Evaluating the implementation of the Tanzanian National Voucher Scheme: A case study from the Ruvuma region, Tanzania

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Executive summary

In Tanzania, malaria is recognised as the number-one killer disease in the country, responsible for about 100,000 deaths annually, most of whom are children under five years of age. Most hospital visits and admissions are attributed to malaria and the cost to the national economy is estimated at US$350 million annually. In 2004, the Tanzanian government launched its nation-wide malaria voucher scheme to address the problem, after a pilot project had demonstrated the scheme's feasibility.

In the Tanzania National Voucher Scheme, vouchers may be used by pregnant women and mothers to buy mosquito nets to prevent malaria. At community level, facility-based health workers issue vouchers to pregnant women on their first antenatal visit or mothers with infants when the infants are nine months old and brought to the clinic for immunisation. Women are directed to a nearby shop to redeem the voucher by paying the difference between the value (face value) of the voucher and the prevailing market price of the net (called 'top-up money'). The vendors redeem the vouchers at wholesalers, usually through new purchases, and wholesalers redeem the vouchers with the implementing agency, usually a non-governmental agency. Having bought the net, the woman returns to the facility for further instructions from health workers on how to use it.

The main aims of this study were to identify and analyse any implementation gaps in the voucher scheme and analyse the role of power in the implementation process. Power relations between managers and health workers in implementing the scheme were investigated to find out how they impact on the outcomes of the scheme. The study was implemented as part of the policy analysis work in the Regional network for equity in health in east and southern Africa (EQUINET) co-ordinated through the Centre for Health Policy, Wits University and University of Cape Town.

The study was undertaken in three phases. First, we reviewed national policy documents and consulted regional and district annual reports, as well as evaluation reports of the ongoing scheme, which were undertaken during 2005 and 2007. We also reviewed past studies and research reports on malaria, in general, and anti-malaria nets, in particular. Interviews were conducted with relevant national officials. The second phase involved the selection of districts and health facilities to be surveyed, based on appropriate performance criteria. For the purpose of this study, the utilisation rate of the vouchers was adopted as a measure for judging the performance of districts and health facilities. We selected two districts from the Ruvuma region: Mbinga and Namtumbo, which are two rural areas that can be usefully contrasted. Two facilities were selected from each district, namely one high-performing facility and one poor-performing facility. In the third phase, a detailed investigation of the four health facilities was conducted to identify and analyse implementation gaps in the voucher scheme and examine the role of power in the implementation process.

The study found that, at national level, prioritisation affects implementation because malaria is not being accorded the national priority it deserves, despite it being one of Tanzania's biggest health challenges. A lack of funding is felt most severely at facility level. For example, in one district, the total budget for the health sector during 2007/8 was 357 million shillings, of which HIV and AIDS activities were allocated nearly half, (163 million shillings). HIV and AIDS units in the surveyed districts were allocated four-wheel drive vehicles, while the malaria focus persons (MFPs) have none. No resources were allocated specifically for voucher distribution, which results in periodic shortages of vouchers. More often, distribution (and supervision) has to be

done in conjunction with visits for other duties such as giving vaccinations and distributing essential drugs.

In both districts, those involved in the voucher scheme have other duties to perform, limiting the time and effort they can spend on the scheme. In the low-performing district, the MFP is also a clinical officer and spends more time seeing patients than working on voucher issues. The same situation applies to the reproductive and child health coordinators, who are usually more concerned with immunisation and birth control than vouchers. Most importantly, however, no additional incentives are available. In other programmes, such as for AIDS, allowances given to attend seminars and conduct awareness campaigns provide workers with some extra income.

The study points to one major success in the scheme: health workers reported that the number of malaria patients and the number of severe malaria cases had declined. But these gains may be undermined by some implementation problems. The managerial approach to implementation has typically been top-down, with weak links between different levels of the hierarchy, especially between district managers and facility health workers. This allowed health workers to exercise unfair power over mothers and pregnant women seeking nets and treatment at two of the surveyed facilities. In these two high-performing facilities, health workers showed more interest in the scheme, but were violating due process by demanding that women pay for vouchers, when they are actually entitled to get them free. When women cannot afford to pay, their clinic cards are retained and they are unable to access further services. Subsequent analysis suggests that this violation of women's rights may be motivated by personal gain. Health workers exercised discretionary power over patients by using their professional status to withhold services and knowledge (patients were kept ignorant because they were not informed about their rights to receive vouchers). Lack of education on the part of beneficiaries of the scheme needs to be addressed to prevent further abuse of power.

In contrast, health workers in the two poor-performing facilities adopted a hands-off attitude to the scheme and devoted little time and energy to it. District managers' limited supervisory role may partly explain this attitude, as they have no control over resources or finances and there is no incentive for them to get involved. In one facility, there was some indication of corruption, where the vendor who supplied the vouchers was a close relative of the clinical officer, and was appointed without any mandate to do so.

A significant equity issue in the distribution of nets is rising prices. The top-up money for nets has risen from 750 shillings to between 1,500 and 2,000 shillings at present, which is an increase of over 100% in just four years. While vendors blame manufacturers and manufacturers blame rising production costs, fewer mothers and pregnant women are able to buy nets because they are becoming unaffordable. Further investigation is needed to find out if increases are genuinely necessary or motivated by personal gain.

The study, building on previous studies in Tanzania and elsewhere, demonstrated that a top-down approach to policy intervention is contributing to implementation gaps. Inadequate preparation, a lack of proper coordination and managerial weakness have combined to produce less-than-optimal outcomes. Policy interventions, no matter how good their intentions, are prone to implementation gaps that can be attributed to the nature and exercise of power among actors. The voucher scheme is not just a tool for ensuring access and equity in health care delivery – it must be carefully considered in the context of those entrusted with the task of overseeing its implementation. In other words, further analyses of the power relations between actors in the scheme need to be undertaken and findings should be considered when developing future interventions.

1. Introduction

The health care system in Tanzania has undergone numerous policy changes in the last few decades, influenced in part by the political and economic transformations of the 1980s and 1990s, when neo-liberal economics were imported into Africa. These changes were a significant departure from the policies pursued in the 1960s and 70s, which were more human-rights based and focused on accessibility and equity, with the government offering health care services that were officially free of charge (but for which informal payments were often made).

The second half of the 1970s witnessed a change in Tanzania's economic fortunes, culminating in the economic crisis of the 1980s and the subsequent adoption of the World Bank's structural adjustment programme (SAP), which took the form of conditions attached to loans that required the government to cut back on social spending, like health. This led to some reversals in health policies and raising doubts about access and equity in health care delivery, especially among the poor and other vulnerable groups (Mwangu, 2003; Lorenz and Mpemba, 2005; Smithson, 2006). For example, the introduction of the national 'cost-sharing' scheme, where health facility users must pay user fees, out of their own pockets, to contribute towards the service they receive tended to exclude those who could not pay, such as the poor, the aged, women and infants, so government introduced policies to offer partial subsidies to these vulnerable groups, such as payment exemptions to cost-sharing schemes. Regrettably, experience has shown that policy interventions like these often suffer serious implementation challenges (Kamuzora and Gilson, 2007; Newbrander and Sacca, 1996).

This study investigates what challenges have been experienced in implementing a similar policy intervention – the Tanzanian National Voucher Scheme (TNVS). The study was implemented as part of the policy analysis work in the Regional network for equity in health in east and southern Africa (EQUINET) co-ordinated through the Centre for Health Policy, Wits University and University of Cape Town. The nation-wide TNVS programme, popularly known in KiSwahili as 'Hati Punguzo' or HP, offers subsidised vouchers for insecticide-treated nets (ITNs) to pregnant women and infants to help protect them from contracting malaria, the country's number one killer disease, responsible for about 100,000 deaths annually - mostly children under five years of age. This costs the national economy about US$350 million annually.

How does the voucher scheme work? At community level, facility-based health workers issue vouchers to pregnant women on their first antenatal visit or to mothers with infants when the infants are nine months old and brought to the clinic for immunisation. They are directed to a nearby shop to redeem the voucher by paying the difference between the value of the voucher and the market price of the net (called 'top-up money'). Vendors redeem the vouchers with wholesalers, usually through new purchases, who then redeem them with the implementing agency. Having bought the net, the woman returns to the facility for further instructions from the health workers on how to use it.

The study identifies and analyses implementation gaps and the role of power in the implementation process. More specifically, it aims to:

- critically examine the implementation process and its impact on the outcomes of the voucher scheme;
- determine factors influencing relationships among actors and how they impact the process; and
- examine the influence of managers and health workers in implementing health policies.

Figure 1, the TNVS implementation framework shows how the various actors described above interact. At the national level, the National Malaria Control Programme (NMCP), which operates in the Directorate of Preventive Services, is the main implementing agency responsible for the TNVS, through its ITN Unit, including: mobilising resources, coordinating implementing agencies and issuing policy guidelines. Since the scheme is donor funded through multilateral and bilateral agencies such as the Global Fund and United States Agency for International Development (USAID), continued donor support has been crucial to its sustainability. These donors interact with the Ministry of Health and managers at NMCP (through the national malaria advisory committee).

Four private actors are also coordinated at the national level, even though they actually operate separately in the regions and districts. In Tanzania's decentralised health care system, the district is the main implementing unit responsible for the day-to-day provision of health services through its health facilities. Council health management teams (CHMTs) are responsible for managing the health system, including the voucher scheme. Malaria focal persons (MFPs) and district reproductive and child health coordinators (DRCHC) are more directly involved in the voucher scheme.

The Mennonite Economic Development Agency (MEDA), a non-governmental organisation (NGO), was contracted to provide logistics for the scheme. It is mainly responsible for voucher management: distributing vouchers to districts, tracking vouchers, collecting stubs and redeeming vouchers. The regional manager is responsible for overseeing activities in all districts in the region. World Vision (Tanzania), another NGO, was contracted to offer training services to those participating in the scheme at district and facility levels. Population Services International (PSI), also an NGO, was contracted to provide social marketing services. It is also responsible for raising awareness through various media outlets and providing technical support to the mosquito net manufacturers. Monitoring and evaluation (M&E) was commissioned to Ifakara Health Research and Development Centre (IHRDC) and the London School of Hygiene and Tropical Medicine (LSHTM).

In the current organisational arrangements of the voucher scheme, regional administration seems to have been by-passed in the sense that they play very little role in programme activities and MEDA's regional representative has little contact with regional health managers. Vouchers are delivered directly to the districts by the regional representative for subsequent distribution to participating health facilities by district managers, malaria focal persons and district reproductive and child health coordinators.

The Ruvuma region was selected for this study because malaria is endemic to the area. It consists of five administrative districts: Mbinga, Namtumbo, Songea (rural), Songea (urban) and Tunduru, totalling 22 divisions, 100 wards and 522 villages (*mitaa*). The estimated population is 1,235,162 people, with 602,967 males and 632,195 females. About 83% of the population live in the rural areas (URT, 2006) and about 16% of the population are under the age of five. *Table 1* provides population figures and numbers of health facilities for the five districts.

Figure 1: TNVS implementation framework

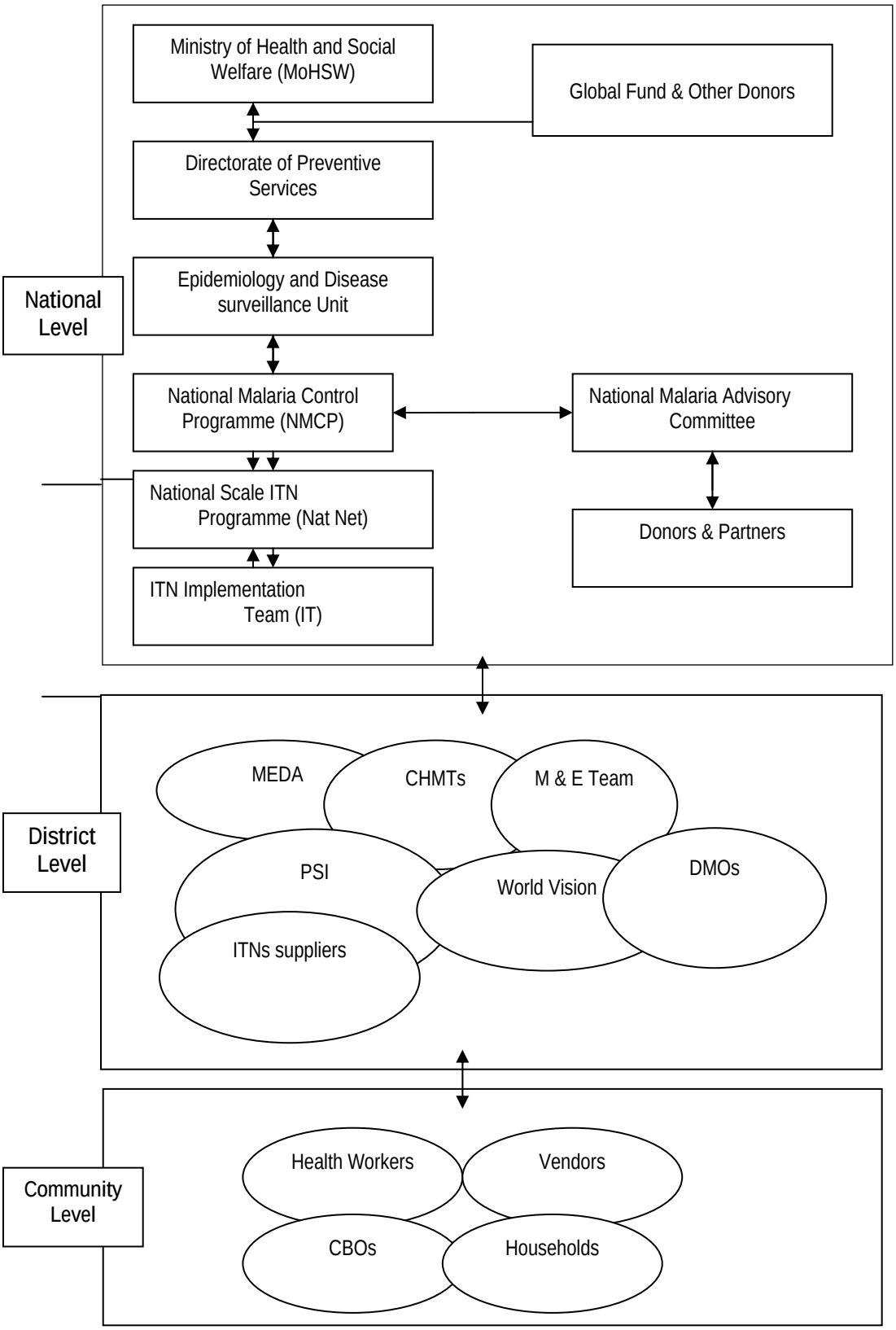

Table 1: Population and numbers of health facilities in the Ruvuma region, 2006

District	Population	Number of health facilities
Mbinga	447,758	70
Namtumbo	191,508	39
Songea (rural)	174,668	41
Songea (urban)	151,430	10
Tunduru	269,798	47
Total	1,235,162	207

Source: MEDA, 2007; Regional Annual Health Report, 2006.

The available health statistics are not encouraging: the under-five mortality rate is 185/1,000, maternal mortality stands at 155/100,000 and the doctor-patient ratio is 1:58,731 (as opposed to the recommended ratio of 1:25,000). Malaria is the leading cause of hospital visits, admissions and deaths in the region. During 2005 it accounted for 57% of hospital cases and 15% of deaths (Regional Annual Health Report, 2006). *Table 2* shows the utilisation rates for pregnant women vouchers (PWVs) and infant vouchers (IVs) for the five districts in the Ruvuma region.

Table 2: Utilisation rates for pregnant women vouchers and infant vouchers in the Ruvuma region, 2007

Pregnant women vouchers			Infant vouchers		
No. issued	No. redeemed	Utilisation rate (%)	No. issued	No. redeemed	Utilisation rate (%)
30,550	19,944	65.3	10,450	4,071	38.9
20,700	11,518	55.6	5,000	1,202	24
14,000	8,466	60.5	4,800	1,566	32.6
9,150	6,335	69	3,150	1,604	50.9
22,400	14,143	63.1	7,250	3,861	53.6
96,800	60,406	62.4	30,650	12,304	40

As can be seen from the table, three districts – Mbinga, Tunduru and Songea (urban) – have utilisation rates above the regional average for PWVs, with the remaining two districts below average. A similar pattern emerges with infant vouchers, although utilisation rates are much lower than for PWVs because the PWV scheme has been in place for a much longer period (18 months), while the IV scheme is a recent addition to the programme and has been running for about six months. In *Table 3*, we have combined the two schemes to compare performance of the districts.

Table 3: Combined utilisation rates for pregnant women vouchers and infant vouchers in the Ruvuma region, 2007

District	No. of health facilities	No. of vouchers issued	No. of vouchers redeemed	Utilisation rate (%)
Mbinga	70	41,000	24,015	58.6
Namtumbo	39	25,700	12,720	49.5
Songea (rural)	41	18,800	10,032	53.4
Songea (urban)	10	12,300	7,939	64.5
Tunduru	47	29,650	18,004	60.7
Region	207	127,450	72,710	57.1

In both situations, Namtumbo district emerged as the poorest performer, with a combined utilisation rate of 49.5% (55.6% for pregnant women vouchers and 24% for infant vouchers), and it was selected for this study on that basis. The second district, Mbinga, was not the best performer, but it was selected because it has the highest percentage of participating health facilities (34%), serves 447,758 people, and distributes almost a third of the vouchers for the region (41,000) compared with the best performer - Songea which only has 5% of health facilities and distributes only 17,971 vouchers. Mbinga and Namtumbo are both rural, which makes them ideal for comparison because one would expect more similarities than differences in terms of attitudes, beliefs, social values and so on, and therefore, observed implementation gaps are more likely caused by the specific actions (or inactions) by actors in the process, rather than other contextual variations.

Having settled on two districts, the next step was to select health facilities – two good performers and two bad performers in each district. The selection was based on data from the long-running pregnant women voucher scheme, which started in June 2007. Data showed that 23 health facilities (33%) in Mbinga district had utilisation rates of more than 75%, with five of them above 90%. One facility had a utilisation of 92% and we selected it as the high performer in the district (hereafter referred to as 'Facility 1a'). Only nine facilities (13%) had utilisation rates of less than 50% and we selected a low-performing facility with a utilisation rate of 32% (hereafter referred to as 'Facility 1b').

In Namtumbo district, only two health facilities (about 5%) had utilisation rates of more than 75% and none were above 90%. The selected high-performing facility (Facility 2a) had a utilisation rate of 76%. In contrast, 16 facilities (about 45%) recorded utilisation rates of less than 50%. The lowest rate was 9% at one facility but it could not be included in the study after discovering that the facility was recently established, lacked staff and did not have the necessary infrastructure in place. The same situation applied to the facility that scored second lowest (11%). The low-performing facility we finally selected had a utilisation rate of 24% (Facility 2b). *Table 4* provides a summary of key features of the selected facilities for the field study.

Table 4: Key features of the health facilities selected for this study

District	Facility	Performance status	Ownership	No. of staff	Distance from district headquarters (km)
Mbinga	Facility 1a	High	Government	5	30
	Facility 1b	Low	Government	6	72
Namtumbo	Facility 2a	High	Mission	2	15
	Facility 2b	Low	Mission	7	30

2. Methods

Studies on equity in health care have adopted different approaches, depending on the objectives, available resources and prevailing conditions on the ground. For example, surveys are commonly used to establish the effectiveness and impacts of policy interventions in the health sector (Schellenberg et al, 2003; Onwujekwe et al, 2004) and social experimentation has also been used to determine the uptake of subsidised health services (Dupas, 2005). However, this paper is a policy analysis, which required us to investigate processes, so we adopted a case study approach to allow an in-depth examination of the developments in the districts and

health facilities in one region of Tanzania, the Ruvuma region. The Ruvuma region was selected for this study because it is one of a number of regions where malaria is endemic, so results from this study may be helpful in addressing the problem of malaria in those other regions. One under-performing district from the region, the Namtumbo district, and one better-performing district, the Mbinga district, were selected as the focus of the study to make comparisons more useful. Data on utilisation rates was obtained from MEDA, one of the implementing agencies responsible for voucher management.

The study was undertaken in three phases. First we reviewed national policy documents, including the national health policy and the malaria control policy from the offices of the National Malaria Control Programme (URT, 2003; NMCP, 2003). In addition, we consulted regional and district annual reports, as well as evaluation reports of the ongoing scheme undertaken during 2005 and 2007 (Hanson et al, 2007). Past studies and research reports on malaria, in general, and insecticide-treated bednets (ITNs), in particular, were also reviewed (Mushi et al, 2003; Castro et al, 2004). Interviews were also conducted with relevant national officials (who will remain anonymous for privacy reasons). The second phase involved the selection of districts and health facilities to be covered, based on appropriate performance criteria. For the purpose of this study, the utilisation rate of the vouchers was adopted as a measure for judging the performance of districts and health facilities. It measures the extent to which use is made of the scheme by beneficiaries (pregnant women and mothers with infants). In the third phase, a detailed investigation of the selected districts and health facilities was conducted. The aim was to identify good and poor performers so that we could find and analyse any implementation gaps. Four facilities were selected for the field study: one high-performing and one poor-performing facility from each district.

Interviews were the main source of data, and were mostly face-to-face interviews with various actors/stakeholders at national, regional, district and community levels. The principal researcher and assistants worked together and separately and compared notes. Interview protocols/schedules were prepared and used to guide discussion, and information from health workers was compared to that obtained from vendors, district managers and the voucher-tracking agency.

Focus group discussions were held at each health facility to obtain information from the beneficiaries of the scheme, namely, pregnant women and the mothers of infants. Issues that were raised included relationships with health workers and vendors, availability of and access to vouchers, and implementation obstacles. Observations were noted about the state of physical facilities and the presence (or lack) of informational material such as posters advertising the vouchers specifically and malaria in general.

Data analysis was undertaken primarily by the lead researcher. The analysis process involved a review of all available data, the development of codes to use in analysis and an analysis of each data site, applying these codes. In each site, different sets of data were then triangulated to ensure validity in interpretation. Early analyses were reported to the multi-country team involved in the overall work programme and were subject to testing and discussion. In the final analyses, we looked at the nature and exercise of power by specific actors in districts and facilities, drawing on frameworks developed within the broader EQUINET policy analysis programme (Erasmus and Gilson, 2008) and also applied in other studies (Lehmann, 2008; Simwaka, 2008).

3. Results and discussion

In this section, we will examine some of the key issues affecting the implementation of the voucher scheme such as the availability of resources (especially at district level), the discretionary power exercised by health workers and the problems of weak management, a lack of participation and poor socio-economic conditions.

As noted earlier, implementation of the scheme was assigned to the NMCP, a specialised unit in the Ministry of Health and Social Welfare's (MoHSW) Directorate of Preventive Services. Interviews and discussions with officials revealed that much of the work is being done by private contractors responsible for voucher tracking, social marketing and providing training services. Otherwise, implementing agencies are responsible for ensuring that districts are accorded the support they need, mainly technical, to see through the voucher scheme.

In the context of Tanzania's decentralised health care system, there is a limited role for national actors in the implementation of the voucher scheme. Interviews and discussions with MoHSW officials and the NMCP, as well as with the managers of the private implementing agencies, indicated that the MoHSW's role was only to coordinate activities and mobilise resources, and issue policies and implementation guidelines through the NMCP. However, evidence suggests that these centrally issued policies and guidelines face implementation problems at lower levels, especially at facility level. Officials also expressed concern about the sustainability of the voucher scheme in view of its dependence on the donor funds. However, a recent government announcement that it will issue nets free to all pregnant women and children under five gives hope that the scheme will continue to receive funding, at least in the near future (URT, 2008).

At district level, Council Health Management Teams are responsible for delivering and managing health services. However, they have little say in resource allocation, which is the main responsibility of central government, acting through the MoHSW and District Councils. For both districts in this study, the main sources of funding are basket funds from the central government, revenues from cost sharing, the local community health fund and donors who give money to NGOs operating in the districts. Allocation of public funds is a function of population size and the number and sizes of health facilities in the districts.

The two districts have much in common and are typical of many administrative districts in Tanzania. The main difference between them is that Namtumbo is a new district that was created in 2003 out of the Songea rural district. The infrastructure, including administrative buildings, is still being developed. For example, what used to be a health centre now serves as a district hospital. Income disparities are also evident, with farmers in Mbinga earning more from coffee production than Namtumbo farmers earn from tobacco and maize production. Income disparity impacts on the implementation process directly and indirectly. For example, level of income influences the uptake of services directly (poor people can't afford to access services as often), while the underdeveloped infrastructure means there is currently more focus on resource mobilisation than service delivery (an indirect impact), as noted by a district official: 'We are very new here and as you can see everything is very temporary. We are in the process of building new Council headquarters and that has kept us quite busy lately.'

As implementing units, districts are supposed to provide leadership and to fulfil a managerial role in relation to actors within the districts, particularly facility health workers. However, we found district managers played a limited supervisory role. Interviews with malaria focal persons in the two districts showed that combinations of factors have contributed to the situation, including limited support to those directly involved in the implementation process:

Unfortunately, so far the focus has been on cure and not trying to prevent malaria despite obvious benefits from the latter. It is no wonder that the voucher scheme has not attracted much support from the district authorities.

District Health Manager, Namtumbo.

Repeated requests to get Council authorities to budget for fuel to run the motorcycle used by MFP have fallen on the deaf ears. There is no doubt that it is reflection of low priority accorded to malaria control efforts (District Health Manager, Mbinga).

According to district managers, implementation of the voucher scheme was affected by problems relating to:

- control over resources;
- prioritisation;
- workload;
- CHMT engagement;
- power and influence; and
- coordination.

In terms of control over resources, district health managers have no direct control over the vouchers. At the time of study, shortages of infant vouchers were reported in both districts and all health facilities due to delayed deliveries by MEDA. Moreover, when they are available, their distribution to health facilities is not immediate, partly because there are no resources allocated specifically for voucher distribution. More often, distribution (and supervision) is done in conjunction with visits for other duties such as giving vaccinations and distributing essential drugs. Alternatively, vouchers are collected by health workers during unrelated visits to the district headquarters. As a result, some facilities have gone for months without both types of vouchers. Even though malaria focal persons were provided with motorcycles by the MoHSW, no fuel is being allocated by district authorities to run them. In addition, the terrain is not suitable for motorcycles, especially in remote facilities.

Prioritisation also affects implementation because malaria is not being accorded the national priority it deserves, despite the fact that it remains one of Tanzania's biggest health challenges. For example, in one district, the total budget for the health sector during 2007/8 amounted to 357 million shillings, of which HIV and AIDS activities have been allocated nearly half (163 million shillings). HIV and AIDS units in both districts were allocated four-wheel drive vehicles, while the malaria focal persons have none.

In both districts, those involved in the voucher scheme have other duties to perform, which limits the amount of time and effort they can spend on implementing the scheme. In the low-performing district, the malaria focal person is also a clinical officer and spends more time seeing patients than working on voucher issues. The same situation applies to the reproductive and child health coordinators, who are usually more concerned with vaccination/immunisation and birth control than vouchers. More importantly, there are no additional incentives available. In other programmes, such as HIV and AIDS programmes, allowances given to attend seminars and conduct awareness campaigns provide workers with some extra income.

With the exception of malaria focal persons and district reproductive and child health coordinators, other management team members are much less familiar with voucher scheme activities in both districts, possibly because they have very limited control over resources. In contrast, district managers in HIV and AIDS programmes have direct control of resources such

as vehicles, anti-retrovirals and campaign money. In the voucher scheme, there are fewer incentives to interest and engage them in the implementation process. This limited engagement and lack of interest has created a situation where facility health workers exercise discretionary powers that tend to interfere with the rights of the beneficiaries. This is one important factor influencing the performance of health facilities.

As the implementing units, districts are supposed to play a coordinating role in the voucher scheme. District managers are to make sure that vouchers are delivered and distributed and that district insecticide treated nets wholesalers are equipped to supply the required number of nets at reasonable prices. However, both districts have been faced with voucher shortages and rising net prices. For their part, the wholesalers have attributed rising prices to net manufacturers, who in turn claim rising production costs. Overall, it seems that district managers have a limited role in the voucher scheme implementation process and the factors that are influencing performance the most are developments taking place within health facilities and their immediate environs.

The voucher scheme arrangements make health facilities the places where implementation succeeds or fails. In Tanzania's health care system, health facilities serve as points of delivery where most Tanzanians - most of them in the rural areas - are served. There is at least one health facility for each ward (an administrative area consisting of several villages). They vary in size, status and staffing levels, ranging from small, scantily staffed dispensaries to relatively large facilities with hospital status. In terms of ownership, they are either government or church owned and widely spread, with some readily accessible and others remotely located and often cut-off from the district headquarters, especially during the rainy season. Health workers are key actors and their actions or inactions have much to do with the outcomes of the implementation process. The interactions between health workers and patients/beneficiaries, vendors, the communities they serve and, to a certain extent, district managers, are key factors influencing performance at this level. This will be discussed in more detail in the facility-level analysis below (sections 3.1 and 3.2).

Our analysis addresses four main issues. First, it establishes the context for voucher scheme implementation focusing mainly on physical, geographical, social and economic conditions. Second, it outlines the implementation process in the sense of who is doing what. Third, a performance assessment is provided that details the outcomes of the voucher scheme and identifies implementation gaps. Finally, the factors impacting on performance are identified and discussed.

3.1 Implementation challenges at facility level in the Mbinga district

3.1.1 Contextual factors

We selected two facilities for the Mbinga district: Facility 1a (a high-performing facility) and Facility 1b (a poor-performing facility). Facility 1a was established in 1995 and is readily accessible - located off the main road about 30 km from the district headquarters. Facility 1b, established in 1978, is much older, relatively larger and is about 72 km from the headquarters with limited accessibility, especially during the rainy season. Both serve about 10,000 people living in several surrounding villages. Both are government owned and headed by clinical officers. The staffing situation is more or less the same with two to three mid-wife nurses, as well as a varying number of nurse assistants and laboratory technicians. Facility 1b has a vehicle (a land cruiser), which is used in emergencies on a cost-sharing basis, i.e. patients have to pay for fuel to use it.

The two facilities are located in predominantly rural communities that grow food and cash crops, mainly maize, rice paddy and tobacco. In the case of Facility 1a, high-performing, but small-scale, mining prospecting is also undertaken in surrounding areas, with the resultant environmental damage creating conducive environment for mosquito breeding. In Facility 1b, fishing is a further major, but low-performing, economic activity, with many women making a living as fishmongers.

3.1.2 Implementation of the voucher scheme

As noted above, the implementation guidelines require health workers to issue vouchers to pregnant women on their first antenatal visit and to mothers with infants when they report for measles vaccination when the child is nine months old. The two facilities show different approaches to the implementation process. In Facility 1a, women are informed of the scheme and told that on their second visit they should come with top-up money to pay for the nets. In some instances clinic cards have been confiscated until the payment is made. Vouchers are redeemed at two main places: a retail shop at the village market place or at the facility where one health worker also offers vendor services.

In contrast, in Facility 1b, the implementation guidelines are more or less adhered to, despite a few implementation gaps. Women - most of them without prior knowledge of the scheme - are informed of the scheme by the nurses and issued with vouchers on the first visit. They are then directed to a market place where there are two vendors who both run pharmacies and participate in the voucher scheme. Once their vouchers are redeemed, they are not required to report back to the facility for further instructions. At the launch of the scheme, the health workers recommended one vendor for the job, but district managers added another one, whose contract was terminated by the district managers, only to be reinstated later on.

3.1.3 Performance assessment

As noted earlier, the two facilities have shown differing levels of performance: Facility 1a recorded a utilisation rate of over 90%, while Facility 1b recorded less than 40%. However, in both facilities, evidence emerged of implementation gaps that have tended to influence performance. The discretionary exercise of power by health workers in Facility 1a (who demand cash for the vouchers) and the lack of interest in the voucher scheme displayed by health workers in Facility 1b may explain the difference in performance between the facilities. In the interviews with health workers, vendors and village leaders and the focus group discussions with pregnant women and mothers, some major implementation issues in both facilities were mentioned.

First, beneficiaries were not well informed about the functioning of the scheme. Health workers in Facility 1a used this ignorance to manipulate people for financial gain by demanding that mothers must bring cash so as to be issued with a voucher; if not, they are forced to part with their clinic cards. This is a violation of their human rights, especially since all pregnant women and mothers are entitled to free vouchers under the law. Cash is demanded even when nets are not available, on the understanding that they will be issued at a later date. In contrast, in Facility 1b, health workers passed information on to beneficiaries and issued vouchers with no apparent demands for cash.

Second, both facilities suffered from an intermittent supply of vouchers. Very often, vouchers were not available at all. At the time of this study, no infant vouchers were available, necessitating a long waiting list for those who qualify. For record-keeping purposes, vouchers

should only be issued when they are available, yet at Facility 1a, beneficiaries are often allowed to buy nets when there are no vouchers. The relevant record-keeping is done later, when the vouchers are received.

Third, the rising price of nets was brought up in the focus group discussions with pregnant women and mothers. They also pointed out that nets are not always readily available from vendors. Availability is a function of the capital investment by vendors and, since they are small retailers, they don't devote much money or shelf space to the scheme. Prices have also increased from the initial top-up amount of 750 shillings to the present 1,500–2,000 shillings, making them unaffordable for some. *Box 1* tells the story of a young mother faced with the dilemma of needing to pay for a mosquito net she cannot afford.

Box 1: A young mother who could not afford to pay for her baby's mosquito net

A 17-year old mother with an 11-month old baby still had an infant voucher pinned to her clinic card two months after it was issued. When she was asked why the voucher had not been redeemed, she said that, when the voucher was issued, she had been told that the top-up amount for the voucher was 1,000 shillings. The next time she took her baby in to be vaccinated, she was told that the price had gone up to 1,500 shillings. As she had brought only 1,000 shillings with her, the voucher could not be redeemed. Two months later the money was all used up to meet other family needs and the top-up amount had increased further to 2,000 shillings.

In Facility 1b, our discussions with health workers and beneficiaries revealed an uneasy working relationship with one of the vendors (the one placed on the vendor list by the district managers). The vendor and his shop attendant were known to use foul language and be verbally abusive to health workers and beneficiaries. Also, health workers did not always pass on information on the voucher scheme to beneficiaries. For example, one pregnant woman who participated in the discussion had visited the clinic a few days earlier and still was not aware of the scheme: 'I attended clinic two days ago and no one bothered to tell me about the scheme until today. I don't know why.' It was not possible to establish whether this was intentional or not, but it demonstrates a communication breakdown of some sort.

When asked about the support they receive from their husbands, most women indicated a supportive environment in their households. However, when pressed to speak further on the issue, some expressed what could be interpreted as inadequate support from men. *Box 2* tells the story of a nurse at Facility 1b.

Box 2: A pregnant woman is beaten by her husband for wanting a mosquito net

A pregnant woman visited Facility 1b for prenatal services, where she was introduced to the voucher scheme and issued with a voucher. After about two months she was rushed to the facility in a state of distress and subsequently miscarried. It was discovered that the voucher had not been redeemed and was still pinned to her clinic card. The husband, who accompanied the wife to the clinic, appeared to be drunk and could not provide a satisfactory answer as to why the voucher had not been redeemed. When the woman was asked, she told health workers that she had been beaten by her husband once for asking for money to redeem the voucher and had been too afraid to ask again.

3.1.4 The role of power in implementing the voucher scheme

From the interviews, focus group discussions and observations, we identified power (and how it is exercised – or not) as a major factor impacting on the implementation of the voucher scheme. The role of power may go some way towards explaining the difference in performance between the two facilities.

In Facility 1a, health workers required pregnant women and mothers to bring cash on their visits to the facility. There is no doubt that this was an undue exercise of authority on the part of health workers because their actions clearly contravene the procedure laid down for issuing vouchers. It also seems to be contributing to high utilisation rates. According to a nurse, the cash arrangement was intended to promote the use of nets after a slow start to implementation:

> *When we started this scheme women were not buying insecticide-treated nets as fast, even after efforts to educate them on the benefits of doing so. Thus it was decided that they be required to pay upfront for them to continue getting other services.*

This fallacious reasoning raises questions about the real motive for introducing cash payments. Given the fact that one member of the health team also doubles as a vendor and the head of the facility is also known to collect money from beneficiaries on the promise of delivering nets, personal financial gain cannot be ruled out. In the course of focus group discussions, it was reported that the head of the facility had collected money and that patients were still waiting for their nets, despite repeated visits. The head had this to say when asked about her vendor activity:

> *I usually do some outreach work and often do visit some villages far from here. I take nets so that people don't have travel far to get them. I consider it as part of public service.*

Another example of the exercise (abuse?) of power was the decision by the head of Facility 1a to replace the original vendor, who had a contract with the implementing agency to supply nets. This decision was outside his mandate so he was not entitled to replace the vendor. In Facility 1b, health workers seemed less concerned once the vouchers were issued. The clinical officer in charge showed limited knowledge of the voucher scheme, with much of the task left to reproductive and child health nurses. In view of the fact that doctors are highly regarded and quite influential in most rural communities, this lack of interest can partly explain the low level of up-take observed at the facility. These examples broadly demonstrate the influence of health workers over the implementation process and their direct ability to influence its outcomes. The role of power in both facilities is summarised in *Tables 4* and *5*.

From the tables, it can be seen that there are two main sources of power exercised by the health workers over pregnant women and mothers: control of vouchers and professional knowledge. With regard to the vouchers, the health workers possess the relevant information over the implementation process, which most beneficiaries knew very little about. The ignorance of beneficiaries about what they were entitled to allowed health workers in Facility 1a to depart from standard procedures. Health workers also had the power to decide how and when health services are delivered, which allowed them to deny services to pregnant women mothers who do not meet their 'conditions'.

Table 4: The role of power in Facility 1a

Power relations between actors	Types of power	Sources of power	Consequences of exercising power	Reasons for exercising power	Impact on performance of the voucher scheme
Health workers (who exercise power over women patients)	Control: Demands on women to bring cash	Control of vouchers	· High levels of redemption for vouchers · Denial of clinical services	Financial gain	Positive
	Control: Retaining clinic cards	Professional role as health workers	· High levels of redemption for vouchers · Denial of clinical services	To improve uptake of the scheme after a slow start	Positive
Vendors (who exercise power over women patients)	Control: Prices of nets	· Monopoly conditions · Knowledge of actual prices of nets	· Higher net prices · Affordability	Financial gain	Negative

Table 5: The role of power in Facility 1b

Power relations between actors	Types of power	Sources of power	Consequences of exercising power	Reasons for exercising power	Impact on performance of the voucher scheme
Health workers (who exercise power over women patients)	Control: Information about vouchers	Professional role as health workers	Some women don't get vouchers	Unclear	Negative
Vendors (who exercise power over women patients)	Control: Net prices and availability	Financial capital and property ownership	· Higher net prices · Unaffordable vouchers	Financial gain	Negative

For Facility 1a, a positive outcome was achieved in the form of high utilisation rates for vouchers. But this needs to be contrasted with setting conditions and denying services to beneficiaries, which have further negative consequences including reporting late, or not at all, for prenatal services.

The vendors' control over prices for nets gives them a form of control over pregnant women and mothers. The situation is partly explained by the monopoly conditions that have developed because only selected vendors are participating in the scheme. The high net prices are lowering utilisation rates, especially in the absence of coercive measures, as we observed in Facility 1b.

The failure by district managers to exercise power and influence over health workers is yet another factor. The result is weak managerial practices, reflected in the lukewarm supervisory role played by the council health management teams. This contributes to a situation where facility health workers can act as they please without fear of reprimand or censure from the district managers. Leakage of authority is quite evident in both cases. In addition, observation done in the two facilities did not reveal evidence of posters or related items about the voucher scheme. Instead, sexually transmitted infections (STIs) and HIV and AIDS posters were prominently displayed a reminder of the fact that the voucher scheme is not a high priority here.

3.2 Implementation challenges at facility level in the Namtumbo district

3.2.1 Contextual factors

Facility 2a (the high-performing facility) and Facility 2b (the poor-performing facility) are mission owned and operated. They are both relatively old (nearly 50 years old) and Facility 2a is in a very dilapidated condition, with some very old buildings that are falling apart. The facility is located 10 km off the main road, 15 km from the district headquarters, and serves a population of about 10,000 people. Facility 2b, located off the main road about 30 km from the district headquarters, is relatively large and often serves as a referral hospital for some small facilities in the nearby areas. Both facilities are managed by clinical officers, but their staffing situations are quite different. Facility 2a has two staff members and Facility 2b has seven. Because of their subsidised services, the facilities are playing an increasingly important role in the surrounding communities.

Both facilities serve typical rural communities, with homesteads spread over a large area and a small village centre around the church buildings. In the area around Facility 2a there is only one store, which also sells over-the-counter drugs, and no pharmacy. In the area around Facility 2b there are several stores, including small pharmacies. The main economic activity in the two communities is farming, with peasant farmers growing maize and beans for food and tobacco for cash. Poverty is quite widespread.

3.2.2 Implementation of the voucher scheme

The approach to the voucher scheme was quite different in the two facilities. In Facility 2a beneficiaries seemed to be well informed about the scheme and what it entailed. Pregnant women and mothers who qualify for infant vouchers are required to bring the top-up money with them on their visit to the facility for prenatal services (or vaccination in the case of infants). The voucher is issued to the pregnant woman or mother when the top-up money is paid. She is then directed to the nearby shop to redeem the voucher by paying the difference between the true value of the voucher and the prevailing market price of the net. At the time of the study visit, women were supposed to pay 2,000 shillings for pregnant woman vouchers and 1,800 shillings for infant vouchers. Having bought the net, the woman returns to the facility for further instructions from the health workers on how to use it. This represents a departure from prescribed practice because vouchers are supposed to be issued to *all* mothers and pregnant women, whether they can pay the top-up money or not.

In contrast, in Facility 2b there was no significant departure from prescribed practice. Once pregnant women have reported to the clinic for prenatal services they are informed of the existence of the voucher scheme, what it entails and what they are required to do in order to benefit from the scheme. They are issued with vouchers after the details have been recorded and directed to visit the vendor's shop where they can be redeemed. The same approach is

followed when handling infant vouchers. Vouchers are redeemed at the vendor's shop at the marketplace, a short distance from the facility.

3.2.3 Performance assessment

Interviews, focus group discussions and observations all point to the fact that the different approaches adopted by health workers in the two facilities are responsible for the difference in performance. Both facilities experienced a voucher availability problem at the time of the study visit. The infant vouchers had run out some time ago and it was reported that this was a recurring problem with both types of vouchers. In the case of Facility 2a, low-valued vouchers (2,750 shillings) were being issued, even though it had high-valued vouchers (3,250 shillings) in stock, because the implementing agency instructed them to use up the low-valued vouchers first before they started using the other vouchers.

In discussions with health workers at Facility 2a, they pointed out that the voucher scheme had had a slow start, with few vouchers being redeemed, so they decided that some measures were needed to improve utilisation rates. They required beneficiaries to bring money as a precondition for receiving prenatal and vaccination services. With this requirement in place, the facility witnessed improved performance as reflected in higher utilisation rates. In Facility 2b, when faced with the same situation, nothing was done to address it. However, health education sessions clearly sought to inform pregnant women and mothers about the dangers of malaria during pregnancy and to infants. Beneficiaries demonstrated adequate knowledge about malaria, its causes and modes of transmission, vulnerability during pregnancy, its danger to infants, and, more important, the benefits of using nets. Similarly, knowledge of the voucher scheme, its functioning and the benefits to mothers and infants was quite evident among participants. When asked to account for low redemption rates, most attributed them to high net prices.

The conditionality imposed by the health workers in Facility 2a, while contravening implementation guidelines, seemed to be liked by beneficiaries. They gave the impression that there was nothing wrong with the order given by the health workers. In fact, some participants in the discussion group praised the decision as having helped sensitise the community to the dangers of malaria to pregnant women and infants, as noted by one woman:

> *We are very grateful to our nurses for their efforts to sensitise the people on the dangers of malaria and the benefits of voucher scheme. The community is enjoying the benefits of the voucher scheme because of these efforts.*

However, subsequent investigation revealed that the sole vendor also happens to be the husband of the clinical officer. Under such circumstances, one cannot rule out the possibility of a self-serving motive for the observed arrangement.

The problem of rising net prices was mentioned at both facilities. In both cases, the net prices have been on the rise since the launch of the scheme. At the beginning, women were required to top up 800 and 600 shillings for the pregnant women and infant vouchers respectively. At the time of the study, the top-up amounts had gone up to 2,000 shillings for pregnant women vouchers and 1,600 shillings for infant vouchers, an increase of nearly 150% over a two-year period. The increase in the voucher value from 2,750 shillings to 3,250 shillings has not been enough to offset increases in market prices for nets, especially considering the fact that low-valued vouchers were still being issued at the facility. Interestingly, the top-up amount is less than the price of one chicken or a few kilos of maize or beans. Most participants acknowledged having these items in their households.

The story in *Box 3*, told by a health worker in Facility 2a, shows some of the difficulties encountered in trying to follow implementation guidelines and the potential for side-stepping them.

Box 3: A tale of orphaned twins

One young woman had become pregnant and after indications that it was going to be a troubled pregnancy she went, accompanied by her mother, to a distant hospital for more expert care. During her stay at the hospital she was denied a pregnant woman voucher for the reason that she was not from the catchment area for which the hospital was responsible. She delivered twins, but unfortunately she died of complications. On return home the mother visited the facility and asked to be issued with vouchers for the twins. She was told that it was not possible because there was no pregnancy and the twins are not of the age where they can be issued with infant vouchers. The situation was presented to a visiting agent from the voucher-tracking agency and while sympathetic to the problem, he agreed with the decision by the head of the facility to deny the grandmother vouchers for the twins. He parted with his own money to enable the grandmother to buy nets for the twins.

Also emerging from a focus group discussion in Facility 2a was the potential for insecticide-treated nets to be improperly used or not used at all, despite the observed high redemption rates, thus defeating the whole purpose of the scheme. For example, participants raised the issue of the effects of the chemicals used to treat nets on humans, especially infants. This could be interpreted as potential fears among beneficiaries that could in turn lead to nets not being used as expected. Some pointed out that they have to make a trade-off between using the nets and suffering the unbearable heat or doing away with the nets altogether. Pressed further, they agreed that the latter is the preferred option.

3.2.4 The role of power in implementing the voucher scheme

In trying to explain the performance of the two facilities, the exercise of power is very much evident, especially in Facility 2a. *Tables 6* and *7* summarise the situations in the facilities. First and foremost, the condition requiring beneficiaries to bring money when visiting the facility for service has much to do with the observed high utilisation rate in Facility 2a. Implementation guidelines do not set any preconditions for giving the vouchers to those who qualify for them. The imposed conditionality, while helpful in promoting ITNs' uptake in the community, at the same time infringes on the right to make individual decisions. This is not the case with Facility 2b where the health workers are showing a lack of interest in the implementation process.

Table 6: The relevance of power in Facility 2a

Practices of power	Categories of power	Source of power	Consequence of practice of power	Influence over 'performance'	Reasons for this exercise of power
Health Workers to Women	Control: Women told to bring cash on first visit to the clinic	• Control of vouchers • Professional role	High redemption rate	Positive	Promote uptake after low start
Vendors to Women	Control of net prices	Monopoly condition	High net prices	Negative	Financial gains

Table 7: The relevance of power in Facility 2b

Practices of power	Categories of power	Source of power	Consequence of practice of power	Influence over 'performance'	Reasons for exercise of power
Health Workers to Women	Control of vouchers	Professional	Low redemption	Negative	Limit workload
Vendors to Women	Control of net prices	Monopoly conditions	Low redemption	Negative	• Financial gains • Entrepreneurial

In Facility 2a it is interesting to note the existing relationship between the Clinical Officer and the vendor who are husband and wife. One cannot help wondering whether or not the situation would have been the same in the absence of such a relationship or with the existence of a more competitive environment in the marketplace. It is clear, though, that the conditionality represents an exercise of power on the part of health workers over pregnant women and mothers. In the absence of any alternative to the existing facility, beneficiaries seem to have no choice. In other words, a sense of powerlessness cannot be ruled out as an important explanatory factor.

Another factor worth considering is the existence of a monopoly in the village. With no pharmacy in place, the village being far from the nearest health facility and unreliable transport, the facility and vendor's store are the only places where pregnant women and mothers can access services and meet their basic needs, including medicines and nets. It is therefore hard for beneficiaries to resist coercive measures, direct or indirect, imposed upon them by health workers and the vendor. This is reflected in the imposed conditionality and higher net prices that leave beneficiaries without much choice.

On the other hand, in Facility 2b a lack of interest or engagement on the part of health workers is an important explanatory factor. In other words, what emerges from the case study is the fact that the role of health workers don't go beyond the minimum of passing on information about the scheme and issuing vouchers. While appreciating scheme's potential impact on the malaria cases they have to attend to, they still seemed reluctant to become more proactive in relation to the voucher scheme.

There are different possible explanations for such attitudes on the part of the health workers. Firstly, being a mission-owned facility there is a feeling that the scheme has been imposed on them. Even though the scheme is being implemented as part of reproductive and child health services, the facility's core activity, they are of the opinion that the logistics involved interfere with other duties. However, it is interesting to note that the same argument was given by the two health workers in the other facility.

Second, and closely related to the first, is the ownership and its influence on the reward-penalty system. Health workers at mission-owned facilities are governed by regulations laid out by managers at the mission's coordinating office. As such, they feel less accountable to district managers, despite the general operating subsidies mission facilities receive from the government through district councils. This could be discerned from a discussion with health workers who noted that their colleagues at the government-owned facilities are better-off in terms of pay and training opportunities while they are overworked and underpaid.

3.3 Cross-facility performance analysis

The four case studies display some similarities and differences that preclude generalisation about the outcomes of policy implementation. However, the analysis raises a good number of issues that are critical to understanding implementation gaps, especially in a situation where policies are predominantly implemented in a top-down way (as is the case with the national voucher scheme). Therefore, this section of the report aims at explaining performance across facilities by identifying commonalities and discrepancies and, in so doing, some implementation gaps. *Table 8* provides an overview of explanatory factors.

Table 8: Cross-facility performance analysis

Factors influencing performance	Mbinga district		Namtumbo district	
	Facility 1a	**Facility 1b**	**Facility 2a**	**Facility 2b**
Ownership	Government	Government	Mission	Mission
Accessibility	Good	Difficult	Difficult	Good
Level of engagement by:				
Health workers	High	Low	High	Low
District managers	Low	Low	Low	Low
Exercise of power by:				
Health workers	High	Low	High	Low
District managers	Low	Low	Low	Low
Combined voucher utilisation rate	58.6%		49.5%	

3.3.1 Ownership

There are two types of facility ownership: government and mission/church. The two facilities in the high performing district are both government owned, while those in the low performing district are church owned. However, in each district one of the facilities is a relatively high performer, and one a lower performer suggesting that ownership is not clearly an important explanatory factor. In other words, high or low utilisation cannot be linked to whether or not the facility is government or church-owned. However, wider generalisation is difficult given the small numbers involved in this study and because other available data don't disaggregate facilities by ownership.

3.3.2 Accessibility

Women and mothers' access to vouchers is only possible when the vouchers are delivered to health facilities by those responsible: representative of Mennonite Economic Development Agency and district managers. One would think that health facility location or accessibility would be an important performance factor. Given the fact that the two districts are predominantly rural, with facilities scattered in some remote locations, there is the potential for the availability of vouchers, with its influence on performance, to become location specific. However, the evidence in this study suggests that geographical location is not an important explanatory factor. The high performing facility in the high performance district is readily accessible, but this is not true for the high performing facility in the low performance district. At the same time, of the two low performing facilities one is readily accessible, while the other is not.

3.3.3 Level of engagement

There are two types of engagement: one involving health workers within participating facilities and the other involving district managers in their supervisory capacities. What emerges from this study is that levels of engagement have much to do with the way facilities perform. In those

facilities where health workers are more engaged, that is, they demonstrate high levels of interest to the point of directly intervening in the process, utilisation rates are high. Likewise, in facilities where lack of engagement is more evident it is reflected in poor performances.

What is interesting to note, however, are the reasons or motivations for the observed high levels of engagement on the part of the health workers. In the two high performance cases in this study there are one or two plausible explanations, the chief of which relates to the behaviours of health workers. In both cases beneficiaries are required to pay for nets up-front as part of receiving prenatal or vaccination services, even if no nets are available at the time. In one of the facilities a health worker is also offering vendor services and the head of the facility is reported to be taking money even if he is not one of the vendors, while in the other the head of the facility and the vendor are related as husband and wife. Therefore, it is possible that the observed engagement and the consequent high performance may be because of some self-serving financial interests.

On the other hand, in the two low performing facilities low levels of engagement are quite evident. The heads of the two facilities are less concerned about how the voucher scheme is being implemented in the sense of knowing who is doing what and why. As noted, once the task has been assigned to reproductive and child health nurses they feel less obliged to follow-up such things as voucher availability, how they are redeemed or the ever rising prices of the insecticide-treated nets.

As we have noted above the districts, through their Council Health Management Teams and malaria focal persons, are the main implementing units for the voucher scheme. Together with private implementing agencies they were to serve as the scheme's key actors. As such, they are supposed to be closely involved in the implementation process by ensuring that the laid down procedures are adhered to for the maximum impact. However, what emerges from this study is the lack of engagement on the part of district managers as reflected in weak coordination and limited contact with health facilities noted above.

3.3.4 The exercise of power

The practice of power is an important aspect of any policy implementation process and often the success or failure of the policy depends on it. The evidence in this study suggests that some of the observed discrepancies between facilities can be attributed to the exercise of power or failure to do so by actors. For our purpose in this study the play of power is analysed at three levels: between health workers and beneficiaries, between health workers and vendors, and between district managers and health workers.

First and foremost, the health workers have been quite influential in determining the turn of events in the voucher scheme implementation. This influence partly stems from the nature of their profession which is highly valued and respected, especially in the rural communities they serve. The knowledge they possess is an important source of power that can be exploited for personal gains, as evidenced in this study. This is quite clear within the two high performing facilities in both districts where health workers have overwhelming influence over the way the scheme is being implemented.

In addition to requiring women to pay for vouchers in exchange for services, in one of the facilities there is a note telling women/mothers that they will be punished, without specifying the kind of punishment, if they don't report for prenatal service within the first four months of pregnancy or if they fall pregnant again within two years of their last delivery. The opposite is

true for the two low performing facilities where such coercive behaviour on the part of health workers cannot be observed.

In both high and low performing districts, as well as in the facilities, district managers seem to exert very little influence over the way the voucher scheme is being implemented. They don't have much say over the behaviours of health workers and vendors at the lower levels. There are two main explanations for the observed lack of power on the part of district managers. Firstly, the public-private partnership, the framework under which the scheme is being implemented and the large amount of work parcelled out to private partners mean that district managers have less influence over turn of events as evidenced in this study where the actions of other actors: health workers, nets wholesalers and vendors lack proper coordination. Indeed, this is reflected in absence of district-level database on the performance of health facilities the information that can only be accessed through Mennonite Economic Development Agency's regional manager or its headquarters in Dar es Salaam.

Second and, perhaps, more important, is the lack of district level control over vouchers and other resources, especially financial, which could be used as a tool for influencing the behaviour of lower level actors. With the exception of occasional visits by a person from the voucher tracking agency, health workers and vendors are on their own and left to do whatever they think appropriate in their respective contexts. Again, this is reflected in different approaches to voucher implementation and the resultant different outcomes.

The reporting system is such that the district managers are less knowledgeable about what is happening in the facilities, with much of the work left to the regional coordinator of the voucher tracking agency who has the means (a four-wheel drive vehicle and lap-top computer) to visit district headquarters to collect stubs for further processing and reporting to agency headquarters in Dar es Salaam for dissemination.

4. Conclusion and recommendations

In this study we have been able to highlight issues relevant to health policy implementation in general and the voucher scheme in particular. We have noted, among other things, the devastating impact of malaria, socially and economically, and the intervention through subsidised vouchers. The voucher scheme implementation process, however, has raised some challenges, especially with regard to the exercise of power by health workers, as identified and analysed in this study.

Despite some implementation gaps, including marginalised roles for regional and district managers, the voucher scheme is popular and well received in rural Tanzania where the majority of people live and poverty is widespread. Health workers are reporting reduced malaria cases, and attributing this trend to the scheme.

Power and the exercise of power have considerable influence over the outcomes of the voucher scheme implementation. On the one hand, high performance facilities are at the same time characterised by engaged and influential health workers who have displayed power over beneficiaries. Personal financial gains as a motive for this engagement cannot be ruled out. On the other hand, in low performing facilities health workers are less engaged and there is no evidence of the use of coercive measures to influence outcomes. Such discretionary exercise of power can also be attributed to the limited supervision of the district health managers.

4.1 Recommendations

This study on health policy implementation provides some invaluable lessons, its limited scope notwithstanding. It is quite in line with the body of evidence on the problems or difficulties associated with policy interventions. Across policy interventions, for example, unintended outcomes are not uncommon and can be as important as the intended ones (e.g. Kamuzora and Gilson, 2007). The following are some of the implementation lessons emerging from this study.

First and foremost is the general perception among respondents that the voucher scheme is producing the intended impact: addressing the malaria problem among pregnant women and infants. Discussions with health workers and beneficiaries attest to the belief that malaria cases among these groups have declined during the implementation period. It is said that this is reflected in fewer visits to facilities, fewer severe malaria cases, and fewer complications related to malaria among pregnant women. What is not clear, though, is the issue of whether or not the situation is sustainable in the absence of the vouchers. In other words, in view of realised objectives whether or not beneficiaries will be willing to pay for nets at market prices. The study's finding that not all vouchers are used and that not everyone is willing to pay the current top-up above the subsidy the voucher offers, suggests that there would be reluctance and inability to pay market rates amongst the most vulnerable groups.

Secondly, the voucher scheme essentially applied typical 'top-down' implementation approach to policy interventions, with centrally determined goals and objectives (Pressman and Wildavsky, 1973; Pulzl and Treib, 2006). However, what is of interest in this case is the fact that the centre has no firm control of those below responsible for getting the work done. The central powers have been essentially delegated to district authorities and some private actors within the framework of a public-private partnership. But the real action is at the facility level where vouchers are issued and redeemed. Within this arrangement a number of issues have emerged that influence performance, including the power exercised by health workers.

As evidenced in the two high performing facilities, health workers demonstrated a great deal of influence over the way the scheme is implemented. They exercised control not only over women and mothers (for example, by denying them services they rightly deserve), but also over vendors (for example, unilaterally terminating a vendor contract in one case). This behaviour, while beneficial in terms of raising utilisation rates, raises some concerns with regard to implementation guidelines. Moreover, if the top up is really unaffordable for some women and families, being forced to pay it seems to be an abuse of power and a threat to the individuals' own rights. More broadly, it seems to reflect is the behaviour of 'street-level bureaucrats' (Lipsky, 1980), who exploit the knowledge and information that they have to exercise discretionary power over other local level actors.

Given such discretionary power, it is clear that the implementation of the voucher scheme is a dynamic, complex and multi-factored process whose success or failure is multi-sourced. Thus, centrally set goals and regulations are manipulated by those below responsible for getting them into practice. They have the power to influence the outcomes of the process, as experience elsewhere has also shown (Smit, 2003; Brynard, 2005).

Lastly, the implementation of the voucher scheme highlights some difficulties inherent in the decentralised health care system. The arrangement has its share of advantages and disadvantages with far-reaching consequences on policy implementation processes and outcomes. Decentralisation may bring service delivery management closer to people, but may

not produce the intended results. As with a centralised system, it is prone to manipulation and exploitation. Nonetheless, the differences between facilities in terms of voucher scheme implementation specifically suggest that health worker performance may be influenced by better supervision (it was particularly weak in low performing sites) and, in the Tanzanian context, by financial incentives (the personal financial gain secured by requiring voucher purchase seemed to at least partially explain health worker practices in better performing sites).

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Acronyms

AIDS	-	Acquired Immune Deficiency Syndrome
CBO	-	Community-Based Organisation
CHMT	-	Council Health Management Team
DMO	-	District Medical Officer
DRCHC	-	District Reproductive and Child Health Coordinator
HIV	-	Human Immunodeficiency Virus
HW	-	Health Worker
IDS	-	Institute of Development Studies
IHRDC	-	Ifakara Health Research and Development Centre
ITN	-	Insecticide Treated Net
IV	-	Infant Voucher
M&E	-	Monitoring and Evaluation
LSHTM	-	London School of Hygiene and Tropical Medicine
MEDA	-	Mennonite Economic Development Agency
MFP	-	Malaria Focal Person
NGO	-	Non-Governmental Organisation
NMCP	-	National Malaria Control Programme
PSI	-	Population Services International
PWV	-	Pregnant Women Vouchers
RCH	-	Reproductive and Child Health
SAP	-	Structural Adjustment Programme
STI	-	Sexually Transmitted Infection
TNVS	-	Tanzania National Voucher Scheme
USAID	-	United States Agency for International Development

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Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, these typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region. EQUINET is primarily concerned with equity motivated interventions that seek to allocate resources preferentially to those with the worst health status (vertical equity). EQUINET seeks to understand and influence the redistribution of social and economic resources for equity oriented interventions, EQUINET also seeks to understand and inform the power and ability people (and social groups) have to make choices over health inputs and their capacity to use these choices towards health.

EQUINET implements work in a number of areas identified as central to health equity in east and southern Africa

- Protecting health in economic and trade policy
- Building universal, primary health care oriented health systems
- Equitable, health systems strengthening responses to HIV and AIDS
- Fair Financing of health systems
- Valuing and retaining health workers
- Organising participatory, people centred health systems
- Social empowerment and action for health
- Monitoring progress through country and regional equity watches

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