The Implementation and Effects of Direct Facility Funding in Kenya's Health Centres and Dispensaries

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TABLE OF CONTENTS

TABLES

FIGURES

BOXES

LIST OF ACRONYMNS AND ABBREVIATIONS

AIE	Authority to Incur Expenditure
ANC	Ante Natal Care
CDF	Constituency Development Funds
CHW	Community Health Worker
DANIDA	Danish International Development Agency
DFF	Direct Facility Funding
DHA	District Health Accountant
DHAO	District Health Administrative Officer
DHMT	District Health Management Team
DMOH	District Medical Officer of Health
FBO	Faith Based Organisation
FMN	Facility Management Nurse
GOK	Government of Kenya
HFC	Health Facility Committee
HMIS	Health Management Information System
HSSF	Health Sector Services Fund
KES	Kenya Shillings
MOH	Ministry of Health
NGO	Non-Governmental Organization
PETS	Public Expenditure Tracking Survey
PFGA	Provincial Facility Grants Accountant
PMO	Provincial Medical Officer
RHF	Rural Health Facility
STI	Sexually Transmitted Infection
VHC	Village Health Committee

Background
Direct facility funding (DFF) is an initiative that was developed in response to concern that Ministry of Health funds allocated to districts rarely filter down to the health centres and dispensaries, and that these facilities have also lost revenue due to the reduction in official user fees in 2004. Piloted in Coast Province from late 2005, DFF involved facilities receiving funds for recurrent expenditure directly into their bank accounts. This report presents an evaluation of the implementation and effects of DFF in health centres and dispensaries.

Methods
The findings in this report are based on data collected between October 2007 and March 2008, about 2 to 3 years after DFF implementation. A structured survey that included an interview with facility in-charges, records review, and outpatient exit interviews was conducted at a random sample of 15 facilities in each of the two purposively selected districts (Kwale and Tana River). In addition, focus group discussions with health facility committee (HFC) members and key informant interviews with in-charges and DHMTs were conducted in a subset of 6 facilities in each district.

Results
The study found that DFF accounted for an average of 56% of the facilities' annual income, while user-fees revenue accounted for 34%. DFF funds were particularly important for dispensaries, accounting for 62% of facility income. Wages for casual staff, travel allowances and construction and maintenance accounted for the bulk of DFF expenditure.

DFF procedures were generally well-established: all facilities had opened bank accounts and funds had been transferred; HFCs were active in planning for and use of the funds; and accounting procedures were generally followed. A few initial problems were noted, especially in training of HFCs in one district, and, whilst these had mainly been resolved by the time of data collection, confusion persisted over some aspects of DFF operation, reflecting limited HFC training and a lack of DFF documentation at facility level.

DFF was perceived to have had a highly positive impact by a great majority of the respondents. Utilization of facilities was thought to have increased, especially through the expanded outreach programs, thus improving access to health services. Although this resulted in a heavy workload for staff, there were no complaints about this as the increased workload was offset by the improved working environment, namely the availability of supplies and a better infrastructure, and by the ability to hire more support staff. Health worker motivation was also improved through provision of allowances; and, as a result of these changes, it was felt that quality of care had improved.

Despite the DFF funds, it was clear that facilities were not adhering to the user fees policy. Many continued to levy charges above the prescribed fees and failed to exempt groups of patients such as the under-fives and those with malaria. Interviewees attributed non-adherence to lack of official communication of the policy and the need for more resources at the facility level

The operations of HFCs were reported to have improved since the introduction of DFF; however, only a minority of people in the broader community had the information to participate actively in decision making and hold HFCs to account. Only 46% of exit interviewees had ever heard of a HFC, while community members had very little knowledge on DFF procedures, how decisions were made, how DFF funds could be used, and what user fees should be charged. Specially designed blackboards aimed at displaying utilization data and a limited amount of financial information were available in most facilities but were rarely filled in completely.

Conclusions
DFF is perceived to be a highly valuable intervention and the current system is generally working well. The Kenyan Government plans to scale up DFF nationwide under the Health Sector Services Fund and our findings indicate that this is warranted; however, scale up of DFF should include improved training and documentation; greater emphasis on community engagement; and insistence on user fee adherence as a prerequisite for receipt of funds.

INTRODUCTION

Background

Health centres and dispensaries are a major source of primary level health care for the poor groups in rural areas of Kenya; however, a number of problems with their performance have been documented. These include poor quality of care, inadequate and poorly maintained equipment and infrastructure, unreliable drug supplies, staff shortages, low staff motivation, and charging fees above official rates or to exempted groups (Kimalu, Nafula et al. 2004; Pearson 2004; NCAPD, MOH et al. 2005).

Some of the causes of these problems reflect inadequate access to resources at the facility level. Staffing and drugs for health centres and dispensaries are funded from central budgets while their other needs should be provided through the district health system; however, in practice, facilities have always faced challenges in accessing funds through the District. Firstly, a high proportion of the funds intended for the districts fail to reach them. The 2007 Public Expenditure Tracking Survey (PETS) indicated that only 67% of allocations as per Authorities to Incur Expenditure (AIE) were received at district level, and that the receipt of AIEs was often delayed (MOH 2007). Secondly, problems in accessing these funds have been identified for more peripheral facilities, such as health centres and dispensaries, due to bureaucratic and liquidity problems at the District Treasury. Moreover, the majority of these funds are spent at the district level, leaving the peripheral facilities without operating funds.

Cost-sharing (user fees) revenue represents an alternative funding source for rural health facilities; however, in 2004 the 10/20 policy reduced official user fees to KES 10 or 20 (Appx. US$ 0.2 or 0.3) at dispensaries and health centres respectively. Prior to the 10/20 policy, charges were higher and variable, with separate fees for drugs, injections, consultation, and laboratory services. There are concerns that, where 10/20 is implemented, facility level funds have been reduced, restricting the capacity of facilities to be responsive to local problems and to purchase drugs and other essential resources (Pearson 2005). In addition, facility-level resource constraints and a lack of clarity around the user fee levels appeared to be undermining relationships with communities (Molyneux, Hutchison et al. 2007).

To address these issues, the Government of Kenya (GOK), with the support of the Danish International Development Agency (DANIDA), decided to fill the gap of reduced facility funds by piloting an innovative system of direct facility funding (DFF) of health facilities in Coast Province. A similar approach had been used in the education sector in Kenya and other African countries following the introduction of free primary education (Ayako 2006); however, we are not aware of any similar measure previously implemented at this level of the health sector.

This report presents the results of an evaluation of the Coast pilot, conducted to learn lessons about implementation and perceived impact. Specifically, we assessed the set-up and implementation of DFF at the health centre and dispensary level; described process outcomes covering health facility expenditure, health worker motivation, adherence to the 10/20 policy, and community engagement; and, explored the perceived impact on quality of services and utilization of health facilities. The report is particularly timely in view of the current Government plans for nationwide scale up of DFF under the name Health Sector Services Fund (HSSF).

Direct Facility Funding

DFF has been piloted in health facilities throughout the seven districts of Coast Province. Between the start of the pilot in mid-2005 and September 2007, a total of KES 74,473,042 ($1,235,209) was disbursed. These funds were allocated across districts using the MoH Resource Allocation Criteria[1], ranging from KES 2.4 million in Lamu to 10.1 million in Kwale per annum. The breakdown across facility types was set at 85% to health centres and dispensaries, 10% to district and sub-district hospitals, and

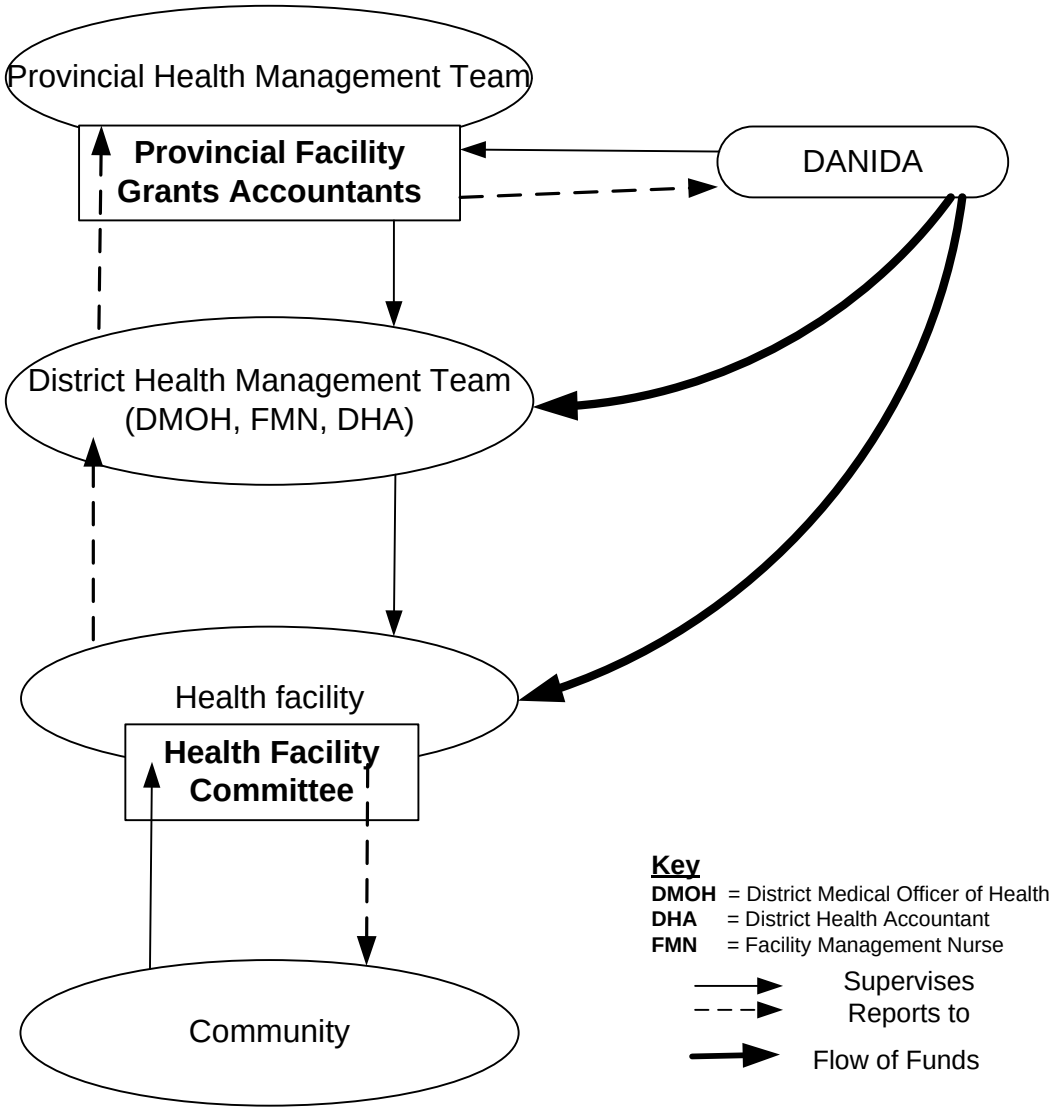
[1] The criteria are based on poverty levels, new AIDS cases, number of women of reproductive age, number of government facilities, number of under fives, and area (sq kms).

5% to DHMTs; and, it was intended that funds were allocated to individual facilities within each district on the basis of workload. All facilities belonging to the MoH were entitled to receive funds, as long as the District Medical Officer of Health (DMOH) could ensure adequate supervision by qualified staff.

All facilities in Kenya should have a Health Facility Committee (HFC), selected from among the community members in the catchment area. Their role is to oversee the operation and management of the facility, advise the community on matters concerning the promotion of health services, represent community interests, facilitate feedback to the community, implement community decisions and mobilize community resources (MOH and Aga Khan Health Services 2005).

The relationship between the various DFF players and the flow of funds is depicted in Figure 1. At the top of the diagram is he Provincial Health Management Team (PHMT) which has an oversight role for DFF implementation in the whole province. In addition at the provincial level, Provincial Facility Grants Accountants (PFGAs) are contracted and financed by DANIDA to specifically support the DFF initiative. The PFGA reports to the Provincial Medical Officer (PMO) and submits quarterly financial reports to DANIDA. The reports form the basis for further disbursements of funds which DANIDA remits directly into each facility's bank account and to the DHMTs to cover supervision.

Figure 1: Relationship among DFF Players



At the district level, the office of the DHMT is responsible for DFF implementation. The DMOH is responsible for overall supervision, including the approval of work plans, a pre-requisite for the transfer of funds. Other key members of the DHMT include the Facility Management Nurse (FMN) and District Health Accountant (DHA). The role of the FMN is to support links between facilities, the community and the district by strengthening the management of Health Facility Committees (HFCs). The DHA is responsible for financial management and reports to the PFGA.

At the facility level, HFCs are expected to be involved in the planning for and use of DFF funds, as far as possible, and to prepare a work plan giving quarterly budgets per expenditure item and an explanation of the purpose. Both facility staff and committee members should have received training on the DFF scheme. Local communities were to be empowered to monitor what facilities did with funds through their committee members and through the blackboards at the health facilities, providing a public display of accounts and facility utilization.

Examples of expenditure items on which DFF could be used are listed in Box 1.

Box 1: Expenditure Items on which DFF could be used

Category	**Examples**
Salaries	Basic wages of temporary employees
Utilities, supplies and services	Electricity, water
Communications	Telephone, airtime, postage
Domestic travel and subsistence allowances	Staff travel costs and allowances, transfer of patients
Printing, advertising and information	Photocopying, posters, advertising
Specialized materials and supplies	Insecticides, oxygen, food rations
Office and general supplies and services	Stationery, clearing materials
Fuel and lubricants	Petrol, wood, charcoal
Other operating expenses	Bank charges, contracted guards and cleaning services
Routine maintenance	Vehicles, equipment, furniture and buildings, and other assets

A maximum of 30% of the individual facility funds could be spent on domestic travel allowances. The funds could not be used for purchase of drugs or laboratory services, construction of new buildings or for sitting allowances for HFC meetings. One reason for excluding expenditure on drugs was that DANIDA was supporting other initiatives in Coast Province aimed at improving drug procurement and availability. Facilities were expected to comply with the 10/20 policy, as far as possible.

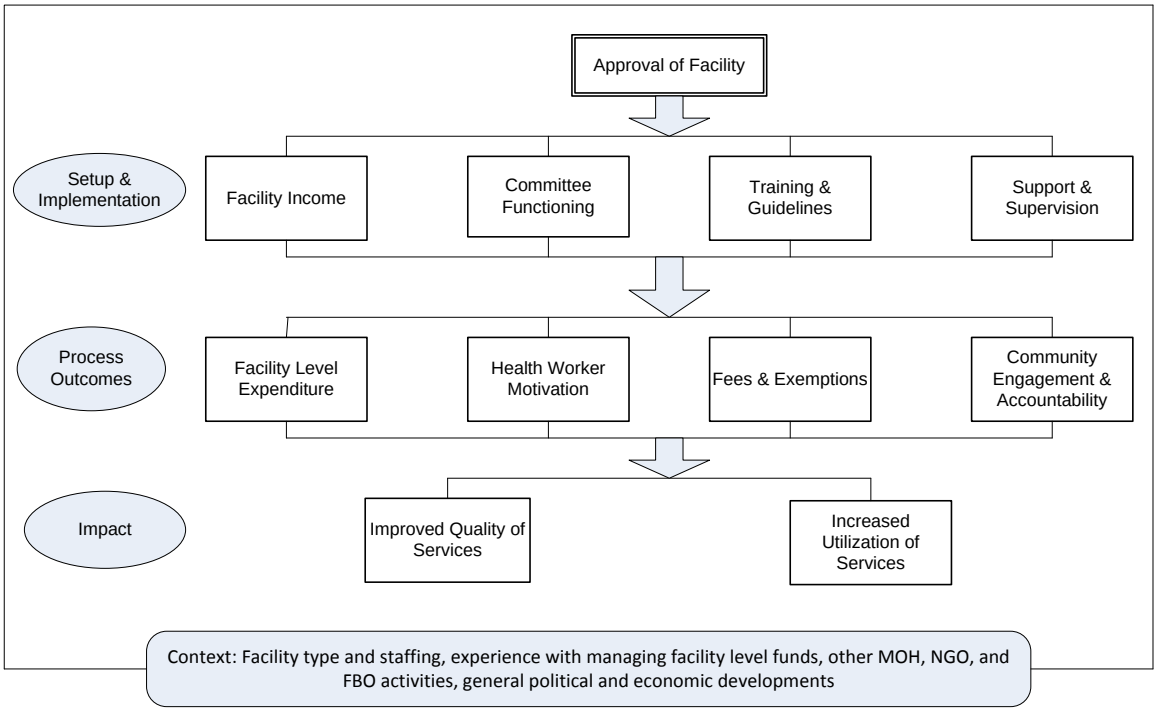
METHODS

Study Design

The overall aim of the study was to explore the implementation and effects of DFF in health centres and dispensaries in Coast Province. Although DFF was implemented in all health facilities, the study focused on health centres and dispensaries because they are the most utilized by poor rural households and the use of such direct funding mechanisms in these facilities is innovative. The conceptual framework in Figure 2 shows the hypothesized pathways through which participation in DFF could lead to improved utilization and quality of care at the facility level. The framework was derived from a review of literature and discussions with DFF stakeholders, and guided the process of data collection, analysis and interpretation.

The study was a post-hoc assessment, conducted 2 to 3 years after the scheme was introduced. It was not possible to assess the quantitative impact on key indicators, such as utilization and fees charged, because no baseline data had been collected prior to implementation, and Health Management Information System (HMIS) data were neither sufficiently complete nor reliable. We addressed this issue by focusing our quantitative analysis on intermediate/process outcomes that could be easily linked to the direct funding intervention, and using qualitative methods to explore stakeholder opinions on impact.

Figure 2: Conceptual Framework



Background to the Study Sites

Coast Province is comprised of seven districts: Malindi, Lamu, Taita Taveta, Kilifi, Kwale, Tana River and Mombasa Municipality. Mombasa Municipality hosts the town, Mombasa, which is also the provincial headquarters.

Two districts, Kwale and Tana River, were purposively sampled to reflect likely diversity of experience: according to provincial and district health managers, Kwale was seen as a stronger performer on the

implementation of the DFF whilst Tana River was perceived to be weaker. The background characteristics of these districts are summarized in Table 1.

Table 1: Characteristics of Study Districts

Characteristic	Kwale	Tana River
Number of hours drive from Mombasa to District headquarters	1 hour	5 hours
Population[1]	610,845	237,448
Main tribal groups	Mostly Digo and Duruma, both of the Mijikenda group	Pokomo, Orma, Waldei, Malakote, Mnyoyaya, Somali
Climate	Monsoon, long rains March – July; short rains November – December	Dry and semi-arid to the north, frequent floods in the River Tana delta, to the south
Main Economic Activities	Mainly food-crop farming and fishing, some pastoralism	Mainly pastoralists to the north and central, food-crop farming and fishing along the river basin and delta

[1] Source: National Population Database, 2007, maintained by Noor et al, KEMRI-WT

Data Collection

Our sampling frame comprised of all the government health centres and dispensaries in the two districts; however, facilities were excluded if they were not eligible to receive DFF grants and, additionally in Kwale, if the facilities had been included in another recent research study.

A structured survey was conducted at a sample of 15 facilities in each district: all 5 health centres in Kwale and 4 in Tana River were automatically included in the study, along with 10 randomly selected dispensaries in Kwale and 11 in Tana River. The structured survey comprised of an interview with the facility in-charge, record reviews, and exit interviews. The in-charge interview assessed facility characteristics and services provided, drug availability, financial and non-financial resources, user fees and community engagement mechanisms. The record review covered utilisation, income and expenditure over the period July 2006 to June 2007. We also aimed to select a convenience sample of 10 patients seeking outpatient curative services at each facility to make a total of 300 exit interviews. The interview was conducted at the facility premises, but away from staff and HFC members, and covered patient characteristics and diagnosis, user fees paid and awareness of community engagement strategies.

In addition, a subset of 6 facilities from each district was re-visited for in-depth interviews with the facility in-charge and members of the HFCs. The 6 facilities were purposively selected to encompass variation in terms of facility type (health centre or dispensary); accessibility to the district headquarters; and variation in performance on key indicators measured in the structured survey, for example, adherence to the 10/20 policy, activity of the HFCs, and availability and completeness of utilization records. In addition, facilities were only included if the in-charge had been working at the facility for at least 1 year. At each facility, in-charges were interviewed individually while HFC members were interviewed together, with the group size ranging from 2 to 9. We aimed to ensure a fair representation of office holders, ordinary members and of both genders; although in one case we conducted an individual interview as only one member was available. Issues covered with health workers and HFC members included committee selection, training and roles; the process of applying for, accessing, using and accounting for the funds; challenges experienced during the implementation of DFF; and recommendations for improvement.

Finally, in-depth interviews were conducted with members of the district and provincial managerial teams, and DANIDA-funded accounting staff. The interviews covered their role in support, supervision, and

oversight of DFF, and their views of its performance, problems, achievements and recommendations.

Data collection was conducted between October 2007 and March 2008. Informed consent was obtained before all data collection, and the study was approved by the Ethical Review Committees of the Kenya Medical Research Institute and the London School of Hygiene and Tropical Medicine.

Data Management and Analysis
Data from the exit interviews and structured survey of facility in-charges were double entered using Fox-pro D-base IV and MS Access respectively, and imported into STATA version 9 for analysis. The record review data were double entered using MS Excel and analyzed with the same program.

Where possible, in-depth interviews were recorded on digital voice-recorders and notes were taken by a trained assistant. The recorded discussions and/or notes were transcribed and imported into N-Vivo 7 (QSR International) for coding and analysis. A coding scheme was developed from the conceptual framework and from reading a sub-set of the transcripts to identify the main themes. The transcripts were first coded into broad categories, and then more detailed coding was completed by merging similar themes and expanding broad ones, thus allowing the data to guide the coding.

RESULTS

The results are presented in four main parts: the first part is a brief description of the study subjects and facilities; the remaining sections are structured around the study conceptual framework, covering DFF setup and implementation, process outcomes, and perceived impact.

Characteristics of Interviewees
Table 2 summarizes the characteristics of the in-charges, clients and HFC members interviewed. In each health facility, the in-charge (n=23) or the acting in-charge (n=7) was interviewed.

Table 2: Characteristics of Interviewees

	In-Charges	**Exit Interviewees**	**HFC Members**
Total Interviewed	30	292	12 groups 50 participants
Number Female (%)	7 (23%)	228 (78%)	13 (26%)
Age (yrs)	Median 34; Range (23 – 54)	16 – 24 (35%) 25 – 44 (44%) Over 44 (11%) Don't know (10%)	Not assessed; but a wide range
Qualifications/ occupation (%)	Clinical Officer – 5 (17%) Registered Nurse – 6 (20%) Enrolled Nurse – 16 (53%) Community Health Worker – 3 (10%)	Not assessed	Mostly peasant farmers, some retired civil servants , retired chiefs and local politicians – mainly councilors

Although we aimed to complete exit interviews for 10 clients per facility, a total of 292 were interviewed because some facilities had very few clients on the day of the survey. Clients were seeking curative care for themselves (48%) or their children (52%). 56% and 29% of the exit interviewees were literate in Kiswahili and English, respectively.

Services and Utilization
Outpatient curative services were offered by all the facilities while in-patient services were offered by only

5 health centres (4 in Tana River and 1 in Kwale). All facilities offered maternal and child-health services except one dispensary in Tana River which did not offer immunization, and one dispensary in each district which did not offer antenatal care (ANC) services. Delivery services were offered by all the health centres and by 9 dispensaries. Other services available at selected facilities were HIV/AIDS testing and counseling and anti-retroviral therapy (ART), in addition to the sale of insecticide-treated mosquito nets (ITNs).

Utilization data were collected for the period July 2006 to June 2007. The average monthly outpatient utilisation per facility was 1,241 for Kwale and 928 for Tana River[2]. For health centres, the figure was 1,750 and for dispensaries, 799.

DFF SETUP AND IMPLEMENTATION

Committee Functioning

All facilities surveyed had active HFCs. These were composed of the in-charge, acting as secretary, and between 8 and 18 community members (median 11), from which the chairman and treasurer were selected. There was a genuine mix of members from a wide range of geographical locations surrounding the health facility. Whilst membership was drawn from varied professions, most members were peasant farmers, and a few had a limited background in health issues, for example, Community Health Worker (CHW) training. Between 1 and 7 members were female (median 3).

The method of committee member selection varied: the most common method was through village level barazas, held by the chief, assistant chief or village headman, whereby the villagers elected representatives. Another approach was for each Village Health Committee (VHC) to send a representative to the HFC.

All HFCs had a written constitution and minutes of the meetings were generally kept. Meetings were held regularly (once every 1 to 3 months), though a smaller executive committee often met more regularly. Most HFCs received a sitting allowance from user fee funds that averaged KES 160 (US$2.60) per meeting (range KES 50 – 500 or US$ 0.80 – 8.00), although 3 facilities reported not receiving any sitting allowances. HFC members and their families also received priority services and charges were often waived.

DHMT members reported that, whilst HFCs were in place before DFF was introduced, they had not been informed of their roles and participation in management was often limited:

> *"…they had existed there before but they didn't know their roles and responsibilities. They were not doing regular meetings, they had no work plans they just attended some meetings but they were not managing the facilities…"* (District Manager)

Overall, most respondents perceived that the working of HFCs had improved since DFF introduction. It was reported that the mere existence of funds to manage in the facility led to increased participation from committee members, as well as developing the sense of facility ownership:

> ***"**You know management without finance is not management at all. Now if it couldn't be this DANIDA (DFF) funds these committees couldn't be meeting often like that because they would have nothing to discuss about or to budget for."* (Health Worker)

[2] Where data were missing for 3 months or less (6 facilities in Tana River and 2 in Kwale), the average monthly attendance was used to estimate attendance for the missing months. 5 facilities were excluded as they had more than 3 months of missing data.

The introduction of DFF released user fee money to pay sitting allowances which was also said to have improved HFC activity:

> *"Previously, we depended on the cost sharing money only and it was too little, just enough for drugs or syringes but not allowances…members would not come for meetings because there were no allowances."* (HFC Member)

Training and Documentation

Prior to DFF implementation, training on the way in which the fund was to be operated was conducted for the in-charges and HFC members. HFC members were also trained on their roles in relation to DFF and health facility management. The executive committee members were taken through the accounting procedures and the process for making monthly returns using a special cash book dedicated to the DFF funds.

The training of HFCs in both districts was highly valued by members; however, problems emerged which pointed to shallow coverage of key elements of DFF operations such as the rules of the scheme, financial management and filling in the cash book.

Nearly all health workers reported having problems with the accounting system, particularly filling and balancing of the DFF cashbook. Many said they could not understand the entries, forcing them to frequently seek assistance from the District Health Accountant and, thereby, interrupting service provision at their facilities:

> *"The main challenge was we were not conversant with documentation and another thing was the time because you see like I am alone and I have to travel to Kwale for the whole week, because you take the book and the receipts you are told that these things are not complete and then I have to come back. So those are challenges in fact you had to learn on job filling those things, we were not used to."* (Health Worker)

Interestingly, some of the district managers referred to the DANIDA cash book as 'that big book' and also admitted to having difficulties in understanding how to fill it in:

> *"I have a problem understanding those entries myself..."* (District Manager)

In some facilities, DFF funds were not spent initially, even after several disbursements. DHMT members attributed this to a lack of clarity on expenditure guidelines. Some HFC members feared spending the money because they were afraid of making mistakes:

> *"….. Some were even afraid of spending the money because they heard of strictness and the guidelines, and the procedures so some had apathy to use the funds. So I think it was somewhere around midway that they had gained the courage, otherwise they used to have accrued balances."* (District Manager)

These problems were compounded by the lack of any documentation on DFF at the facility level; however, at the time of the study, district managers reported that most facilities were managing activities well and supervisory visits had been reduced, indicating that some of these issues had been resolved:

> *"After the trainings we did monthly follow-ups for up to 6 months. Thereafter we were doing follow-ups once every 6 months…the committee members are doing well, they are operating well, and they are implementing their activities."* (District Manager)

As such, most of the teething problems that resulted from lack of or poor training appeared to have been solved and facilities were managing better.

Support and Supervision
As outlined above, members of the DHMT (DMOH, FMN, and DHA) and the PFGAs were instrumental in supporting the DFF initiative. The DMOH had an overall supervisory role, including the approval of work plans which were a pre-requisite for funds to be transferred. There was a FMN in each district and their support to the HFCs was considered vital by other DHMT members. FMNs supported links between facilities, the community and the district by strengthening the management of HFCs. This involved organising the selection of committees, arranging training, assisting committees in planning and continuously evaluating the resulting plans.

The third member of the DHMT directly involved with DFF was the DHA. The DSA advised the in-charges on budgeting and balancing the cash book; received facilities' monthly returns and entered them into a computer; and supervised facilities and helped to resolve accounting problems where they arose. There were delays in hiring DHAs and supplying their computers which affected implementation in the early stages. Moreover, by the time of the study, Tana River's accountant had left and his role had been taken over by the FMN.

The DHA reported to the Provincial Facility Grants Accountant (PFGA). There were two PFGAs in the province, each supervising 3 to 4 districts and ensuring appropriate record keeping, as well as assisting in the interpretation of rules governing DFF and allowing flexibility in expenditure of funds, where appropriate.

The degree of involvement which the DHMT had in planning DFF expenditure differed between the districts. In Kwale, HFCs were allowed to decide how money should be spent within the basic DFF rules; however, in Tana River, the DHMT distributed pre-determined budget plans which allocated funds by line item, for example, salaries or allowances. HFCs were allowed to request alterations in this plan but this required DHMT approval. Some HFC members felt the guidelines represented undue interference:

> "*The community should not just be told you must spend this money this way. They should decide for themselves – let it be a bottom-up approach* …." (HFC Member)

In contrast, other respondents found the guidelines useful in decision-making. One in-charge said that guidelines reduced arguments, for example, in relation to some HFC members wanting to use a disproportionate amount on salaries in order to employ their contacts:

> *"…The guidelines are very strict…there are no difficulties [in decision making on expenditure] …it can only be difficult if you give people room to budget without some limitation…"* (Health Worker)

Since many health workers and HFCs had problems filling in the financial records, most DHMT members said that they were spending a lot of time providing DFF accounting support to the facilities, and reported that this was compromising their other management roles. Despite the apparent increase in workload, district managers seemed satisfied with their work and more motivated now that they were also receiving some funds, reported to be making their work easier. For example, problems supervising health centres and dispensaries had been alleviated by using DFF funds to repair vehicles or buy fuel.

Allocating and Accessing Funds
Officially, only government facilities with a qualified health worker were eligible to receive funds; however, at the time of study, three of the facilities surveyed were managed by community health workers (CHWs) only, yet also received funds. According to the DHMT members, health workers at these facilities were either on leave, or had left service and were awaiting replacement.

Funds were supposed to be allocated to facilities using two main criteria: type of facility (health centres received more than dispensaries); and workload data (facilities with higher utilization received more). As utilization data were very limited in Tana River, allocations were instead based on DHMT perceptions of how busy facilities were. Later disbursements were also adjusted for the catchment population, since

district managers argued that facilities served a wider population than just those who attended for services.

Table 3 shows the average annual income per facility by source of the funds (excluding resources received in kind from the central MOH or donors such as staff, drugs and equipment). In total, DFF contributed 56% of the income; user fees contributed 34%; and, ITNs and other sources such as income generating activities, donations and Constituency Development Funds (CDF), contributed 10%. At dispensaries, the contribution of DFF was higher at 62% compared to 47% at health centres.

Table 3: Average Annual Income per Facility by Source (KES)

	DFF	**User fees**	**ITNs**	**Other**	**Total**
Dispensary	190,000 62%	65,000 22%	15,000 5%	35,000 11%	305,000 100%
Health Centre	320,000 47%	328,000 49%	19,000 3%	3,000 1%	670,000 100%
All facilities	230,000 **56%**	142,000 **34%**	16,000 **4%**	23,000 **6%**	411,000 **100%**

In general, interviewees reported that DFF accounting procedures were well established and functioning properly. In addition, records from the PFGA showed that facilities spent a high proportion (82%) of the funds disbursed. There were, however, occasional lapses and reported examples included an in-charge spending money on personal needs and producing faked receipts; a treasurer disappearing with funds; and a treasurer who insisted on keeping the funds at home, meaning that they were not immediately available for emergencies. There were also claims by an in-charge that he had spent money on facility upgrading when this was done by a donor, and funds spent on building a new latrine that was not covered since it was a new construction. These were, however, isolated cases and had been addressed by the DHMT or PFGA.

It was also noted that the financial management systems for DFF and user fees were entirely separate: separate accounts were operated for each; there were different rules and procedures for operating the two accounts; and, separate accounting and reporting procedures were followed. This led to confusion over available resources and the operation of parallel systems increased the work load of HFCs and in-charges.

PROCESS OUTCOMES

This section outlines the second level of the conceptual framework, exploring the process outcomes of DFF setup and implementation. We assessed how facilities spent their funds, the perceived impact on health worker motivation, whether the facilities adhered to the 10/20 user fee policy, and the level and nature of community engagement.

Facility Level Expenditure

Figure 3 summarizes DFF expenditure. This shows that about a third (32%) of all expenditure was for staff's wages, whilst domestic travel allowances (transport costs, patient transfers, allowances for outreach services and staff per-diems etc) accounted for about a fifth (21%) of the funds.

Other areas of expenditure included construction and maintenance of buildings, furniture and equipment; stationary, photocopying and printing; non-drug supplies such as bandages, needles and syringes, and food; fuel and lubricants; electricity and water; and airtime for communication.

Figure 3: DFF Expenditure in Health Centres and Dispensaries (July '06 - June '07)

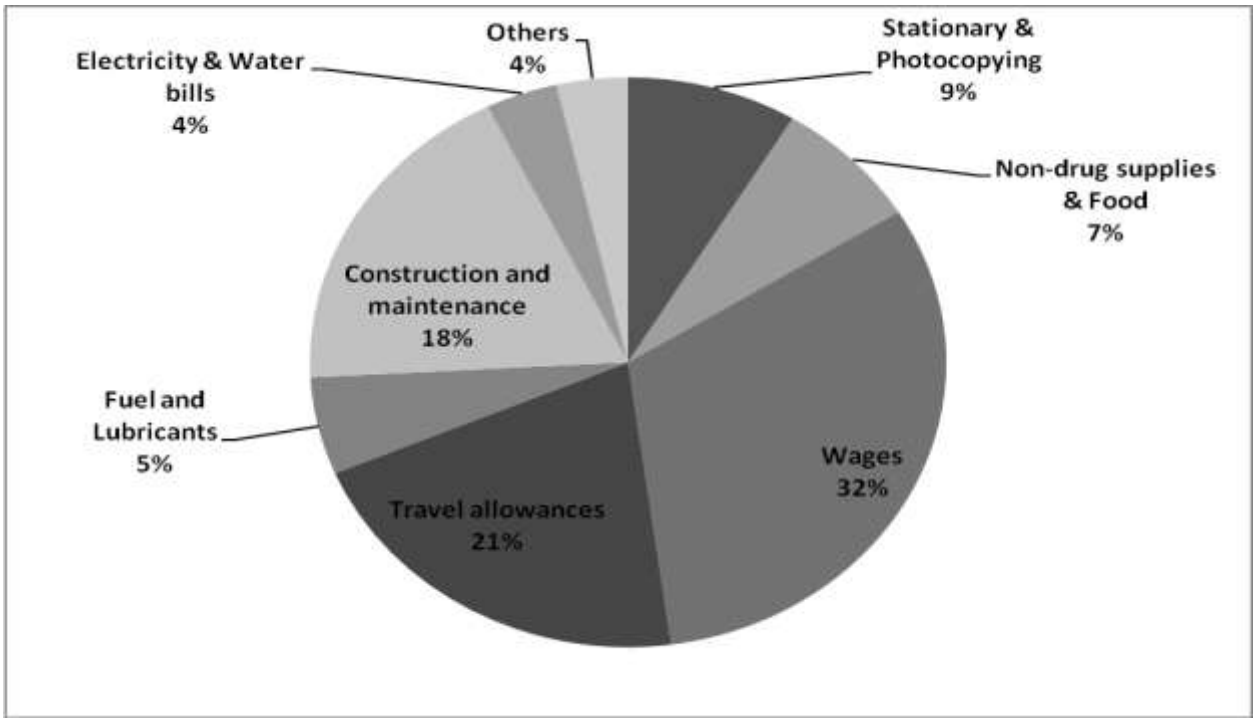


Table 4 shows that the pattern of DFF expenditure was similar across districts, except for wages, accounting for 40% and 22% in Kwale and Tana River respectively, and construction and maintenance, accounting for 7% and 33%. The top three categories of expenditure were similar across facility type, although dispensaries spent a much higher proportion on travel allowances compared to health centres (27% and 13%, respectively).

Table 4: DFF Expenditure across Districts and Types of Facilities (as % of total expenditure)

CATEGORY	DISTRICT		FACILITY TYPE	
	KWALE	TANA RIVER	DISPENSARIES	HEALTH CENTRES
Stationary & Photocopying	9	9	12	4
Non-drug supplies & Food	8	6	6	10
Wages	40	22	33	30
Travel allowances	21	21	27	13
Fuel and Lubricants	8	3	4	8
Construction and maintenance	7	33	15	24
Electricity & Water bills	5	2	1	7
Others	3	4	3	5
TOTAL	**100**	**100**	**100**	**100**

The important contribution to funding staff made by DFF is shown in Table 5, which includes professional staff employed centrally by the Ministry of Health (MOH) and locally employed subordinate staff. The MOH was the main employer, contributing salaries for over 50% of staff, nearly all of whom were trained health workers. DFF covered 33% of staff (all subordinate); while 12% were paid from user fees. Non-governmental organisations (NGOs) contributed salaries for 2% of the staff, and a further 2.5% were

volunteers. DFF contributed salaries for more staff in Tana River (40%) than in Kwale (28%), and for more than half of all staff in dispensaries (52%), as opposed to only 8% in health centres. Staff funded by DFF included cleaners, watchmen, patient attendants, registration clerks and pharmacy assistants.

Table 5: Number of Staff by Source of Salary[1,2] (%)

SOURCE OF SALARY	DISTRICT		FACILITY TYPE		TOTAL
	Kwale	Tana River	All Dispensaries	All Health Centres	
MOH[3]	92.5 (53.6)	50 (45.0)	38.5 (31.4)	104 (64.7)	**142.5 (50.3)**
DFF[4]	49.5 (28.7)	44.7 (40.3)	64.2 (52.4)	30 (8.6)	**94.2 (33.2)**
User fees	22.5 (13.0)	11.3 (10.2)	14.8 (12.1)	19 (11.8)	**33.8 (11.9)**
NGO	3 (1.7)	3 (2.7)	1 (0.8)	5 (3.1)	**6 (2.1)**
Volunteers	5 (2.9)	2 (1.8)	4 (3.3)	3 (1.9)	**7 (2.5)**
TOTAL	**172.5 (100)**	**111 (100)**	**122.5 (100)**	**161 (100)**	**283.5 (100)**

[1, 2] Includes both centrally employed staff by MOH and those hired locally as support staff
[2] Where an employee's salary was funded by more than one source such as the DFF and user fees, we have allocated their time in proportion to the funding
[3] Employer of all technical staff and some support staff
[4] Employer of support staff only

The pattern of expenditure for DFF was similar to that presented by other facility income (user fees, sale of ITNs, income generating activities). For these non-DFF sources, wages and domestic travel allowances accounted for 15% and 17% of the expenditure, respectively; 14% was spent on construction and maintenance, while non-drug supplies and food took 10%. The main difference to DFF funding was that facilities were allowed to spend this income on drugs and sitting allowances for HFC members, which accounted for 13% and 11%, respectively.

Many HFC members felt that the restriction on purchasing drugs using DFF grants was not warranted. They argued that the system of supplying drugs through Kenya Medical Supplies Agency (KEMSA) had failed to ensure adequate supplies. Drug shortages were reported to be prevalent; an observation supported by data from the facility survey which showed that, on the day of the survey, all facilities had a stockout of at least one essential drug or medical supply. One district manager said he would personally allow expenditure of DFF on drugs as a stopgap measure in the event that there were severe shortages.

Health Worker Motivation

It was a common perception among health workers and DHMT members that DFF had motivated health workers to work better. Firstly, it was said to be easier for health workers to plan their work since they worked with a predetermined budget. This was in contrast to the pre-DFF period, when the flow of funds was erratic and planning for services very difficult. Secondly, health workers found it easier to perform their jobs because of the help provided by support staff. Before DFF implementation, facilities were always understaffed, and health workers were obliged to engage in other activities, such as registering clients, collecting funds and dispensing drugs, in addition to providing consultation and administering treatment. DFF funding ensured that health workers could concentrate on performing their core duties of providing healthcare and this increased their ability to meet DMHT targets, impacting positively on motivation. The most common targets set were improvements in the proportion of fully immunized children, facility-based deliveries, and increased antenatal attendance.

The improved staffing meant that even though DFF was said to have increased the administrative and clerical workload on health workers, few complained:

> *"The government brought me here as a trained personnel alone but now if you check the workload, I could not do it alone. There is seeing of patients here, there is checking of the children there, doing tests for others, so that one person alone would not have worked but because I employed some people paid by DANIDA, you find that I am comfortable. Even sometimes, I could take a day off to follow some things in Kwale and when I come back, work has been done so you find that work is still going on without me."* (Health Worker)

It was also important that DFF covered utilities such as water and electricity, and supplies such as food rations, stationary, needles and syringes, cotton wool, spirit, torch batteries and kerosene, as reductions in stockouts were reported to have greatly improved morale:

> *"If you are provided with whatever you need and you give to your client, then you feel you have done whatever you are supposed to do. For example, if you require stationery and you get it there and then, then you feel satisfied … so there is fair satisfaction in the running of this facility with the coming of this fund."* (Health Worker)

Moreover, health workers felt that having control of DFF funds had increased their capacity to make timely decisions and resolve problems in collaboration with HFC members. Previously, when supplies (for example needles and syringes), were needed, health workers had to go through the DHMT and the complex district accounting system. This used to cost them valuable time and, in the case of Tana River, a week could be spent at the District headquarters trying to get the district accountant to release funds:

> *"…the mere fact that now they have some funds to manage… you know that gives you some motivation somehow. Then eeh . . . the fact that at least to some extent they are in control of some of the activities and damage control measures: because when something runs out you can easily say now you are going to purchase it without consulting the DMOH or the PMO."* (District Manager)

The most important link to improved motivation of health workers, according to most interviewees, was the provision of allowances for carrying out outreach activities, accompanying referred patients, and travelling to the district headquarters for re-supply, submitting HMIS reports or even visiting the bank to withdraw cash from facility accounts:

> *"In fact it has really assisted the facilities. Like it has really motivated our staff, like normally when they come to the district to bring the returns or . . . when they refer patients, normally there before the grant, they were not paid any money. They had to liaise with the relatives [yet] relatives are poor. So it was not motivating at all, but with the grant they have some allowances, they have the provision; if they refer patient their allowance is there."* (District Manager)

> "*They are paid, they feel very nice. They are more motivated to work"* (HFC Member)

> *"There was motivation because before [DFF], staff was being forced to go out on outreaches with no transport and no lunches. Nowadays there is no problem and if you tell someone to go for an outreach, they are happy to go and their work is the same ... now there is no such problem almost everybody is motivated."* (Health Worker)

> *"There is greater motivation because whatever you do, you have support. You have a source…you have finances…"* (Health Worker)

Fees, Exemptions and Waivers

According to the 10/20 policy, a patient visiting a dispensary or health centre should pay KES 10 or 20 respectively, for all the services received, except for the following groups who are exempted from all charges: under fives; malaria, HIV/AIDS, TB and patient with sexually transmitted infections (STIs); MCH and those receiving delivery services. We developed a list of tracer cases and asked the in-charges what fees they charged for each case.

Table 6 shows that the only category of patients reported to have been charged appropriately on a consistent basis were women requiring delivery services. No single facility complied with the policy on all the different types of patients, with the poorest adherence observed for patients with STIs (3/30), and adults with malaria (5/30).

Table 6: Number of Facilities Adhering to 10/20 Policy

Category	DISTRICT		FACILITY TYPE		Total
	Kwale (n=15)	Tana River (n=15)	Dispensaries (n=21)	Health Centres (n=9)	(n=30)
Child with Malaria	13	9	13	9	22
Adult with Malaria	2	3	2	3	5
Child with Pneumonia	12	8	13	7	20
Adult with Pneumonia	13	10	16	7	23
Adult with TB	10	12	16	6	22
Adult with Gonorrhea	1	2	2	1	3
Woman at first ANC visit	15	13	20	8	28
Mother requiring delivery	15	15	21	9	30
All cases	0	0	0	0	0

[1]Based on reports of in-charges

The figures in table 6 do not include lab charges in facilities, where these services were available, as it was not clear from the 10/20 policy whether lab services should be free for exempted patients. If laboratory charges were included, the proportion of facilities complying with the policy falls even further, particularly for ANC clients, and malaria and STI patients. For example, lab charges for ANC ranged from KES 100 to 300 and, for STI diagnosis, from KES 20 to 60.

Table 7 shows the charges exit interviewees reported paying. Charging for under fives was common with a median of KES 5 per child. Dispensaries charged a median of KES 10 (range 0 - 45) for under fives, meaning their fees were higher than health centres, which charged a median of KES 0 (range KES 0 – 20).

Table 7: Client-Reported Charges for Services (KES)

	Dispensary	Health Centre	All Facilities
Under fives:	**n= 86**	**n= 37**	**n= 123**
Mean	7.38	4.05	6.38
Median	10	0	5
Range	0 - 45	0 - 20	0 - 45
Over fives:	**n= 116**	**n= 53**	**n= 169**
Mean	16.29	29.80	20.52
Median	10	20	10
Range	0 - 140	0 - 150	0 - 150

The causes of non-adherence to the user-fee policy were explored during in-depth interviews. Some health workers felt that DFF funds were insufficient for running the facilities; others said that exempted patients formed the bulk of their clients and, therefore, not charging them would have a major impact on their resources. One health worker was particularly concerned about exempting the under-fives:

> *"...When we waive the under 5's then it means we will almost be running nil of user fee because most of the patients are these under 5's... when you don't charge the under 5's then definitely you get nothing..."* (Health Worker)

Other interviewees blamed non-adherence on a lack of clarity in the communication of the policy:

> *"….no formal communication was done by the Ministry [of Health], it was just announced over the radio that we waive the under 5's and such kind of thing. So when a government officer comes here to ask me why I am charging the under 5's and [I respond] you know an announcement over the radio is not the policy of the government, that is an announcement of KBC. (Laughter) So right away, we do not have a written real documentary directive that [we] don't charge under 5's."* (Health Worker)

Some DHMT members said they would allow HFCs to levy fees on exempted groups or charge higher fees if the facility was in need of those extra funds; however, this would be on the condition that the community agreed to those charges:

> *"….if there are any charges, it is the community I believe which can agree to those higher charges rather than the dispensary imposing the charges."* (District Manager)

Most interviewees were of the opinion that DFF had not changed the charging practices and, although the in-charge in one dispensary reported that DFF led to a reduction in fees from KES 20 to KES 10 per consultation, this appeared to be an exception. It seems that the requirement that facilities comply with the user fees policy for further DFF disbursements was neither communicated nor enforced: no facilities were fully adhering to the policy, yet they continued to receive the grants.

Community Engagement and Accountability

As noted above, the HFCs were generally functioning well and were perceived to have become more active with the introduction of DFF; however, just under half of exit interviewees (46%) were aware of the existence of their HFC (Table 8). Knowledge of HFCs was higher in Tana River (58%) compared to Kwale (34%), and, generally, patients visiting the dispensaries were more aware of HFCs than those visiting health centres (50% and 38%, respectively). Overall, only 16% said they knew the chairman while 26% reported knowing a committee member and, again, awareness was better in Tana River than in Kwale.

Table 8: Community Members' Knowledge of HFCs (%)

	DISTRICT		FACILITY TYPE		Total (n=292)
	Kwale (n=142)	Tana River (n=150)	Dispensary (n=202)	Health Centre (n=90)	
Ever heard of HFC (%)	48 (34)	87 (58)	101 (50)	34 (38)	135 (46)
Know HFC Chairman[1] (%)	13 (9)	35 (23)	39 (19)	9 (10)	48 (16)
Know any HFC Member[1] (%)	25 (18)	50 (33)	56 (28)	19 (21)	75 (26)

[1] Not necessarily by name

During in-depth interviews with HFCs and health workers, we sought to determine the community's understanding and awareness of DFF. The in-charges had not made any effort to inform the community that facilities were receiving grants and interviewees believed the community's knowledge of DFF to be limited and vague. For example, some in-charges said that some community members knew that a donor paid for some support staff, maintenance and outreach activities, but the community had not been told explicitly that the grants were from DANIDA. 27 of the facilities surveyed had a blackboard for passing information to the community, promoted as part of the DANIDA-funded initiative. The blackboard displayed a large table where facility staff were supposed to fill in monthly data on health and utilization (for example, number vaccinated, under-weight, births and deaths, etc), and accounts (income, expenditure, cash in hand, cash in bank). In 25 facilities, the blackboard was clearly visible to the clients, mostly at the waiting bay.

We recorded the completeness of information on the blackboard for 24 facilities[3] where they were displayed, defining them as "complete" if all columns were filled up to the month before the last. Of these 24, only 3 dispensaries had "complete" information on health and utilization; 18 facilities had partial information while 3 had no information filled in at all. None had complete information on accounts: 6 had the information partially filled in while the other 18 had no information filled in at all. Reasons given for incomplete information during the in-depth interviews included lack of time due to the administrative burden on staff, and the fear that filling in financial data would increase a risk of theft: *"… Actually there is a lot of paperwork. I wish I could show you what we do every day…"* (Health Worker)

> *"...we found that the financial information is a bit sensitive...we advise them not to fill as they can put themselves at risk. .....the community has a crime problem.... They can come and slaughter the in-charge..."* (District Manager)

During exit interviews, only 39% of clients said they had ever read the information on the blackboard and, when asked what the boards displayed, only 21% and 18% were able to mention the presence of utilization and financial data, respectively.

Views on the usefulness of the boards were mixed. Some HFC and DHMT members said that they led to more transparency in the way funds were utilized and this was beneficial to the community. Members from two HFCs said they now received fewer questions from the community about the finances as financial information was displayed on the boards.

In addition, an HFC member said the board helped to identify the needs of their community:

> *"If I come to the hospital and see that this month, some children had diarrhoea, I can ask the*

[3] Not recorded for one facility

*health worker about the number of cases from my village. I can then run to the village and see who it is that had diarrhoea. Do they have a latrine? How are the babies fed? Which water sources are they using? That is how I can know how to help them. For that case, the blackboard helps us to identify those we can help. We feel it is the eye of the public/ community" (*HFC Member)

Conversely, some in-depth interviewees were of the opinion that the boards were only relevant to those who can read, and certainly not the community members, especially in their present format:

"These are valuable for donors and for the educated but not for the local community who are mostly illiterate: They wouldn't know its significance." (District Manager)

"...Many in this community cannot read so they never bother with the board...maybe it is only useful to visitors..." (Health Worker)

We also used the in-depth interviews to investigate the nature of the community engagement relationships between health workers, HFCs and communities; and, to explore the degree to which these were characterised by trust or suspicion. The relationship between in-charges and other HFC members was generally one of cohesion, co-operation and trust. For example, some in-charges valued the opportunity to discuss issues with community members and felt that HFCs provided decisions with local legitimacy:

"...if we are to increase user fees, we must first discuss with the community and let them know why...if they accept then we can increase..." (Health Worker)

However, in-charges in a few cases complained that HFC members saw themselves as watchdogs that were imposed on the facility to supervise the staff:

"...the committee believed the facility and the money belonged to them...if you are told this is yours (dispensary) would you not undermine the person working here...?" (Health Worker)

"The chairman and treasurer act as if they are watchdogs of the facility staff. They are stubborn, and are always in the compound monitoring what is happening, thus they are a nuisance". (Health Worker)

"… They also wanted to rule the employees of a facility and act as their supervisors, whereas they should allow the in-charge to present any issues to the committee about staff and they decide together and resolve it there…" (District Manager)

In one HFC, members were concerned that the In-charge may have been mishandling facility funds:

"....most of the time when we ask about the user fees money, we are never given the correct figure...we are told lies..." (HFC Member).

Working relationships could also be tense between the HFC office bearers (executive committee members) and the ordinary HFC members. A few ordinary members felt that the executive had more privileges than the other members, and were also able to collude amongst themselves to access these. They felt this was possible because the executive members met more often and received allowances even for those sub-meetings.

The relationship between the HFC and the broader community was varied. HFC members felt that they provided an important contact point between the facility and the community. In addition, a health worker noted that this relationship was enhanced by the fact that facilities were providing casual employment for

community members. There were also, however, examples of breakdowns in trust. In one case, HFC members complained that they had come under suspicion from community members over the handling of facility funds:

> *"...The treasurer resigned...he was fed up with the rumours that money was being 'eaten'..."* (Health Worker)

At another facility, HFC members reported that community members accused male executive committee members of seducing the female treasurer since she was always in their company, and they travelled to the bank together because all their signatures were required to receive funds. In another facility, HFC members reported being accused of developing negative attitudes towards other community members, just because they were now committee members. At the same time, HFC members felt that the community did not understand the rules associated with DFF procedures and expenditure and therefore made inappropriate demands:

> *"...once they heard the facility was receiving some money, the community wanted us to make contributions to projects...they do not understand that the money is used within guidelines..."* (HFC Member)

PERCEIVED IMPACT

We now turn to the third level of the conceptual framework, the perceived impact of DFF. This was assessed through qualitative data from the in-depth interviews with in-charges, HFCs and DHMT members. Overall, interviewees felt that DFF grants had brought about a significant positive impact in almost all aspects of health service provision.

Quality of Services

Overall, DFF was perceived to have impacted positively on the services provided. Examples given by interviewees included improvements in the physical state of facilities, furniture and fittings, equipment and essential instruments. Moreover, drug stocks and other essential supplies were said to have been maintained at a comfortable level, ensuring relatively good access to services.

DFF funds were used to renovate buildings, including the restructure of some buildings to create space for specific services, for example, laboratory and pharmacy; fencing the compounds; installing security gates; and, purchasing doors, cabinets, cupboards, and locks. This renovation appeared to have improved the storage conditions for drugs, and the organisation of the stationary and equipment, as well as providing more comfortable working conditions for staff and waiting bays for patients. As such, the environment in which services were provided was felt to have become safer and more attractive for both clients and staff:

> *". . if you have a devastated facility even getting clients there might be difficult. Keeping it clean will also be difficult and infection prevention would be difficult if you only may be do everything from one table: you keep your injections there, tablets there, you have no cupboards to lock some of your drugs, etc. It's very difficult to operate in such a situation. But at least when the building is painted it looks neat and clean. The staffs are motivated and the community feels like they want to come and everything then moves well"* (District Manager)

Facilities were able to employ support staff who were involved in a range of activities, and who were perceived to be ensuring safety and cleanliness of the facility, for instance, watchmen, grounds men and cleaners. The clerks and patient attendants helped to reduce waiting time as previously, it was common for only one health worker to be responsible for registering clients, collecting user fees, consulting, administering treatment and even dispensing drugs. This used to lead to long waiting times for clients and staff fatigue; however, with the advent of DFF and the ability to employ more support staff, HFC

members and health workers felt that waiting times were reduced, and health workers provided better services.

Although DFF could not be used to purchase drugs, interviewees reported that DFF could lead to improvements in stock levels. It was argued that stock outs were very frequent before DFF was implemented, and that staff and HFC members found it difficult to deal with the deficiencies:

> *"In Kwale, half of the [HFC] members resigned because of the shortage of essential items and drugs. They felt they were being held responsible by communities. In charges were also very demoralized by the situation. They just kept their problems to themselves …. DANIDA called a meeting of the DHMTs from across the province to deal with the issue…."* (District Manager)

The introduction of DFF reduced competing demands for user fee revenue which could be saved and channelled towards procurement of drugs, among other needs.

Utilization

Health workers in both districts reported that there had been an increase in facility utilization since the introduction of DFF funds. This was partly the result of better drug supplies and, in some areas, improved cleanliness and maintenance. Another factor was the increase in outreach services, reported to have been facilitated by the provision of transport fuel and allowances. Indeed, all facilities, except one dispensary in Kwale, reported having conducted outreach services in the previous quarter. This provision was considered essential in increasing coverage of services such as immunization and ANC because many patients lived far from the facilities and, in Tana River, many were nomadic. Furthermore, health workers also conducted health education during outreach clinics, and both DHMT staff and health workers felt that this increased the communities' awareness and demand for health services.

DHMT staff in Kwale also reported that health facilities had extended their opening hours since the introduction of DFF, again increasing utilization. Here, it had become more common to open health facilities on weekends and there were staff on call overnight more frequently.

DISCUSSION

Overview of Findings

Overall, DFF was implemented well and was perceived to have had positive effects on quality of service and level of utilization.

Health Facility Committees, comprising of a fair mix of community representatives, were present in all facilities; met regularly; and, had undergone training in facility management and basic functioning of DFF. The DHMT provided both support to and supervision of health facilities, especially through the FMN and district and provincial accountants. All facilities had opened bank accounts and were accessing funds and utilizing them, generally according to pre-planned budgets. DFF accounted for a large share of facilities' income although user fees were also important, especially at health centre level.

The findings also revealed that facilities had a high absorptive capacity as 82% of disbursed funds had been utilized by the time of the study. The categories of items on which money was spent were similar across facilities and districts, with main categories being salaries, travel allowances, and construction and maintenance. DFF was funding about a third of all staff employed in health centres and dispensaries.

DFF was perceived to have had a highly positive impact by a great majority of the respondents. Utilization of facilities was thought to have increased, especially through the expanded outreach programs, thus improving access to health services. Although this resulted in a heavy workload for staff,

there were no complaints as the increased workload was offset by a better working environment, created through the improved availability of supplies and infrastructure, and by the ability to hire more support staff. Health worker motivation was also improved through provision of allowances.

It was clear that facilities were not adhering to the user fees policy. Many continued to levy charges above the prescribed fees and failed to exempt groups of patients such as the under-fives and those with malaria. Interviewees attributed non-adherence to lack of official communication of the policy and the need for more resources at the facility level.

Although our results showed high rates of non-adherence to user fee policy, it is possible that non-adherence was under-estimated as, firstly, in-charges may have been unwilling to disclose deviation from official policy and, secondly, our presence at facilities may have influenced the fees charged that day and therefore recorded in exit interviews. The frequency of non-adherence noted should therefore be considered a minimum.

The operations of HFCs were reported to have improved since the introduction of DFF; however, only a minority of people in the broader community had the information to participate actively in decision making and hold HFCs to account. Only a small proportion of exit interviewees knew the chairman or any HFC member; and their knowledge of the information available on blackboards was low. Although there were no major cases of fraud, the admission by HFC members and in-charges that the community knew very little about DFF raises concerns about transparency. On the other hand, it is possible that the low education level of the community and lack of interest in health facility matters led to challenges in communicating relevant information.

The use of blackboards to present utilization and financial information to patients and the community in general is innovative; however, the value of that information for community members is unclear, since almost a half of those interviewed at exit were not literate in Kiswahili and the boards were rarely completely filled, especially for the financial information. Moreover, it was unclear how community members should interpret some of the HMIS data, for instance, does an increase in outpatient cases represent a success because utilisation increased or a failure because disease incidence is higher? The financial information was also limited to bank account totals with no information on how facility funds had been spent.

There seemed to be some controversy in relation to the rules on how DFF should be spent. Many respondents felt that DFF should be allowed to be spent on drugs although there was some indirect effect on drug stocks as DFF released user fee funds to be spent on other items, including drugs. Other respondents also suggested that there should be flexibility in the categories on which expenditure is allowed to reflect the needs of individual facilities.

Policy Recommendations

This study shows that DFF can be implemented successfully at health facilities lower than the district level. This innovative intervention has proved to be a successful strategy for ensuring that funds reach the periphery of the health system with minimal bureaucratic interference. Moreover, HFCs at the health centre and dispensary levels have proved that these funds can be managed fairly well in low resource settings; by people with relatively low literacy levels; and, that the impact is perceived to be highly positive. This indicates that nationwide scale up of the current system is warranted. Moreover, the grants could be increased as facilities have shown a high level of absorptive capacity and have constructive ideas of how extra funds could be utilized. There is, however, scope to strengthen several areas of DFF implementation and operations.

Allocation of Funds

Allocation of funds was intended to be based on utilization data; however, as this was not possible in settings where HMIS records were poor. Instead, vague categories of “busy-ness” were used, which led to confusion and some resentment among facilities who felt they had been misclassified. Other facilities

argued that utilization was not a good measure of the need for services as facilities with a highly dispersed population and low utilization might have a greater need for outreach. There is therefore a need to reconsider the method for funding allocation to ensure that it is feasible, appropriate and transparent.

Training and Documentation
The successful implementation of DFF at these peripheral levels requires a simple, clear manual for HFC members and health workers. This could reduce confusion about DFF operation, thereby increasing trust. We suggest that the manual should cover HFC roles; procedures for elections; operations of DFF, including accounting for funds; rules on how funds can be used; and information that should be provided for community members. In addition, there should be comprehensive training of HFC members and health workers focusing on key elements of DFF operation. This should be provided before the first tranche of funds is disbursed, and repeated periodically to refresh the skills of past trainees and introduce new health workers and HFC members to DFF.

Community Engagement
Our results pointed to the need to clarify the knowledge requirements of the broader community in relation to DFF. With several mechanisms available for engaging the community, DHMTs need to decide on which mechanism should be used to inform and engage the community.

The blackboards have great potential for informing the community; however, we feel that currently, their full potential is not being reaped because the information they present is relatively difficult for community members to interpret. We therefore suggest that the blackboards are revised to include the names and villages of residence of the HFC members, a simple description of HFC roles, facility income per quarter (DFF, user fees and others), and facility expenditure per quarter by line item.

User fees
In theory, the introduction of DFF could have reduced the need for facilities to over-charge their patients; however, in reality, non-adherence to user fee policy remained common. This represents a missed opportunity to improve equity of access and the following steps are therefore proposed to improve 10/20 adherence.

First, there is need to clarify areas of confusion by issuing one clear MOH document listing all the applicable fees which should be displayed at all health facilities. Secondly, adherence to the policy should be made a key part of DFF training, including evidence on the deterrent effects of fees, especially to the poorest, and the ineffectiveness of waiver schemes in general (Meessen, Van Damme et al. 2006).

Expenditure Rules
It has been argued that drug stockouts are a major constraint on operations of facilities, negatively impacting on utilisation and quality of care. Currently, drugs can be purchased using user fee revenue but not DFF, partly reflecting the fact that DANIDA was supporting other initiatives to improve drug availability in Coast Province. This has led to demands from some HFCs to allow DFF funds to be spent on drugs. This issue requires careful debate. On the positive side, allowing DFF spending on drugs could have a favourable impact on facility operations and remove a temptation to over-charge user fees. On the other hand, allowing more local drug purchase could lead to inappropriate and poor quality drug procurement, and potentially undermine efforts to strengthen quality drug delivery systems.

More generally, the degree of autonomy that HFCs should have over allocation of funds also requires debate. Should HFCs be given a free reign within basic rules, as in Kwale, or should they be provided with a predetermined budget plan, as in Tana River? Does the latter undermine autonomy and community involvement; or does it simplify decision making and improve community relations between in-charges and other HFC members, and between HFC and community?

Monitoring and Management

Good monitoring and management of DFF is essential to its success, particularly at the facility level. In Coast Province, this was ensured through the employment of dedicated Provincial Facility Grants Accountants (PFGA) who were a lynchpin for the whole system, especially in the face of limited capacity at the HFC, facility and district levels. We suggest that the employment of similar staff in every province, together with adequate resources to support their supervision activities, will be important to the smooth roll out of DFF nationwide.

The Importance of Further Evaluation

The Kenyan government plans to roll out DFF throughout the country very soon under the Government Financial Management (Health Sector Services Fund) Regulations, 2007. This study provides important lessons for the planned scale up and for similar initiatives elsewhere; however, it also lacked a baseline or control against which impact could be quantitatively measured. We have dealt with this issue through qualitative inquiry on the perceived impact by health workers, HFC members and DHMT. There is potential for bias in these responses because respondents may have wanted to present DFF in a positive light in order to encourage the continued flow of funds. To address this, the process outcomes and key aspects of setup and implementation outlined in the conceptual framework were also evaluated to assess whether it was likely that the perceived impacts could be attributed to DFF.

In view of the lack of quantitative impact data to date, further research is clearly warranted. We suggest that this should include both baseline and follow up quantitative surveys, covering a good geographical spread of districts and including a sufficient sample size of facilities to detect statistical differences in key outcome measures such as utilisation, number of outreach activities, and user fees charged. This should be supported by qualitative data to help in understanding and explaining the findings and drawing further policy implications.

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