical village had, on average, six village meetings in 2005. In those meetings, 89 percent of the villages discussed issues concerning the project health facility. The main subjects of discussion in the villages concerned the action plan (30 percent of the villages) or parts of it such as behavior of the staff (49 percent of the villages), drug deliveries at the health facility (48 percent of the villages), and that government health services are supposed to be free of charge (68 percent of the villages).

The CBOs report that concerns raised by the village members were carried forward by the local council to the health facility or the HUMC. However, although the HUMC was viewed as an entity that should play an important role in monitoring the provider, it was in many cases viewed as being ineffective. As a result, mismanaged HUMCs were re-elected, while others felt the pressure from the community to act and follow up on the issues covered in the action plan. Once more, these reports are confirmed in the survey data: more than one third of the HUMCs in the treatment communities were reelected or received new members following the initial intervention. Further, the CBOs report that the community also monitored the health facility staff during health visits to the clinic, when they rewarded and questioned issues in the action plan which had or had not been addressed. Tools such as suggestion boxes (where community members could anonymously leave suggestions for change or comment on the lack of change that was supposed to have taken place), numbered waiting cards (to ensure a first-come-first serve basis), and duty rosters, were also put in place in several treatment facilities.

To the extent we can measure it, the CBO reports are confirmed by the survey data. One year into the project, treatment facilities are more likely to have suggestion boxes (no control facility had these, while 36 % of the treatment facilities did) and numbered waiting cards (only one control facility had these, while 25 % of the treatment facilities did). There are also differences between the treatment and control facilities in the extent to which information is posted on free-services and patient's rights and obligations.<sup>24</sup>

Households in the treatment communities are also better informed about various aspects of service provision following the intervention. For example, a significantly larger number of households have received information about the importance of visiting a health clinic for medical treatment and the dangers of self-treatment and for family planning. The treatment community is slightly more likely (although most households do not know this) to know when the project facility receives drug deliveries. There are also differences between the treatment and control group in the extent to which the performance of the staff at the project facility is discussed in Local Council meetings, and whether, one year into the project, community members know anyone who is a member of the HUMC and have knowledge of the HUMC's roles and responsibilities.

## 8 Conclusion

In response to the failures of traditional mechanisms of enforceability and answerability (the relationship of accountability of provider to state), it has been argued that more effort must be placed on strengthening beneficiary control, i.e. strengthen providers accountability to citizen-clients. However, factual evidence in support of this strategy has, to date, been missing. In this paper, we have studied the effects of enhancing rural communities' ability to hold primary health care providers accountable. We find that both the quality and the quantity of health service provision improved in the treatment communities: One year into the program, average utilization was 16 percent higher in the treatment communities; the weight of infants higher, and the number of deaths among children under-five markedly lower. Treatment communities became more extensively involved in monitoring the providers following the intervention and the results suggest that the health unit staff responded by exerting a higher effort into serving the community. By strengthening the providers' incentives to serve the poor, health provision and, in the end,

---

<sup>24</sup>These data were collected through visual checks by the enumerators.

health outcomes can be significantly improved.

Although the Citizen report card project appears to be successful, it is too early to use these findings as a basis for continued or increased support and funding for various activities with the aim of strengthening beneficiary control. There are still a number of outstanding issues. One important concern is the extent to which the processes initiated by the Citizen Report Card project are sustained. Since the project is ongoing and scaled up to involve an additional 25 health facilities, this process can be studied over time. It is also possible that even better results can be achieved by combining bottom-up monitoring (community based monitoring) with a top-down approach (supervision and possibly sanctions/rewards from someone in the institutional hierarchy assigned to monitor and control the primary health care providers). The evaluation of such a project is currently underway.

It is also important to subject the project to a cost-benefit analysis and relate the cost-benefit outcomes to other possible interventions. This would require putting a value on the improvements we have documented. To provide a flavor of such a cost-benefit analysis, consider the findings on averting the death of a child under-five. The intervention resulted in 1.7 percentage points fewer child deaths during the first project year in the treatment communities. To the extent that this number is representative of the total treatment population, this would imply that approximately 500 under-five deaths were averted as a result of the intervention. A back-of-the-envelope calculation then suggests that the intervention, only judged on the cost per death averted, must be considered to be fairly cost-effective. The estimated cost of averting the death of a child under-five is \$300 in the Citizen report card project. This can be compared to the numbers reported by Filmer and Pritchett (1999). They contrast the cost of averting the death of a child derived from increasing public expenditures on health (regression estimates range from \$47,112 to \$100,927), to more conventional health interventions based on cost-effectiveness estimates of the minimum required cost to avert a death (ranges from \$1,000 to \$10,000 for diarrheal diseases, from \$379 to \$1,610 for acute respiratory infection, \$78 to \$990 for malaria, and \$836-\$3,967 for complications of pregnancy).<sup>25</sup>

---

<sup>25</sup>These numbers should be viewed with extreme caution. For the cost-benefit estimates of the Citizen report card project, it should be noted that the sample is, by construction, not fully representative of the population (since villages closer to the facility were oversampled). Naturally, the 95 percent confidence interval would also include a much smaller estimate of program impact than the 1.7 percentage points used here. Moreover, since the largest cost item was the collection of data and these data were used partly in the intervention and partly to evaluate impact, the cost is a rough estimate. Filmer and Pritchett's (1999) estimates of the cost of averting a child death derived from increasing

The Citizen report card project was implemented in nine different districts of Uganda and reached approximately 55,000 households. Thus, in this dimension, the project has already shown that it can be brought to scale. Still, this project is a controlled experiment in some dimension. Specifically, data collection and data analyses were supervised by the evaluators. To the extent that these tasks were delegated to local actors in the various communities, they could have been subject to capture. This is an issue on which our findings do not shed any light. What our findings strongly suggest, though, is that experimentation and evaluation of new tools to enhance accountability should be an integral part of the research agenda on improving outcomes of social services. This is an area where at present, research on what works and what does not work is clearly lagging behind policy.

---

public expenditures on health are subject to a variety of estimation problems and the health interventions based cost-effectiveness estimates of the minimum required cost to avert a death are, as noted by Filmer and Pritchett, at best suggestive.

## References

- Appleton, Simon (2001), "The Rich Are Just Like Us, Only Richer': Poverty Functions or Consumption Functions?", *Journal of African Economies* 10(4): 433-469.
- Banerjee, Abhijit and Esther Duflo (2005), "Addressing Absence", *Journal of Economic Perspectives* 20 (1): 117-132.
- Banerjee, Abhijit, Angus Deaton and Esther Duflo (2004), "Wealth, Health, and Health Service Delivery in Rural Rajasthan", *American Economic Review Papers and Proceedings* 94(2): 326-330.
- Banerjee, Abhijit, and Ruimin He (2003), "The World Bank of the Future", *American Economic Review* 93(2): 39-44.
- Besley, Timothy, and Robin Burgess (2002), "The Political Economy of Government Responsiveness: Theory and Evidence From India", *The Quarterly Journal of Economics* 117(4):1415-51.
- Besley, Timothy, and Andrea Prat (2005), "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability", *American Economic Review*, forthcoming.
- Björkman, Martina (2006), "Does Money Matter for Student Performance? Evidence from a Grant Program in Uganda", Working Paper, IIES, Stockholm University.
- Björkman, Martina and Jakob Svensson (2006), "Power to the People: Evidence from a Randomized Experiment of a Citizen Report Card Project in Uganda", Working Paper, IIES, Stockholm University.
- Chaudhury, Nazmul, Jeffrey Hammer, Michael Kremer, Karthik Muralidharan, and F. Halsey Rogers (2006), "Missing in Action: Teacher and Health Worker Absence in Developing Countries", *Journal of Economic Perspectives* 20(1): 91-116.
- Esther, Duflo and Rema Hanna (2005), "Monitoring Works: Getting Teachers to Come to School", Working Paper, Department of Economics and Poverty Action Lab, MIT.
- Ferrez, Claudio and Frederico Finan (2005), "Exposing Corrupt Politicians: The Effect of Brazil's Publicly Released Audits on Electoral Outcomes", Working Paper, Department of Agricultural and Resource Economics, University of California, Berkeley.
- Filmer, Dean and Lant Pritchett (1999), "The Impact of Public Spending on Health: Does Money Matter?", *Social Science and Medicine* 49(10).

- Jimenez, Emmanuel and Yasuyuki Sawada (1999), "Do Community-Managed Schools Work? An Evaluation of El Salvador's EDUCO Program", *The World Bank Economic Review* 13(3): 415-441.
- Keefer, Philip and Stutti Khemani (2005), "Democracy, Public Expenditures, and the Poor: Understanding Political Incentives for Providing Public Services", *World Bank Research Observer*, 20: 1-27.
- Khemani, Stuti (2006), "Can Information Campaigns Overcome Political Obstacles to Serving the Poor," mimeo, The World Bank.
- Malena, Carmen, Reiner Forster and Janmejy Singh (2004), "Social Accountability: An Introduction to the Concept and Emerging Practice", *Social Development Papers* 76, Participation and Civic Engagement Group, The World Bank.
- McPake, Barbara, Delius Asiimwe, Francis Mwesigye, Mathias Ofumbi, Lisbeth Ortenblad, Pieter Streefland and Asaph Turinde (1999), "The Economic Behavior of Health Workers in Uganda: Implications for Quality and Accessibility of Public Health Services," *Social Science and Medicine* 49(7): 849-865.
- Moeller, Lars Christian (2002), "Uganda and the Millennium Development Goals", Human Development Network, World Bank, Washington D.C, Processed.
- Olken, Ben (2005), "Monitoring Corruption: Evidence from a Field Experiment in Indonesia", NBER Working Paper No.11753.
- Persson, Torsten and Guido Tabellini (2000), *Political economics: Explaining Economic Policy*, MIT Press, Cambridge, MA.
- Reinikka, Ritva and Jakob Svensson (2004), "Local Capture: Evidence from a Central Government Transfer Program in Uganda", *The Quarterly Journal of Economics* 119 (2): 679-705.
- Reinikka, Ritva and Jakob Svensson (2005a), "The Power of Information: Evidence from a Newspaper Campaign to Reduce Capture", Working paper, IIES, Stockholm University.
- Reinikka, Ritva and Jakob Svensson (2005b), "Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda", *Journal of the European Economic Association* 3 (2-3): 259-267.
- Reinikka, Ritva and Jakob Svensson (2005c), "Working for God", Working paper, IIES, Stockholm University.
- Republic of Uganda (2000), "National Health Policy and Health Sector Strategic Plan 2000/01-2004/05", Ministry of Health, Kampala
- Republic of Uganda (2002), "Infant Mortality in Uganda 1995-2000: Why the Non-Improvement?", Discussion Paper No. 6, Planning and Economic Development, Kampala.

- Samuel Paul (2002), *Holding the State to Account: Citizen Monitoring in Action*, Books for Change, Bangalore.
- Singh, Janmejaya and Meera Shah (2002), "Community Score Cards in rural Malawi", World Bank, Washington, D.C. Processed
- Strömberg, David (2003), "Mass Media and Public Policy", *European Economic Review* 45(4-6): 652-63.
- Strömberg, David (2004), "Radio's Impact on Public Spending", *The Quarterly Journal of Economics* 119(1): 189-221.
- Svensson, Jakob (2005), "Eight Questions about Corruption", *Journal of Economic Perspectives*, 19 (3): 19-42.
- World Bank (2003), *Making Service Work for the Poor People*, World Development Report 2004, World Bank and Oxford University Press.
- World Bank (1996), "World Bank Participation Sourcebook", Environmental Department papers No. 19, Washington.
- World Health Organization (2006), *World Health Statistics 2006*, WHO Press, Switzerland.

## SEMINAR PAPER SERIES

The Series was initiated in 1971. For a complete list of Seminar Papers, please contact the Institute.

2005

734. *Mats Persson, Torsten Persson, and Lars E.O. Svensson* Time Consistency of Fiscal and Monetary Policy: A Solution
735. *Matthias Doepke and Fabrizio Zilibotti* Patience Capital and the Demise of the Aristocracy
736. *Alessandra Bonfiglioli* How Does Financial Liberalization affect Economic Growth?
737. *Alessandra Bonfiglioli* Equities and Inequality
738. *Virginia Queijo* How Important are Financial Frictions in the U.S. and Euro Area?
739. *Assar Lindbeck* Sustainable Social Spending
740. *Vasco Cúrdia and Daria Finocchiaro* An Estimated DSGE Model for Sweden with a Monetary Regime Change

2006

741. *Mats Persson and Claes-Henric Siven* The Becker Paradox and Type I vs. Type II Errors in the Economics of Crime
742. *Assar Lindbeck and Mats Persson* A Model of Income Insurance and Social norms
743. *Assar Lindbeck, Mårten Palme and Mats Persson* Job Security and Work Absence: Evidence from a Natural Experiment
744. *Martina Björkman* Income Shocks and Gender Gaps in Education: Evidence from Uganda
745. *Anna Larsson* Monetary Regimes, Labour Mobility and Equilibrium Employment
746. *Harry Flam and Håkan Nordström* Trade Volume Effects of the Euro: Aggregate and Sector Estimates
747. *Mirco Tonin* The effects of the minimum wage in an economy with tax evasion
748. *Stefano DellaVigna and Ethan Kaplan* The Fox News Effect: Media Bias and Voting
749. *Martina Björkman, Ritva Reinikka and Jakob Svensson* Local Accountability

ISSN: 1653-610X  
Stockholm, 2006



Institute for International Economic Studies