Payment for Performance (P4P) Evaluation

2008 Zambia Country Report for Cordaid

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Executive summary

Performance Based Financing (PBF) is a means of financing health facilities based on results that are measurable and agreed upon in contracts has been introduced by Cordaid in Zambia. In 2007 Cordaid commenced PBF support to five mission hospitals, with one hospital and two health centres added in 2008. This report describes the findings of a formative evaluation undertaken in 2008 to explore the PBF conceptualisation and implementation in Zambia, identify lessons learnt and make recommendations for improvement. The study carried out in Zambia is part of a multi-country evaluation and is not an accountability evaluation.

The set up and effects of PBF were studied in four PBF supported mission hospitals (St. Paul's, Kasaba, Lubwe and Minga) and one Rural Health Centre (Muzeyi) through discussions and semi-structured interviews with relevant stakeholders and the collection and analysis of health and financial data. Recognising that it is difficult to attribute effects to PBF by merely comparing data before and after PBF implementation, several non-PBF facilities were included in the study. Discussions, interviews and data collected in Mbereshi and Petauke hospital as well as Chiparamba Rural Health Centre, were used for comparison with the PBF supported facilities and helped to identify confounding factors.

Cordaid's introduction of Pay for Performance (P4P) is in line with the current national health strategy of the Ministry of Health, who is intending to pilot this approach in nine districts. However, lack of involvement of different stakeholders in the conceptualisation and institutional set up of PBF has proven a weakness in the program, and could affect its sustainability. The regulatory function was allegedly with the MoH, while the dioceses (which have an oversight role of the catholic mission health facilities) were designated by Cordaid as an intermediary fund holder for PBF. Independent verification of the results by the purchaser was not found to be in place during the time of this study. Nor did the evaluators find evidence of community involvement in the conceptualisation of PBF. Consultation is to occur as soon as possible on the institutional set up of PBF and its corresponding roles and responsibilities clarified. Establishing a PBF Steering Committee (inclusive of the regulator, purchaser and the community) is strongly recommended.

The fact that the contracts were signed between Cordaid and the diocese, albeit maintaining the purchaser-provider split essential for PBF, proved to be a major disadvantage in instilling responsibility for results and ownership of the performance indicators at health facility level who were often not involved or aware of contract negotiations and agreements but responsible for its results. The health facilities managers highlighted dissatisfaction with several of the indicators selected by Cordaid and the corresponding targets set. Increasing the inpatient turnover rate especially appeared questionable for health centres which are to focus mainly on preventative and promotive health care. The denominator (per 1,000 people) of the hospital delivery and VCT user rate both experience problems due to concerns about the accuracy of the catchment population assigned to each facility, and has led to facilities reporting different rates to the MoH and Cordaid which potentially creates confusion on the validity of data.

Moreover, health facilities emphasised the significant attention already paid to increasing VCT consultations through other donor supported programs. The indicator assessing the availability of essential (tracer) drugs was found to be suitable. The current indicators used, all point to quantitative aspects of health service delivery and do not include performance measures on the quality of health services which Cordaid also aims to improve. Nor do the indicators

selected reflect preventative aspects of health care provided, crucial for the provision of integrated health care. The payment for performance depends on a uniform target set for each indicator rather than based on baseline or contextual circumstances like population catchment or available staffing. As a result, one health facility would need to perform much harder than others to receive the same amount of incentives. It is recommended that contracts will be signed between the fund holder and the health facility whereby the indicators for performance and its corresponding targets will be re-negotiated. Indicators reflecting perceptions of the quality of care provided and those promoting access to preventative health care are to be considered.

Cordaid's shift from input funding to output based funding was implemented through the provision of Zambian Kwacha (ZMK) 90,000,000 as fixed funding at the start of the year, with a similar amount available to each hospital if 100% of the target achieved. For health centres this was found to be ZMK 50,000,000 each. Cordaid funding provided to the health facilities made up about 17% of their income and as such can make a significant contribution to improve access and quality of the health services delivered. However, the expenditure ceilings set by Cordaid (40-60% for staff motivation, 20-30% for equipment and medical supplies, 20-30% for infrastructure and 10-30% for running costs) were found to confine health managers autonomy in decision making to improve performance, which is pivotal to the success of PBF. It is proposed that the expenditure ceilings will be removed to allow health managers to determine the best use of the funds with the aim of improving performance.

Improving health staff motivation to consequently improve service delivery performance is one of the main objectives of PBF. The human resources crisis throughout the Zambian health sector meant that the main strategy to improve the quality of care and staff availability was through motivating the existing staff. This contrasts with conventional thinking that PBF requires certain staffing levels to be available as a precondition. The provision of an incentive (for individual staff and/or through improving the staff's working and living conditions) received through Cordaid PBF, was said to be one of the most significant impacts of the project, according to health staff. In most PBF facilities though, the link between the incentive and improved performance was not evident which will limit the effect of PBF on staff performance and motivation. An exception was Minga hospital, where an individual performance based incentive system was in place. Further support and technical assistance was requested by the health facility managers to assist in developing appropriate health staff incentive systems while the possibilities to use PBF funds for the recruitment of additional staff is to be explored.

Overall staff satisfaction was found to be higher in PBF supported facilities than non-PBF, although it is not known what the satisfaction levels were prior to the commencement of PBF. The evaluators would like to emphasise the importance of capacity building, which had not yet occurred, to empower health facility managers to plan and manage for results. This requires an understanding of the PBF principles and a shift in the organisational culture to a more results-oriented way of working, which can be a powerful intrinsic motivator for health staff. Similarly, strengthening the role of the community in the planning and management of the health services is crucial. It may be possible to build upon existing planning and management processes in place rather than developing separate processes which will positively impact sustainability. Capacity building on PBF principles and practices is strongly recommended, following an assessment of the needs.

This study explored health data from 2004-2007 and generally found limited improvements in access to curative care, in both the PBF and non-PBF facilities.

Using several tracer indicators to assess the conditions available for providing quality of care, it became evident these conditions were overall significantly better in PBF supported facilities. The evaluators have not been able to compare this to conditions prior to PBF implementation and it can thus not be determined whether this is a consequence of PBF or has always been the case. The findings of this formative evaluation were shared with the health managers of the PBF supported facilities to verify findings and ensure appropriate recommendations were made. Operationalising the recommendations in this report will assist in improving the implementation of PBF in Zambia. Future research and evaluation of the impact of PBF on the health outcomes is proposed, whereby it is suggested that the information collected during this study will be used for comparison.

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We would like to acknowledge the information and support provided by the Ministry of Health staff at national, provincial and district level as well as CHAZ and UNZA to ensure this evaluation is as informative as possible and discusses potential ways forward to improve the implementation of PBF by Cordaid. The feedback and comments provided by Jurrien Toonen from KIT has furthermore been invaluable to the analysis and clarity of this report. Whereas the enthusiasm and determination shown by Ingrid van Bouwdijk, Zambia Program Officer from Cordaid, is of utmost importance to ensure the reports recommendations will be operationalised to improve the PBF implementation in Zambia.

List of abbreviations

ANC	Ante Natal Care
BHCP	Basic Health Care Package
CBoH	Central Board of Health
CDE's	Contracted Direct Employees
CHAZ	Churches Health Association of Zambia
CRS	Catholic Relief Services
CIDRZ	Centre for Infectious Disease Research in Zambia
C-section	Caesarean section
CSO	Central Statistical Office
DHD	District Health Director
DHMT	District Health Management Team
DOTS	Directly Observed Treatment, Short-course
EHT	Environmental Health Technician
EPI	Expanded Program of Immunisation
FBO	Faith Based Organisation
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
GDP	Gross Domestic Budget
GHE	Government Health Expenditure
GRZ	Government of the Republic of Zambia
HAHC	Hospital Affiliated Health Clinic
HHE	Household Health Expenditure
HMIS	Health Management Information System
IEC	Information Education and Communication
ITN	Insecticide Treated Net
JICA	Japan International Cooperation Agency
M	Million
MD	Medical Doctor
MoH	Ministry of Health
MT	Management Team
MUAC	Mid Upper Arm Circumference
NGO	Non-Governmental Organisation
NHC	Neighbourhood Health Committee
OPD	Out Patient Department
P4P	Pay for Performance
PBF	Performance Based Financing
PEPFAR	United States President's Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother to Child Transmission
PHC	Primary Health Care
PSMD	Public Service Management Division
QA	Quality Assurance
RHC	Rural Health Centre
SWAp	Sector Wide Approach
TBA	Traditional Birth Attendant
THE	Total Health Expenditure
TOR	Terms of Reference
UNZA	University of Zambia
VCT	Voluntary Counseling and Testing
ZEM	Zambia Enrolled Midwife
ZEN	Zambia Enrolled Nurse
ZMK	Zambian Kwacha

1 Introduction

1.1 TOR

The overall aim of the multi country evaluation on Performance Based Financing (PBF) was to learn now the Performance Based Financing could contribute to the improvement of quality and accessibility of healthcare for the poor and vulnerable.

Cordaid aims at improving the access and quality of health services for people in low income countries, with emphasis on the poor and vulnerable. Reducing poverty also means changing power relations. Empowerment of the users of health services and enhancing the performance of the health work force are seen as important prerequisites for sustainable improvement in accessibility and quality of care.

Cordaid's main strategy is supporting partner organisations through capacity building. Cordaid assists in developing new innovative, approaches in order to achieve its aim. One of the new approaches used by Cordaid in supporting health developments is PBF. PBF means financing of health care based on results that are measurable and agreed upon in contracts. This is in contrast with many still existing systems within de-concentrated health services, being based on input planning and financing. So far, PBF seems theoretically having many advantages compared to the classic input based planning and financing model. This, however, is based on assumptions, often context specific and depending on the way PBF is operationalised. On the other hand, PBF is questioned internationally for bearing a number of important risks.

In Zambia, Cordaid introduced PBF in 2007 through the Pay for Performance (P4P) project. In this project, the focus shifted from merely input based support in three dioceses, towards a results-based financing with four indicators (In-patient turnover, institutional deliveries, Voluntary Counselling and Testing (VCT) and stock outs of essential drugs). The total target population is estimated at 2 million and the project mainly covers five (5) hospitals, and since early 2008, three (3) health centres in Chipata diocese were included.

Scope of the evaluation: Specifically the review of the PBF in Zambia focuses on the start up process and the conceptualisation of PBF, given that Cordaid started with PBF in Zambia in 2007. In line with the Terms of References (TOR) (see Annex 1), the relevance and appropriateness of the interventions chosen is explored from the perspectives of government, donor, implementers and beneficiaries. In addition, specific attention was given to investigating the sustainability of the approach as regards to institutional embedding, alignment with MoH policies as well as exploring the consequences of PBF from the perspective of financial dependency.

1.2 Methodology

This was investigated through semi-structured interviews (see Annex 2) with government officials at national, provincial and district level as well as through relevant donors such as the World Bank and CHAZ. In addition, relevant policies and government documents were reviewed (see References in section 6). Moreover, discussions and semi-structured interviews were held with management team members of catholic mission hospitals and health centres, which are Cordaid's implementing partners, as well as with relevant stakeholders within the diocese which has overall responsibility for these facilities. During these discussions emphasis was placed on specific questions described in the TOR which relate to the understanding of PBF and its

complexity, the capacity of the relevant organisations to implement PBF as well as the monitoring and evaluation, the latter with particular attention for the relevance of the indicators utilised.

It is recognised that it may be too early to measure any **results** in terms of real impact of PBF. However, the overall efficiency and effectiveness of the project has been investigated by looking at inputs, outputs and outcomes of the PBF approach in the specific facilities. There are five Cordaid supported mission hospitals in Zambia where PBF was initiated in 2007 and one hospital to which support commenced in 2008 as well as two health centres. Recognising that it is difficult to review a facility where PBF has only recently been implemented and considering time and travel limitations (see travel schedule in Annex 3), it was decided to visit four health facilities where PBF was initiated in 2007 while ensuring that both the best and least performers were included. As a result, St. Pauls, Lubwe and Kasaba were visited, all of which are first level hospitals located in Luapula Province, receiving their funding through Mansa diocese. In addition, Minga 1st level hospital in Eastern Province with Chipata diocese as fund-holder was selected. To gain insight into the conceptualisation and implementation of Cordaid supported PBF in a Rural Health Centre (RHC) in Zambia, Muzeyi Health Centre in Eastern Province was included. This facility started receiving Cordaid PBF support in 2008 and therefore was also considered relevant exploring from that point of view.

Aiming to attribute results to PBF, several **non-PBF** supported facilities were visited and similar information collected for reasons of comparison and identifying confounding factors. For this reason, Petauke district hospital and Chiparamba RHC in eastern province were included. Minga hospital with 121 beds according to Ministry of Health (MoH) figures can be compared to the government owned Petauke district hospital, located 10 km's away from Minga also with 121 registered beds. Similarly, Muzeyi RHC (with 34 beds) in Chipata district can be compared to the government owned Chiparamba RHC (with 22 beds) located 9 km from Muzeyi. Annex 4 reveals the health facility mapping for the relevant districts (maps copied from: 2007, Zambia National Health Facility Atlas, MOH and JICA). Table 1 briefly describes the health facilities visited for the review of Cordaid supported PBF implementation.

However, identifying facilities which allow for a valid control and absolute comparison was difficult as most facilities were different in size, location and/or services provided. For example, no comparable non-PBF facility could be identified in Luapula province and Mbereshi mission hospital was selected merely for convenience. For that reason, financial and health information was collected from as far back as 2004 to allow for composition of pre and post PBF data as well as to create a trend.

Table 1 Health facilities visited for formative PBF evaluation

Health facility	PBF status and characteristics	Location
St. Paul's Hospital	PBF commenced 1-1-2007. Catholic mission hospital 145 beds hospital, only 1st level referral hospital in district, No Hospital Affiliated Health Centre.	Mansa Diocese, Nchelenge district, Luapula province
Mbereshi Hospital	Non-PBF, Lutheran mission hospital 56 beds, 1st level mission hospital Approximately 200 km from St Paul's	Kawamba district, Luapula province
Kasaba Hospital	PBF commenced 1-1-2007, Catholic mission hospital 85 beds 1st level hospital Approximately 30km from Lubwe Hospital	Mansa Diocese, Samfya district, Luapula province
Lubwe Hospital	PBF commenced 1-1-2007, Catholic mission hospital 116 beds 1st level hospital	Mansa Diocese, Samfya district,

		Luapula province
Minga Hospital	PBF commenced 1-1-2007, Catholic mission hospital 121 beds, 1st level hospital Approximately 10km from Petauke district hospital	Chipata Diocese, Petauke district Eastern province
Petauke Hospital	Non-PBF, government district hospital 121 beds, 1st level hospital	Petauke district Eastern province
Muzeyi Rural Health Centre	PBF commenced 1-1-2008, Catholic mission health centre 34 beds, rural health centre Approximately 9 km from Chiparamba Rural Health Centre	Chipata Diocese, Chipata district Eastern Province
Chiparamba Rural Health Centre	Non-PBF, government health centre 22 beds, rural health centre	Chipata district Eastern Province

During discussions with authorities, it was found that in Katete district (located in eastern Province) implements an incentive scheme, with the aim of improving performance through the district health team. Rather than providing incentives on the supply side (e.g. health staff), incentives were being provided on the demand side (e.g. mothers receive a 'mother kit' when attending postnatal care or traditional birth attendants receiving an incentive for referring mothers to deliver in the health facility) in order to boost up the utilisation of health services. Determined to learn more about the contribution of using incentives to improving quality and/or accessibility of health care, it was decided to include a visit to the district and collect similar information in one of the health centres. The visit to Katete also served as an opportunity to gauge the replicability of the PBF approach in other areas of Zambia, more so if it is implemented by other financiers.

1.2.1 Limitations of the study

Attribution of the results solely to the Cordaid implemented PBF approach was difficult due to several confounding factors, with the most important one being the abolishment of user fees in April 2006, which also lead to an increase in the utilisation of health facilities. On the other hand, the Cordaid PBF approach commenced in early 2007.

Identifying appropriate facilities for control and comparison was difficult for most facilities, especially in Luapula Province:

1. St. Paul's is the only referral hospital in Nchelenge district, with 145 beds officially recognised by the MoH but in reality 175 beds, as reported on to Cordaid. However, it is a major referral hospital as it also receives patients from the neighbouring districts of Chiengi and Kaputa, which currently have no 1st level hospitals (although currently being constructed). In addition, it is a hospital which does not have a hospital affiliated health centre and for that reason, it does not carry out primary health care activities, including preventive and promotive activities such as antenatal care and immunisations. The hospital is, therefore, very different from any other hospital in the area and comparison is difficult. Nevertheless, Mbereshi Mission hospital was visited in Luapula province, as patients from St. Paul's mentioned going there and thus also allowing exploration of changes in utilization in PBF and non-PBF facilities.
2. Lubwe (116 beds) and Kasaba (85 beds) are both 1st level mission hospitals, located about 30km from each other in the same district in Luapula Province, while the nearest other hospital is a level 2 district hospital Mansa with 326 beds, which consequently provides different

type of services, making any comparison invalid. Luwingu district hospital, the nearest hospital was thought to be too far for patients to travel across.

Finally, it was generally difficult to evaluate the effect of the implementation of PBF in Zambia as it is still in the early stages of its operationalisation, commenced in 2007 and in the case of Muzeyi in 2008. Some of the data collected may, therefore, be useful as baseline data for future monitoring and evaluation.

1.3 The PBF approach

As part of the multi-country study, a literature review on PBF was carried out (Toonen, Canavan, Elovainio, 2008), providing the following insights: **PBF** is predicated on the assumption that linking incentives to performance will contribute to improvement in access, quality and equity of service outputs. The incentives are tied to performance, based on an agreed set of indicators negotiated upon in a contract between the fund holder and the service provider. The basic principle is "the money follows the patient", if health facilities attract more patients and provide quality services they will receive more subsidies and incentive payments on a scheduled basis (Blanchett, 2003). PBF is therefore deployed as a modality to incentivise public and private providers, using different contract arrangements as informed by lessons learned from global and local context.

Hence PBF can be seen as a **contracting approach** linking motivations and sanctions to:

- Improvement of productivity ***and*** quality of services;
- Expected results, negotiated with those to produce these;
- Creating the conditions to perform well;
- Information collection to measure performance.

The **PBF Principles** can be summarized as follows:

- Autonomy in management and planning of service providers
- Involvement of the population in managing the services
- Instruments: business plans, contracts, verification, equity fund

Organizational design of performance based funding mechanisms routinely adopts institutional arrangements where steering committees (commonly chaired by MOH) are responsible for the decision making while the fund holder assumes responsibility for the operational management, with service providers (MOH/NGOs/faith based organizations) contracted for service delivery in specific geographic catchment areas (World Bank, 2007). The fund holder is mandated to provide the administrative and public health expertise that is required, in order to deliver effective managerial capacity and collaborate with the regulator (often the MOH). The regulator in turn is responsible for the stewardship, policy and standardization of approaches to health service delivery under their jurisdiction. The community is to play an important role in PBF, with representatives taking part in the steering committee while at the same time involved in the planning and monitoring of the health facility performance.

One of the fundamental requirements for success in delivering a PBF scheme is a well constructed **business plan** with multi stakeholder participation. The health providers are required to prepare business plans, spelling out strategies for attaining desired results and the innovations that will enable them to deliver improved services with increased coverage.

The **conditions** for the proper working of PBF, that follow from international literature study of the project documents, may be summarised as follows:

1. Facilities with minimal service conditions should be available.
2. Health providers should have (access to) the knowledge and skills to provide quality services and/or the means of professional development.
3. The local M&E system should be well established and be able to respond to the information needs in PBF.
4. Community organisations should be strong enough to actively participate in ongoing feedback and decision making related to the provision of quality services to their communities.
5. The fund holding organization (e.g. Cordaid) must have the organizational capacity to assume the management of the PBF program while ensuring compliance with agreed standards, equity and ultimately mainstreaming of the tools and approach within the national health system.

The **(potential) risks** that follow from international literature and after studying the project documents, may be summarised as follows:

1. As a consequence of PBF there may be an incentive for health workers to inflate records for remunerated activities, or even to note ghost patients in the records, to obtain more incentives.
2. They may neglect activities that are not remunerated, prioritise 'low hanging fruits' (services with high demand and relatively low burden of work) and induce unnecessary demands for the select activities that are incentivised. Even more, providers may feel themselves incentivised to increase turnover of patients who can afford the services and the length of stay for inpatients – while excluding the very poor or severely ill who may not afford access.
3. Health workers may see themselves forced to deliver the activities in their contract, in spite of insufficient capacity. The provision of quality assurance is integral with the PBF model, in order to guarantee that quality of healthcare is not compromised as a trade off for reaching service targets.
4. The scale of economy is critical to success of PBF, this could make the overheads for a too small a target population too high. Transaction costs, needed to establish the systems and structures that are necessary to implement PBF are costly. E.g. time spent on monitoring and HIS may compromises programming implementation time.
5. Most often the payer decides – in case of input planners this is the central level in the MOH, in case of community financing this is the community representatives, in case of PBF this may be the donor. The risk is then that PBF may become donor-driven and donor-dependant, providers will look finally at the donor (Cordaid) what priorities should be in needs and demand in health care – rather than be responsive to community needs.

1.4 National context

1.4.1 Socio-economic situation

Zambia is a landlocked country located in the Southern-Central part of Africa and is surrounded by eight (8) countries namely Malawi, Tanzania, Botswana, Namibia, Mozambique, Zimbabwe, Angola and the Democratic Republic of Congo. Zambia covers an area of about 752,614 square kilometres of land and has an estimated population of 9.9 million people in 2000 (CSO website: www.zamstats.gov.zm). The population is skewed to the rural areas where the

majority of the people live (65% rural, 35% urban), with the capital city Lusaka having the largest population density of 64 persons per square kilometre. The median age was estimated at seventeen (17) in 2000 (Central Statistical Office - CSO, 2000)

Zambia is administered through nine provinces representing 72 districts while the main export earner is copper. A huge external and poor performance of copper on the international market stalled economic growth for a considerable period of time. Between 1999 and 2003, it was estimated that on average, real economic output grew by 2.9% per annum while the GDP per capita was US$359 (Government of Zambia, 2002; Seshamani et al, 2005). For the past few years, however, the economy has been registering some macroeconomic stability as evidenced by a real GDP of over 5% per annum, reduction in inflation, appreciation of the Kwacha against the major international currencies, declining interest rates, reduced external debt burden, and an increase in foreign exchange reserves. The GDP per capita was estimated at US $918 in 2007 (International Monetary Fund, World Economic Outlook Database, 2008).

Table 2: Selected Key Macroeconomic Indicators, 2000-2007

Indicator	2000	2001	2002	2003	2004	2005	2006	2007
Nominal GDP at market prices (US $ m)	3,239	3,640	3,776	4,318	5,448	7,269	10,817	11,121
Real GDP growth rate, %	3.7	4.9	3.3	5.1	5.4	5.0	*6.2	*5.3
GDP per capita, USD	314.5	346.7	349.6	389.0	490.8	654.9	*917.4	*917.6
Inflation rate, %	30.1	18.8	26.7	17.2	17.5	15.9	*9.0	*10.7
Average exchange rate: ZMK to USD	3,111	3,608	4,307	4,743	4,772	4,464	3,578	4,003
Total external debt as % of GDP	193.0	199.7	171.8	151.6	130.0	n.a		
Total external debt service as % of exports	15.7	13.1	10.9	14.6	18.3	6.7		

*Source: Bank of Zambia Website except for *International Monetary Fund*

1.4.2 Demographic and Socio-economic Indicators

Zambia has a huge disease burden partially due to its location in a tropical region where climatic conditions are favourable for diseases such as malaria and diarrhoea. The HIV and Aids epidemic has also impacted negatively on the Zambian population with some of its opportunistic infections being malaria and Tuberculosis. As of 2002, the life expectancy at birth had dropped from 54 years during the 1980's to 43 years mainly due to a high prevalence of HIV/AIDS among adults aged 15 to 49 which was estimated at 15.6% in 2002 (CSO, 2002).

Poverty is also widespread in Zambia even though it declined from 70% in 1991 to 64% in 2006 (CSO, 2008a). Although poverty is prevalent in Zambia, recent results show improvements in some of the key health outcomes. The infant mortality rate dropped from 95 deaths per 1000 live births in 2001/2 to 70 deaths per live births in 2007 (CSO, 2008b). The under-5 mortality rate went down from 168 deaths per 1,000 population in 2001/2 to 119 deaths per 1,000 population in 2007 while the maternal mortality rate reduced to 449 deaths per 100,000 from 729 deaths per 100,000 during the same period (CSO, 2008b). The percentage of the population aged 15-49 that is HIV positive dropped from 15.6 in 2001/2 to 14.3 in 2007 (CSO, 2008b).

Table 3: Selected Health and Socio-economic Indicators

	1991/2	2001/2	2006/7
Infant Mortality Rate per 1000 live births	79/1,000	95/1,000	70/1,000
Child Mortality Rate per 1000 live births	120/1,000	168 per 1,000	119/1,000
Maternal Mortality Rate per 100,000 live births	20.1/100,000	729/100,000	449/100,000
Fully Immunised Children Under 1 Year (%)	73%	76%	87%
Total Fertility Rate (%)	7.2%	5.9%	6.2%
HIV/AIDS prevalence (15-49yrs)	23%	15.6%	14.3%
Life Expectancy at Birth (Years)	46.9	43	41
Incidence of Poverty (%)	70%	68%	64%

Sources: All ZDHS 1996; 2001/2002; 2006/7; 2006 Living Conditions Monitoring Survey; Human Development Report; Health Management Information System

1.4.3 Health System Profile

Zambia initiated comprehensive health sector reforms in 1992 with a desire to improve *"equity of access to cost-effective quality health care as close to the family as possible"* (Ministry of Health- MoH, 1992). The health reforms emphasized primary health care and decentralization of health services planning where bottom up planning and implementation took place within the context of National Health Policies and Strategic Plans, and the Sector Wide Approach (SWAp) framework (MoH, 1992). A Basic Health Care Package (BHCP), which defines key health interventions that the public health system should provide within the available resources, was also developed for purposes of planning and allocation of resources to priority areas. To attain this goal, an autonomous body (the Central Board of Health (CBoH)) was created to perform the purchasing role at national level. The CBoH was contracted by the Ministry of Health (MoH) to implement health programmes and its functions included commissioning of health services, interpreting and implementing policies, health system development, monitoring and evaluation and the promotion of public health (GRZ, 1999). The CBoH in turn used to subcontract District and Hospital Management Boards to implement health programmes. Unfortunately, the process of changing roles and functions of the two institutions (MoH and CBoH) didn't work well (MoH, 2004a; 2004b) and the CBoH was dissolved in 2006. The MoH took over the function of the CBoH and is now in charge of policy formulation and implementation of all health programmes through the provincial health office.

As part of the health reforms, the MoH also introduced a SWAp, aimed at integrating all projects into a sector framework that would meet common national goals and objectives. This was done in to order to improve efficiency (through reduced transaction costs and duplication), and to make aid more effective (Chansa et al, 2008). A lot of projects were operational in the health sector before the health reforms and these tended to undermine national efforts to develop the health sector holistically and comprehensively.

With the introduction of the SWAp, several joint systems for sector reviews, planning, procurement, disbursement of funds, reporting, accounting and audit were put in place. Basket funding (pooling of funds from several donors and

government), for districts and eventually hospitals, Training Institutions, and Statutory Boards was also introduced. Basket funding is managed by the MoH headquarters and disbursements are made directly from MoH to Districts, 2nd and 3rd level Hospitals, Training Institutions, and Statutory Boards. There is no distinction between donor and government monies and basket funds cover recurrent costs as reflected in Annual Work Plans and Budgets. A Human Resources basket and a Drug Supplies Budget line are also in place.

Table 4: Health Facilities per 100,000 Population, 2008

Province	**Population**	**No. of Health Facilities**	**Facilities per 100,000 Population**
Central	1,237,251	154	12.4
Copperbelt	1,911,572	229	12
Eastern	1,632,583	195	11.9
Luapula	945,868	136	14.4
Lusaka	1,654,579	105	6.3
Northern	1,586,753	193	12.2
North-Western	711,127	154	21.7
Southern	1,483,654	236	15.9
Western	901,299	161	17.9
Total	**12,064,686**	**1,563**	12.9

Sources: Ministry of Health (2008); Listing of Health Facilities

1.4.4 Health Care Financing

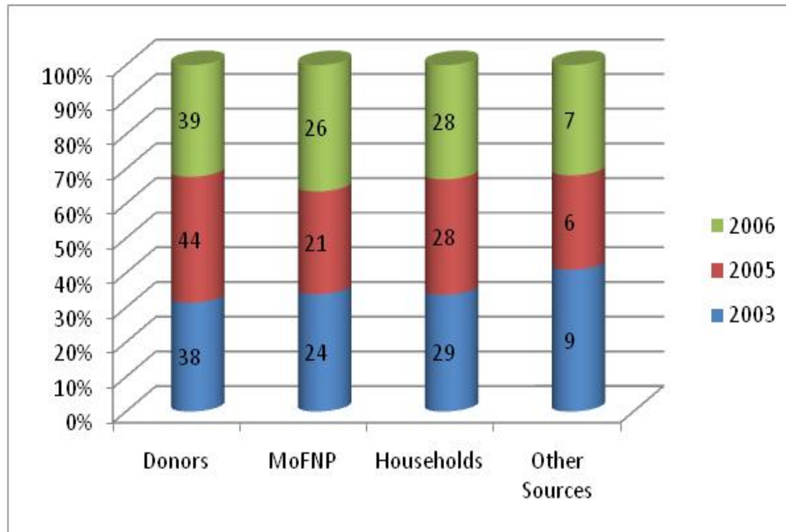
The Ministry of Health introduced a policy of cost-sharing in 1993 as a way of consumer empowerment and generation of additional finances for the health sector with the main instruments being user fees, pre-payment schemes and pre-purchase discount cards (MoH, 2005). Several years later, User Fees were abolished in all the rural and peri-urban districts after it was evidenced that they were creating higher direct costs for patients, lower utilisation of health facilities, and reduced health status for the people. User Fees were removed from all primary health care facilities in 54 rural districts on 1st April, 2006 and in July 2007, this policy was extended to all the 18 Municipalities and Cities, covering radius of 15Km and 20Km, respectively (MoH, 2006b). However, User Fees are still charged at the other levels of health care delivery system (Level II and III hospitals).

The removal of user fees triggered a huge increase in the demand for health services which negatively impacted on the lean Human Resource base and drug availability. In certain provinces, like Southern, the utilisation rate went as high as 60% in the first 3 months of implementation and this adversely impacted on the skeleton human resources available in the province (MoH, 2006c). Utilization rates then fell down again due to a drastic shortage of drugs. By August 2006, the national drug stock out was estimated at 67% (MoH, 2006c).

The major sources of health care financing in Zambia include government tax and non-tax revenues, grants and other forms of assistance from external co-operating partners, private companies, households, and Non-Governmental Organisations (NGOs) and Faith Based Organisations (FBOs) which are used as conduits for domestically and internationally generated health resources and commodities. The government encourages civil society participation in the identification, implementation and monitoring of community-level programmes (MoH, 2005). Such community participation is promoted in the health service

through Neighbourhood Health Committees (NHC's) affiliated with health centres and Hospital Advisory Committees (consisting of members of different NHC's) to provide input in Hospitals planning and management. Figure 1 below, shows the expenditure by sources from 2003 to 2006.

Figure 1: Expenditure by Sources: 2003 - 2006



Preliminary National Health Accounts, 2005-2006

Table 5 further shows that the total health expenditure as a share of the GDP has been fluctuating between 2000 and 2006 (MoH, 2008b). It increased from 5.6% in 2000 to 7.2% in 2004 and then it dropped to 6.1% in 2006. Government health expenditure as a percentage of GDP averaged around 1.7% between 2000 and 2006 (MoH, 2006a; 2008b). Government health expenditure as a percentage of total health expenditure was on average 27% per year between 2000 and 2006 as compared to household health expenditure and donor expenditures as percentages of total health expenditure which averaged 31% and 35% per year, respectively, during the same period (MoH, 2006a; 2008b). This suggests that the government has been reducing its expenditure on the health sector while donors and households have taken up the leading role. Most of the donor funds, however, have over the past 4 years been towards HIV and AIDS programmes and not comprehensive health care.

It is also important to highlight some of the changes in the overall macroeconomic situation that have negatively impacted on health care financing in Zambia. In particular, the resources at the disposal of government and the donors dwindled extensively due to an unanticipated 40% appreciation of the Zambian Kwacha against all the major currencies that occurred in the fourth quarter of 2005 right through to the end of 2006. Thus, the financial position was not in favour of government and the Ministry of Health reduced funding to districts, hospitals, and other institutions in March 2006 (MoH, 2006c). Apparently, the monthly district grant was reduced by about 40% from an average of ZMK 11 billion per month to ZMK 6 billion because more of the weaker dollars from the Cooperating Partners had to service a stronger Kwacha (MoH, 2006c). To date, the kwacha has still maintained its strength against all the major international currencies prompting the MoH to increase funding to all the health facilities in 2007 and early 2008.

Additionally, some of the key donors who over the years had been supporting the Ministry of Health recurrent budget through the basket left the sector while others shifted to direct budget support through the Ministry of Finance. This

impacted negatively on the health sector as the Ministry of Health is heavily donor dependant.

Table 5: Health Expenditure Ratios, 2000 – 2006

	2000	2001	2002	2003	2004	2005	2006
THE/GDP %	5.6	5.5	6.7	6.8	7.2	*6.7	*6.1
GHE/GDP %	1.5	2.3	2.2	1.6	1.2	*1.4	*1.6
GHE/THE %	27.5	40.8	32.3	23.5	17.3	*21.2	*26.1
HHE/THE %	39.6	34.2	28.5	28.8	28.4	*28.4	*28.1
Donor/THE %	17.9	14.9	31.1	38.0	42.5	*59.6	*39.1
Per capita GHE US$	4.9	7.8	7.5	6.2	5.9	*9.0	*14.7
Per capita THE US$	17.6	19.0	23.3	26.5	34.2	*42.4	*56.4

Source: National Health Accounts, 2002-2004;
**Preliminary National Health Accounts, 2005-2006*

Key:
THE – Total Health Expenditure
GHE – Government Health Expenditure
GDP – Gross Domestic Budget
HHE – Household Health Expenditure

1.4.5 Human Resource Staffing Levels

The human resources situation in Zambia has been described as a disaster (Ministry of Health, 2003). Almost all the health facilities in the country are severely understaffed, (especially those in rural areas) in terms of numbers, skills mix and geographical distribution. The current health sector human resource capacity is estimated to be operating at less than 50% of the recommended establishment and some of the health centres in the rural areas are manned by casual workers with no formal training in health.

1.5 This document

This document reports the findings and results of the formative evaluation of the PBF approach implemented by Cordaid in Zambia as well as recommendations for the future. In Chapter two the findings of how Cordaid intended P4P to work in Zambia are described and the relevance and appropriateness of the approach discussed. In addition, attention is paid to the inputs into the facilities and the efficiency of the project. Chapter three provides a more in depth view of the performance of the facilities visited in terms of output, quality of care, human resource development and access to care. Furthermore, an assessment is made of the potential attribution of the PBF approach to these results. Sustainability of the PBF approach is explored in Chapter four, from an institutional; socio-economic; financial and technical perspective. Chapter five concludes with the results in view of the goals Cordaid aims to achieve with PBF. Subsequently the conceptualisation of the PBF approach in Zambia is discussed, which is followed by recommendations.

2 Findings

2.1 P4P – how it works in Zambia

Historically, Cordaid has supported Catholic mission health facilities in Zambia through provision of financial and human resources. Often through the diocese, functioning as a coordinating body with oversight responsibility for allocation and monitoring of the resources in support to designated health facilities. Project and financial reports were submitted to Cordaid on an annual basis with limited accountability and oversight of the actual outputs and outcomes of the project by Cordaid.

In 2007 the new financing scheme, P4P – Pay for Performance, was introduced to three dioceses, which used to receive Cordaid support. This scheme includes a performance dimension and is focused on "output based financing" instead of the previously "input based financing". The total target population is estimated at 2 million people, covering mostly hospitals as well as health centres and dispensaries, more recently.

The regulatory role is allegedly with the MoH, while the oversight responsibility for mission health facilities ultimately lies with the Diocese. The contract is between Cordaid and the relevant Diocese, which states (Cordaid, 2007, 'Follow up' project documents) that for each hospital a minimum contribution of 50 % of the total funding (Zambian Kwacha-ZMK 90,000,000) paid out in advance on an annual basis. Performance based incentives are paid out on a 6-monthly basis, corresponding to the reported achievements, up to a maximum of another ZMK 90,000,000 per year (at 100 % of the target). For health centres this amount is ZMK 50,000,000 fixed funding and similar amount for performance based incentives.

The Cordaid project documents (2007) describe the "P4P funds can be used for the following expenditure items (within the % range):

1. Staff motivation (incl. housing, training, uniforms and incentives) 40-60%;
2. Equipment, drugs and supplies (incl. non-medical equipment) 20-30%;
3. Small infrastructure (such as latrines and incinerator); 20-30%
4. Running costs (such as audit fees, maintenance and communication) 10-30%

An additional 20 % is paid out for the running of the DHO. This includes all cost of coordination, training, data collection, reporting and an annual external auditors' report."

In addition, all hospitals received an "extra amount of € 30,000 and € 15,000 for health centres for one time investment which they had to prioritise how to spend and send a proposal. It was decided to give these extra funds at the start of the PBF contract, which was a lesson learnt from Tanzania where PBF supported Health institutions complained they lacked essential equipment and infrastructure or buildings were collapsing" (Cordaid, Correspondence by email with IvB 4th August 2008).

The indicators for the performance based incentives are the same for each facility with a set target (Cordaid 2007, P4P Zambia baseline 2005), namely:

Table 6: P4P Indicators Zambia

P4P Indicators		
1	**2**	**3**
In-Patient Turnover Rate	**Hospital Deliveries**	**VCT user rate**
per bed	*per 1,000 pop.*	*per 1,000 pop.*
Target: 50	**Target: 15**	**Target: 15**

The 4th indicator is continuous **availability of essential (tracer) drugs and supplies**, measured according to number of stock out days:

Table 7: Tracer drugs selected for PBF 4th indicator

1. Co-artem (1st line malaria)
2. Quinine injections (2nd line malaria)
3. TB drugs (Rifanah, Ethambutol, Streptomycin, Pyrazinamide)
4. Amoxicillin (tabs)
5. Ketamine ***(not for health centres)***
6. Oxytocin
7. IV fluid (Normal saline, glucose 5% or Ringers Lactate)
8. Surgical gloves 7.5
9. X-Ray films ***(not for health centres)***
10. HIV screening kits

The contract describes that the Diocese is required to "…submit half yearly progress reports on realized performance on the indicators, accompanied by explanatory notes. The 6 monthly reports also include financial statements, both on the use of P4P funds and on total income and expenditure" (Example, Cordaid, 2006, '159/10035 Agreement between Cordaid and Diocesan Health Care Programme Mansa'). In reality, it is the health facilities preparing these reports which are then send to Cordaid by the Diocese. Monitoring is to happen unexpectedly but to date; no verification visits have been undertaken.

All indicators have the same weighting when performance is calculated. The health facilities are eligible to a performance bonus every six months upon achieving the proportionate part of agreed target. Health facilities should therefore be in receipt of the bonus payments on a six monthly basis, according to the official contracts.

2.2 Relevance/ appropriateness of PBF

2.2.1 Relevance to national health policy

Timing is right for the implementation of a PBF approach in the Zambian health sector as this is a strategy the Ministry of Health is intending to pilot in nine districts, with support from the World Bank. For that reason, there is a lot of interest in how Cordaid has been implementing the PBF in Zambia as well as other neighbouring countries. It is envisaged that lessons learnt from Cordaid would provide invaluable input in the design and implementation of the World Bank supported PBF programme. Most stakeholders spoken to though, i.e. MoH, other donors and management team members of the Churches Health Association of Zambia (CHAZ), expressed it was the first time they heard of the Cordaid PBF implementation. No consultation or strategic discussion on the conceptualisation of PBF through Cordaid took place at this level and no

strategic plan on PBF implementation in Zambia is available to these stakeholders at this stage.

However, in view of the MoH's plan to introduce PBF, it can be said that PBF is in line with national health policy. Moreover, there are concerns at national level how to improve the performance of the Human Resources available for Health. Review of the international literature revealed that PBF can contribute to this through improving the intrinsic and extrinsic motivation of the staff. While national efforts to improve the HMIS and review the logical framework of results, highlight the importance the MoH assigns to evidence based planning and results based management, aspects PBF can assist in improving.

2.2.2 *Appropriateness: strategies and approaches*

It has been a Cordaid decision for the dioceses to become the fund-holder, although initially Chilonga and Minga hospital received their funding directly from Cordaid. The latter has changed in 2008 with funding through the relevant dioceses, as more facilities were included through PBF support. The decision to channel funds through the diocese has been historical, as it has been distributing funds on behalf of Cordaid. In the past, funds were also being channelled through CHAZ, which is the Global Fund principal recipient and as such, it has significant capacity and experience as a fund holder. Many stakeholders at national level expressed that CHAZ would therefore be an appropriate actor to consider for the role of fund holder. Currently, Cordaid did not opt for utilising CHAZ due to concerns about delays based on previous experience with some funded programmes related to Human Resources (Correspondence IvB Cordaid 4th August 2008). It should be noted though, that delays in the release of funding have recently been experienced through Chipata diocese (see section 2.3.1) and that most of those spoken to in the facilities have commended on the capacity building and support provided by CHAZ when it comes to the Global Funding.

No specific discussion has taken place in-country by Cordaid about who will take on the role of the regulator for PBF in Zambia. In reality, this role is filled by the Ministry of Health which has applicable systems and processes in place, such as regular supervision through the performance assessments which verifies different aspects of the management and delivery of health services. However, given their limited awareness and involvement in the Cordaid PBF programs, it has not been able to look at Cordaid supported activities. The MoH at district level have expressed a willingness to consider taking on this regulatory role, provided there is increased transparency on Cordaid PBF programs.

According to those spoken to, consultation about the contracting approach mainly occurred at the local level through a visit in February 2007 from a Cordaid consultant (Musch-Rossler, E) who had experience with PBF in Tanzania. Hence, the provincial health director of Luapula Province was briefed of the PBF approach while the district directors of health for Samfya and Nchelenge districts were aware as they happened to work in the implementing mission hospitals (St. Pauls and Kasaba) at the time of the consultancy. On the other hand, the Chipata district director of health was not aware at all of the Cordaid supported PBF (the Chipata facility was included in 2008). In addition, it was learnt that none of the district health management teams which were visited were involved in the consultation – even less in developing the approach or institutional framework.

It is strongly recommended that consultation will occur in the near future to determine who is best suited for the role of the regulator and the role of the fund holder and their corresponding responsibilities to ensure the PBF approach will be successfully implemented. This will also enhance sustainability of the approach, especially in view of the MoH plans to implement PBF. In addition, attention needs to be paid to how the process of contracting with the health service providers will be carried out.

2.2.3 Appropriateness: facilities supported

In its review of the strategies to implement PBF in Zambia, Cordaid is advised to give further consideration to the selection of facilities it supports, preferably in consultation with stakeholders such as the MoH and CHAZ. Currently only catholic mission facilities are included which does not necessarily mean that those facilities most in need are supported. Discussions with health authorities and other donors to identify facilities which need support could lead to Cordaid funding making a larger impact on the health status of the people. More appropriate may in fact be to support a district as a whole, rather than selected facilities. As, for example, merely supporting one first level hospital in a district such as Nchelenge, does not promote continuity of care as links between primary and secondary health care facilities are broken. Furthermore, funding of particular individual institutions can create inequities with other facilities in the district that do not receive the additional funding from Cordaid and could lead to inequitable delivery of services provided to the people. For example, MoH at district level may decide to reduce its level of funding to the mission hospital, which may have consequences for the longer term sustainability of these facilities when Cordaid funds are no longer available in future.

It is furthermore recommended to clarify what areas Cordaid aims to support as according to the health managers there has been a felt shift, away from the preventative primary health care activities it used to fund through previous projects in Zambia; such as the provision of water supplies to communities. Cordaid no longer supports these projects. Many of those spoken to expressed the desire to use part of the Cordaid funding for such primary health care activities which are considered important and thought to make a significant impact on improving the health status of the people. However, carrying out such activities has not been thought possible given the current expenditure ceilings set by Cordaid on the PBF funds provided which does not specifically include primary health care.

Cordaid is furthermore advised to encourage the principle of integrated health care promoted by the MoH, which advocates for integration of health promotion and prevention next to curative care. For example, St. Paul's does not have a Hospital Affiliated Health Clinic (HAHC) and does not carry out any preventative health care activities such as antenatal care or immunisation. In addition, Cordaid is currently supporting mission health centres and hospitals based on increasing the number of inpatients in areas where the government may not necessarily consider it needed for a facility at that level to be operational as an inpatient facility. An example is Muzeyi health centre which is considered a rural health centre according to the MoH but would expand to the level of a small hospital if the Cordaid performance indicators for inpatients are reached. The MoH has actually set out the standard number of beds by type of health facility (p.80, MoH, "National Health Policies and Strategies", 1991). Moreover, no assessment of the health coverage was carried out by Cordaid to determine the appropriateness of such an expansion of services, which is to consequently correspond with an increase in resources.

2.2.4 Appropriateness: the indicators

The consultation at the time mainly focused on verifying the feasibility of the use of the indicators proposed by Cordaid, which were the same as those used in Tanzania. The consultant's report describes recommendations to adapt some of the proposed indicators to the following (p.17, Musch-Rossler, 2007):

Table 8: Proposed indicators at outset PBF

No	Indicator	Numerator	Denominator
1	OPD utilization	Number of first attendances (referred cases only)	Catchment population
2	Hospital In-patient Turnover Rate	Total number of Admissions	Total number of beds in the hospital
3	Institutional Deliveries	Number of Institutional deliveries	Number of estimated deliveries in catchment population

The fourth indicator, a quality indicator, was selected (based on a number of qualitative indicators provided) during the mission by the hospital (p.28, Musch-Rossler, 2007):

Table 9: Proposed quality indicator, selected per Hospital at outset PBF

Hospital	First choice	Second Choice	Remark
Minga	MMR Malaria cfr Fresh Still Birth Pneumonia cfr	None	Proposed as a combined indicator
St. Paul's	Post Operative Wound Infection	None	
Kasaba	Post Operative Wound Infection	Number of selected committee meetings	Control by minutes and task allocation.
Lubwe	Post Operative Wound Infection	Drug Management (stock outs)	Selected drugs from HMIS
Chilonga	Death on Total Admissions	Drug Management	(stock-outs)

However, the conclusion of the consultant's report states that Cordaid decided to remove the first choice quality indicator, post operative wound infection, due to concerns related to its monitoring. It is not clear to the evaluators why this has been decided by Cordaid as post operative wound infections are reported on monthly as part of the Health Management Information System (HMIS) of the MoH. It was subsequently replaced with an indicator on drug and medical supply management through several tracer drugs. The OPD utilisation indicator was also removed, in line with the consultant's concern about the feasibility of accurately calculating this. Instead an indicator on the number of new VCT cases (Voluntary Counselling & Testing) was included due to a felt need to strengthen the number of VCT clients in the facilities. This indicator is also monitored by CHAZ as it is one of the indicators that the Global Fund is interested in. This shows that there has been an appreciation of the HIV/AIDS determinant but also suggests that the indicators were determined by Cordaid. This supports the impression of those spoken to during the evaluation who felt that the indicators have been set by Cordaid without much input from the individual facilities. The PBF supported facilities expressed limitations with several of the indicators set and a brief discussion follows on the appropriateness of the indicators and their targets, as identified by the evaluators.

Indicator targets

Currently, the targets set for P4P are in line with MoH policies, like the institutional delivery rate which is set at 15 per 1000 population. However, the targets have been the same for each facility and as a result some facilities will

need to perform much harder than others to receive similar incentives. For example, St. Paul's had 11.5 as a baseline whereas Minga had 7.2 hospital deliveries per 1000 people in 2005. For that reason, St. Paul's will automatically receive more funds as the target has been set at 15 for both, whereas Minga will have to perform much better to achieve the same target given that the P4P is set as a pro-rata of the target. It would be more appropriate to negotiate indicators and targets for the individual facilities, also taking into consideration the specific circumstances such as staffing, resources, population coverage, etc. This becomes evident when looking at the use of the in-patient turnover rate which in 2007 is for example, 22.3 in Minga and 45.3 for Lumezi. With a target set at 50, Lumazi will perform better on this indicator and receive more funds but this is also based on the fact that they have fewer beds, which is the denominator of this indicator. This raises questions of equity in the distribution of the Cordaid funding.

Inpatient turnover rate

The inpatient turnover rate, calculated as the number of admissions divided by the number of beds, showed certain constraints. The evaluators found that number of beds in the hospital or health centre listed by the MoH (MoH, 2008; Listing of Health Facilities) was sometimes found to differ with those in reality, as reported to Cordaid. For example, St. Paul's was listed with 145 beds at the MoH while it reported on 175 beds to Cordaid (the real number of beds). The higher number of beds does not enhance the performance of the hospital, rather the opposite, but the reporting figures will differ from those reported in the HMIS.

The appropriateness of increasing the number of inpatients can be queried for the rural health centres which seek to mainly provide early treatment and preventative care so as to reduce the number of admissions, in line with BPHC policy. The Cordaid indicator which aims to increase the number of inpatients counters this intention. It is recommended that Cordaid promotes the continuum of care between curative and preventative care.

Institutional deliveries rate

According to the baseline information report of Cordaid, the institutional deliveries rate is calculated as the number of deliveries per 1,000 people of the complete catchment population. During the evaluation it was found that the catchment population used for Cordaid reporting is not in line with that assigned by the MoH. It is realised, there are concerns with the catchment population figures used by the MoH when it comes to 1st level hospitals, given they are assigned the total district population irrespective of the number of hospitals in the district or the catchment population received from bordering districts. However, such deviation means rates calculated differ from those reported at the MoH.

The denominator of an institutional delivery rate is usually based on the number of estimated deliveries rather than the total population, as recommended in the report of Musch-Rossler (2007). The estimated deliveries are calculated as approximately 5.4% of the catchment population, in line with the calculation used in the HMIS. The MoH policy was found to be promoting increased institutional deliveries aiming to reduce the maternal mortality and enabling prevention of mother to child treatment of the newborn following delivery, revealing the indicator is in line with this policy.

VCT user rate

The VCT user rate, calculated as number of VCT clients per 1,000 population reveals the same problems with the denominator and subsequent difference in

figures reported to Cordaid and the MoH. Given that the pay for performance is to be based on improving a baseline figure, it is advisable to use MoH standards to ensure consistency in health data reported from different sources.

The appropriateness of this indicator is to be reviewed, given the extensive external support already available for the HIV and AIDS programme (and HIV counselling and testing) from the World Bank, GFATM, PEPFAR, and other bilateral donors and other performance based incentive initiatives, like the CIDRZ program implemented in parts of Eastern Province. It may be more suitable for Cordaid to support areas which currently do not receive incentives.

In addition, one of the health centres visited, Muzeyi, is not yet designated as a HIV and PMTCT treatment centre by the MoH. This was a concern raised at the facility as diagnosis without treatment proves difficult in ensuring client adherence to treatment. It was mentioned that many clients request transport to travel to Chipata to access treatment from designated treatment facilities which Muzeyi has not been able to provide. If Cordaid continues support for this indicator, it could explore ways of supporting clients on treatment to assure the continuum of care. Attention may also need to be given to ensure appropriate processes for accountability and assurance of quality of care (i.e. voluntarity) of the services are in place as this is currently not part of the Cordaid program monitoring.

2.2.5 Pre-conditions for PBF

There are certain pre-conditions considered essential for the success of PBF. These will be briefly explored here. Firstly, all staff in the PBF supported health facilities are employed by the MoH who tries to ensure an equitable distribution throughout the country both in quantity and mix of skills. Hence, the facilities do not have the authority to recruit (or dismiss) staff as this is all done centrally through the MoH. In line with the overall crisis in Human Resources for Health in Zambia, the facilities visited have less than 50% of the required staffing levels available. Such shortages of about 50% exist in rural areas throughout the country, except for Lusaka and Copperbelt district where the vacancy level is around 6%. While the Cordaid PBF funds are not utilised for hiring additional staff, the funds are meant to trigger an increase in the availability of the existing staff through increased staff time emanating from enhanced staff motivation.

Financing of districts in Zambia occurs in a decentralised way whereby health facilities receive their financing from the MoH through a basket grant (pooled funding from MoH and Cooperating Partners), the Global Funds (through MoH and CHAZ), and other vertical programmes operating at the district. Nevertheless, the districts are not completely able to decide what to spend the MoH funding on as there are overall expenditure ceilings set by the MoH. Ceilings are set on how much to spend at the various levels of the district (district headquarters, first level hospital, health centre, community) as well as ceilings on cost items (drugs -4%, capital -10%). This represents a conceptual constraint – one of the most important pre-conditions is a certain level of autonomy at the service delivery level that allows for facility managers and providers to find creative solutions to increase their performance.

Cordaid PBF is not run through this system rather it is parallel and the funding is additional to the existing sources of funding, making it easier for those mission hospitals and health centres to deliver health services and ensure access for the population. On the other hand, this can create disparity with the government facilities which do not receive such additional funds.

In Zambia there is a well established HMIS with data compiled and interpreted at district level before being submitted to provincial and subsequently central level. The disease surveillance data for the main morbidity and mortality as well as the service delivery information on e.g. number of first antenatal care visits or children under 1 year fully immunised, is reported monthly by the facilities. The timeliness of their reporting was evident during this review with information from the previous month readily available at the district level. The quality of the data collection and the use of the information varies however greatly in the country. A revised HMIS is currently being implemented, expanding the information collected and disaggregating data further by age groups, sex, and socio-economic status.

The HMIS data is fed back to the facilities during times of annual planning while highlighting the priority morbidity and mortality to be addressed, although the quality of such evidence based planning differs throughout the country. In Petauke district, it was witnessed during the planning launch meeting the evaluators attended that priorities identified at district and national level were emphasised in addition to health data. Reviewing the three year rolling plans of several of the facilities visited revealed that while some are very advanced in their planning of activities and ensuring its linking with the evidence, most others, like Minga hospital, could still improve on this significantly. The Cordaid PBF funds and activities are planned for separately and currently not included in the facility plans submitted to the Ministry.

Monitoring of the MoH action plans occurs through regular reporting on the plans while quality assurance (QA) is mainly occurring through quarterly self assessments followed by supervisory visits from the district level whereby an in-depth performance assessment is carried out with recommendations for improvement provided to the facility. All staff in the facilities spoke highly of this system, with actions taken guided by the QA committee of the health facility to address problems identified. For example, St. Paul has been asked to address the high postoperative wound infections. In some areas, it was noted that it was not possible to fully implement the recommendations for QA. In Samfya district, for example, the management team noted that some of the recommendations made during the QA may not be realistic to implement due to resource constraints i.e. expanding the theatre or developing radiation safe X-ray rooms in Kasaba and Lubwe.

2.2.6 The contracts and the business plans

The contracts

While the indicators may have been adapted following the consultants recommendations, the contracts (Cordaid 2007, Example Mansa) still reflect the previously proposed indicators, namely:

1. IPD admission rate (target to be confirmed in January 2007)
2. OPD user rate for referred cases (target to be confirmed in January 2007)
3. Institutional delivery rate (target to be confirmed in January 2007)
4. To be defined: non-utilization indicator

The contract and the negotiation process surrounding the indicators and targets play a pivotal role in PBF, but this did not occur in Zambia. This is further illustrated by the fact that the contract is currently between the diocese

and Cordaid rather than the individual facility and the fund holder. In fact, most of the facilities were not able to provide a copy of the contract and many of the management team members were not able to name the indicators used for PBF. This may be partly due to the fact that the PBF contract is currently between Cordaid and the diocese, rather than the individual facility which is responsible for its achievement. As such, there is no ownership of the process at this stage. The performance indicators and those selected do not necessarily reflect the needs and priorities set in the different facilities and thus a feeling of being held accountable for achieving the results, which is essential for PBF, is not instilled. This point was further laboured on during the group discussions with the diocese at the de-briefing meeting of 13th August 2008 (see Annex 5). The participants made it clear that there is need to discuss the indicators based on the needs of each facility while putting emphasis on the results and quality of care provided. For this reason, it is suggested that a process of re-defining the indicators and contracting be initiated during the next Cordaid visit. During this process the involvement of other relevant actors is advisable, such as the regulator, to ensure the performance indicators chosen will be in line with the national (health) policies and processes in place in the Zambian health system

The PBF concept aims to promote the entrepreneurship of the different actors to use the funding to their best intention so as to achieve the results it has agreed to be held accountable for, rather than dictate the use of the funds as is currently practiced with the Cordaid P4P funds. Cordaid PBF contracts state the expenditure items the funds can be used for. The health facilities visited highlighted that there is a percentage range attached to these expenditure items, which is not described in the contracts but confirmed by Cordaid upon request (Correspondence IvB Cordaid 4th August 2008), as described in section 2.1 as ; staff motivation (40-60%); equipment, drugs and supplies (20-30%;), small infrastructure (20-30%) ; running costs (10-30%). While these are all relevant expenditure items, empowering the individual facilities is an important aspect of the PBF approach. Here it was decided by Cordaid how to spend the funds to achieve the results while also the type of indicators and the importance of the bonuses were decided by Cordaid in The Hague, leaving little empowerment to both providers and community. It furthermore appears that the input based funding which Cordaid utilised prior to the PBF was merely replaced with input funding levels determined according to performance on certain indicators set by Cordaid rather than instilling the entrepreneurship and empowerment to be held accountable for results, which is the aim of PBF.

Allowing the facilities to determine the use of the PBF funds so as to achieve its performance indicators is therefore highly advisable. This is especially true in the sense that that the mission facilities in Zambia also receive significant funding from the MoH which is also spent on expenditure items according to certain percentage allocations. For example, districts and hospitals can spend a maximum of 4% of their basket grant on emergency procurement of drugs and medical supplies. Emergency procurement of drugs can be necessitated if the districts and hospitals run out of drugs which are procured and distributed centrally through the Medical Stores Limited (MSL). Therefore, the 20-30% of the PBF grant allocated to drugs might be inadequate to ensure sufficient availability of medicines and supplies which has been Cordaid's aim.

Moreover, the circumstances of the specific facilities will also affect drug availability. For example, Kasaba is remotely located and may need to invest more funds to ensure the availability of drugs than other locations. Furthermore, it is difficult to know beforehand when and to what extent medical supplies provided by the MoH will be inadequate, making it difficult to plan in advance on how the funds are to be spent to ensure the results are

achieved. Participants at the de-briefing meeting further revealed that some diseases were seasonal, which underpins the need for the facilities to use the funds according to their own needs, without pre-determined allocations or criteria, which is in line with the PBF concept. This would also prevent the need for any investment funding separate from the PBF funding, which has created confusion in the facilities in its relation to PBF. Rather the funds are made available and left to the facility to decide how to spend them. Understandably, accountability for the use and expenditure of the funds still needs to be maintained.

The PBF contracts are currently with the Diocese, which receives 20% of the baseline funding. The contract describes this is for the cost of coordination, training, data collection, reporting and an annual external auditors report. So far, limited support was found to be provided with the staff at the Diocese highlighting their lacking in technical capacity in the area of PBF. At this stage there is no clear written description of the tasks and responsibilities the Diocesian Health Office is to carry out, although Cordaid has been involved in the development of the job description for the Diocesian Health Office in Mpika and Chipata (Cordaid correspondence IvB). It is advisable for Cordaid to urgently consider the role the Diocesian Health Office is to play in the implementation of PBF in Zambia and subsequently ensure that the requisite expertise and systems are in place.

The business plans

One of the fundamental requirements for success in delivering a PBF scheme is a well constructed business plan with multi stakeholder participation. The health providers are required to prepare business plans, spelling out strategies for attaining desired results and the innovations that will enable them to deliver improved services with increased coverage. No such business plans were found in any of the facilities visited.

However, each facility has a three-year rolling action plan which is updated annually with support from the MoH taking into consideration the HMIS in the particular facility and other emerging issues. In addition, there are systems in place to include stakeholder participation and community input in the planning and review processes. This system appeared to function better in health centres, where there is an established NHC, than in hospitals. At hospital level, most Hospital Advisory Committees were not established and if they were, they were not functioning. Additionally, there is no regular monitoring of the quality from the client and/or community perspective through e.g. client satisfaction surveys at any of the health facilities, nor is community participation promoted as part of the planning and monitoring for P4P. Cordaid could play an important role in ensuring community input into hospital and health facility planning and the monitoring of the quality of service delivery.

The Cordaid funded activities are currently not included in these action plans as the PBF facilities consider it a vertical program which are monitored and accounted for separately. If all the activities were reflected in the action plans this may increase transparency and subsequent efficiency from a district perspective as well as resources allocated to the facilities by the district. An example being in Petauke district, which has three first-level hospitals each with about 120 beds; Allocation of government financial resources by the district health office to these hospitals is not equitable due to an understanding that the mission hospitals receive additional funding from sources other than government. Full disclosure of the funds in the mission hospitals would in fact reveal the financial gaps these mission hospitals experience.

2.3 Inputs

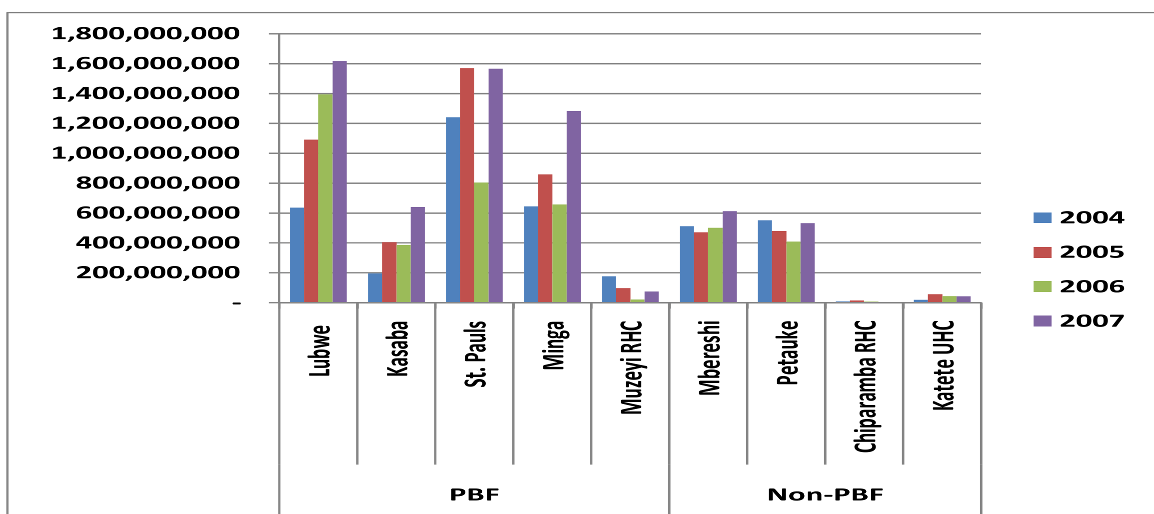
2.3.1 Funding by source

Total Funding to the PBF and Non-PBF Facilities

The main sources of funding at all the PBF and control facilities that were visited were Government (disbursements through the district where the health facility is located and purchase of beds by a neighbouring district), Churches Health Association of Zambia (CHAZ), Cordaid (previous projects and P4P), and User Fees. As earlier mentioned, User Fees were removed in April 2006 and most of the facilities that were visited don't charge user fees except for a patient book (ZMK500 or US$0.14). Apart from the patient book, some of the PBF facilities like St. Pauls, Lubwe, and Muzeyi also had other forms of user fees as did some of the non PBF facilities like Petauke. At St. Pauls and Lubwe they charged by-pass fees for those patients who come directly to the hospital without a referral letter from a health centre. The by-pass fee at St. Pauls was quite high (ZMK20,000 or US$6). At Muzeyi there is no by-pass fee but every patient attended on Sunday or holidays would be charged K5,000 or US$1.4. Generally, the income from user fees was quite minimal as compared to the income from CHAZ, MoH, Cordaid and other donor grants.

The facilities also benefit from income from other external donations and grants, and small income generated from transport charges, rentals, hammers mills, etc. It should also be noted that the money from CHAZ is mainly from government towards the payment of salaries for support staff, and the Global Funds Against HIV/AIDS, TB and Malaria. Comparison of total funding between PBF and non-PBF facilities show that, except for Kasaba Hospital, PBF facilities had more money than the non-PBF facilities. There are also nominal increases in the level of funding in 2007 as compared to the other years for all the facilities except for St. Pauls Hospital and Muzeyi Health Centre (PBF facilities), and Petauke Hospital, Chiparamba Health Centre and Katete Health Centre.

Figure 2: Total Funding to the PBF and Non-PBF Facilities 2004 - 2007



A detailed look at the major sources of income for the PBF hospital facilities (Lubwe, Kasaba, St. Pauls and Minga) in 2007 (when the Cordaid P4P mode of mode of financing commenced) is reflected in Figures 3. Figure 3 shows that the main source of funding for PBF hospitals in 2007 was CHAZ (distributing GFATM funds as well as funds for salaries received from the MoH) at 31.2%, followed by MoH at 31.1%, Cordaid at 21.1%, and Other Grants at 14.1%.

Contributions from the consumers through User Fees were at 2.3% in 2007 and Other Income at 0.2%.

Figure 3: Income by Source – Cordaid PBF Hospitals, 2007

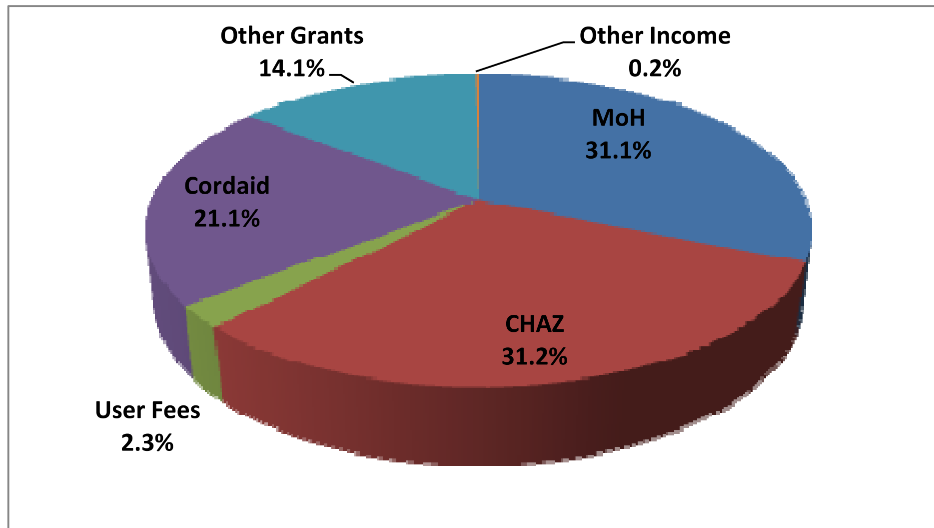
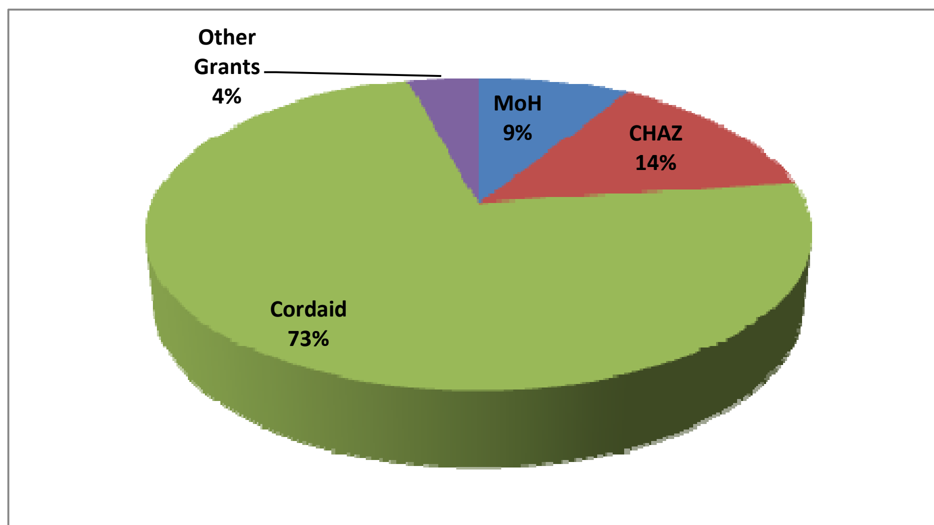


Figure 4 shows the sources of funding for PBF Health Centres in 2008. We only evaluated one of the three health centres that started PBF in 2008 and that is Muzeyi. The 2008 data is for the period January to June 2008. The data shows that Cordaid was the major financier at 73%, followed by CHAZ (distributing GFATM funds as well as funds for salaries received from the MoH) at 14%, MoH at 9%, and Other Grants at 4%. Contributions from User Fees were zero and this can be attributed to the abolishment of User Fees from all the Primary Health Care facilities in rural areas on 1st April 2006.

Figure 4: Income by Source – Cordaid P4P Health Centre (Muzeyi), 2008

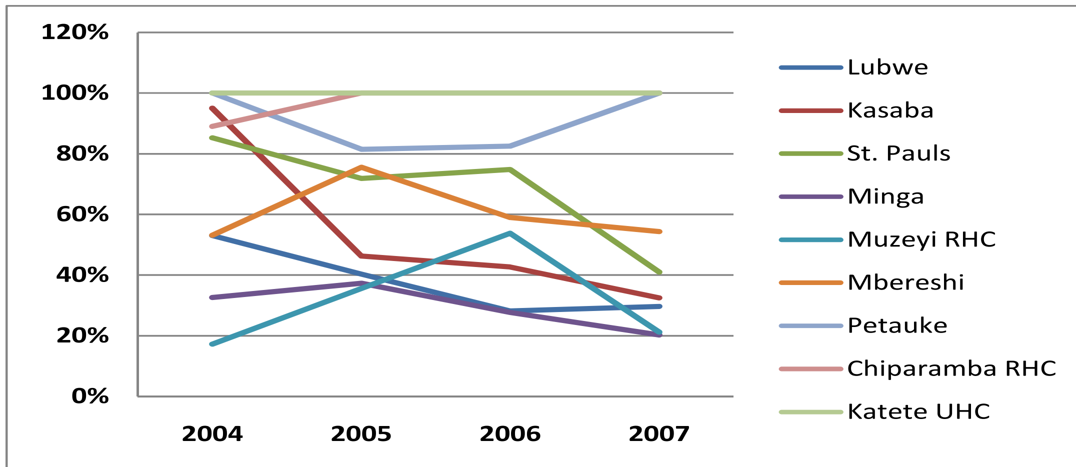


Income contributions by MoH and Cordaid

Analysis of contributions from MoH over the period 2004 to 2007 showed that the level of contribution to the PBF facilities has been going down. This is shown in Figure 5 which indicates that the MoH contribution has been going down consistently between 2004 and 2007 at Minga, Kasaba and St. Pauls

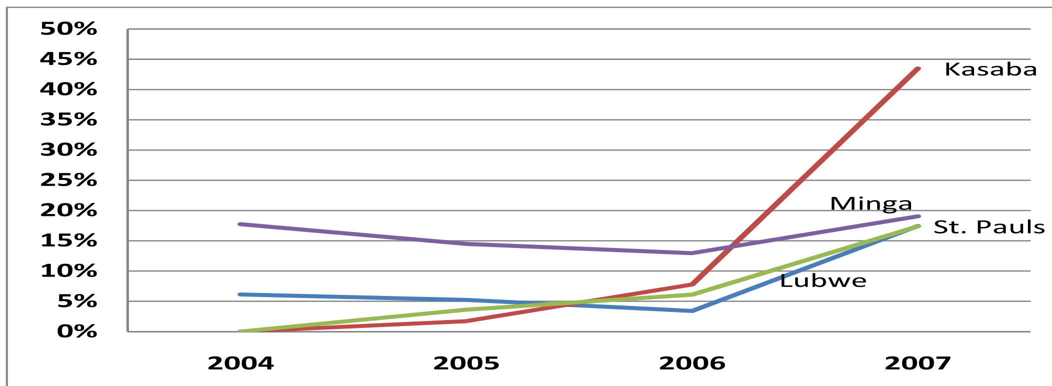
while at Muzeyi and Lubwe, MoH contribution fluctuated upwards and downwards. For the non-PBF facilities, MoH contribution averaged 60% between 2004 and 2007 at Mbereshi Mission Hospital while for the government facilities MoH contribution was at 91% at Petauke and 97% at Chiparamba during the same period.

Figure 5: Income from MoH as Percentage of Total income: PBF and Control Facilities 2004 - 2007



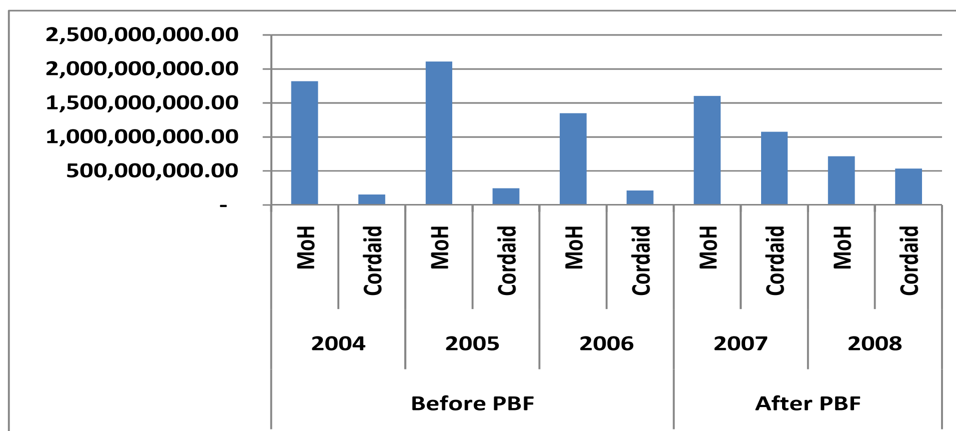
For the contribution from Cordaid, Figure 6 shows that funding from Cordaid increased with the introduction of P4P in 2007. Kasaba had the largest increase of 35% from 8% in 2006 to 43% in 2007, followed by Lubwe from 3% to 17%, St. Pauls from 6% to 17%, and the least increment was experienced at Minga from 13% to 19%.

Figure 6: Income from Cordaid as Percentage of Total income: PBF Facilities 2004 – 2007



Comparison of income from Cordaid with that from MoH for the PBF facilities showed that MoH funding has been fluctuating. It increased in 2005, decreased in 2006 and then increased slightly in 2007. On the other hand, funding from Cordaid has been increasing since 2005 with the largest increment in 2007. Funding from MoH, however, was consistently more than that from Cordaid.

Figure 7: Income from Cordaid Vs MoH: PBF Facilities 2004 - 2008



Predictability of Funds, Income and Expenditure Analysis
The volume and frequency of Cordaid support to health facilities was assessed in order to determine if the full budget amounts were released at the appropriate time (predictability) and if the money was according to the set guidelines. Issues of absorptive capacity were also explored to determine if the level of funding was adequate and if there was some 'wastage' in the system.

A review of financial data and interviews with the managers and/or accountants at both the PBF and non-PBF facilities reviewed that predictability of funding was a problem (except for Petauke). Low and unpredictable government funding was cited at Muzeyi and Minga (PBF), and Mbereshi and Chiparamba (non-PBF) – meaning funding was received low in some months and not received at all at certain times of the year i.e. in 2007 there were three months when Muzeyi and Minga had not receive funds, while this was the case during two months in Mbereshi and five months in Chiparamba. This was further confirmed by looking at the ledger cards at the health facilities, financial reports and cash books at the district health offices.

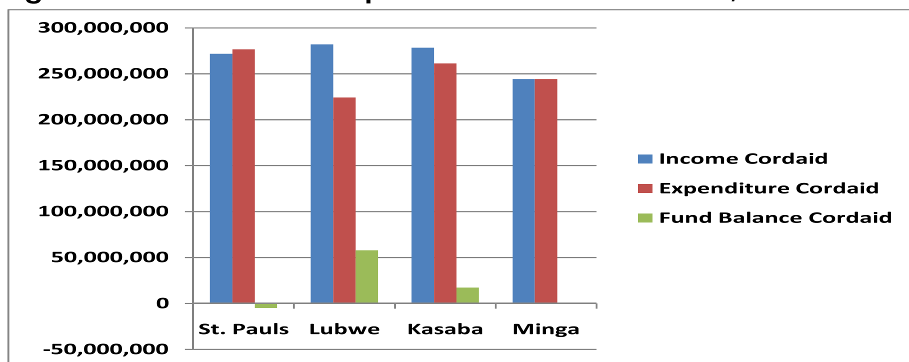
For the Cordaid funds, the same approach was followed when looking at the predictability of funds. Information gathered suggests that Cordaid funds are also unpredictable. It was explained that Cordaid was delaying in sending money meant for the year, including the fixed tranche (baseline). The baseline funding in 2007 was to be provided in December 2006/January 2007, but mostly did not arrive until May 2007 with 20% compensation for the late arrival of the funds. The performance incentives for the first 6 months were subsequently received in August 2007. Similarly, delays were experienced during 2008. For example, the 2008 baseline money which should have been transferred in January 2008 was transferred on 9th April 2008 (€90,000) for Mansa Diocese, and on 14th May 2008 (€17,100) for Minga Hospital. It is not clear what caused these delays; late reporting of the facilities to Cordaid may contribute to this, although, this should not necessarily affect the provision of the 50% fixed funding. It was also explained that the system of channelling funds through the dioceses had lengthened the budget execution process. For example, Chipata diocese received the money for Minga on 22nd May 2008 and only wrote out a cheque to Minga on 30th July 2008. At the time of this evaluation on 4th August 2008, Minga had not yet picked up the cheque.

Further delays in spending the money were further anticipated as Minga would have to deposit the cheque and wait for a minimum of 4 days before it can use the money. Another example of delays in disbursing funds to the PBF facility

was identified at Chipata diocese. Cordaid disbursed €58,000 for baseline and investment for Lumezi, Kanyanga, and Muzeyi on 9th January 2008 while the money was disbursed to the 3 facilities on 20th February 2008. It was learnt that there is no Diocesan Health Coordinator at Chipata diocese and this could explain the delays in disbursing funds.

In terms of absorptive capacity, it was observed that Lubwe had the largest unspent balance followed by Kasaba when it came to the use of Cordaid funds. St. Pauls had negative balances while Minga just broke even. The implication of this is that money might not be enough at St. Pauls and Minga while the opposite can be true for Lubwe and Kasaba. As a matter of fact, managers at St. Pauls had expressed displeasure at the way Cordaid allocates funds saying that St. Pauls should not be allocated the same amount of money as other hospitals because it catered for a very large catchment population (far larger than the official figures), more equipment and infrastructure, and human resources. For Kasaba, it was explained that they had inadequate numbers of health workers and by the time of this evaluation, a meeting had not yet been held to discuss the allocation of the 2008 Cordaid grant even though the money was already in the account.

Figure 8: Income and Expenditure: PBF Facilities, 2007



Cordaid funding to the facilities in 2007, was made up for almost 60% of investment funds which Cordaid considers separate of the P4P. A review of how the Cordaid funds allocated for the P4P are used shows that the bulk of the resources were used for infrastructure and maintenance of buildings at 34%, Personnel Costs at 30%, equipment, drugs and non-medical supplies at 25%, and running costs (transport, PHC and other charges) at 11%. This suggests that Cordaid guidelines on the use of money by cost item were not being followed especially for Personal Costs and Infrastructure and maintenance. Personal costs were far below the recommended range of 40-60%, while Infrastructure and maintenance were above the recommended range of 20-30%. Equipment, Drugs and Non-medical supplies were within the range of 20-30%, and the Running Costs were also within the range of 10-30%. Please note that this analysis does not cover the investment funds sent by Cordaid for capital projects and purchase of vehicles. The analysis was only made for Cordaid PBF Hospitals (Lubwe, Kasaba, St. Pauls and Minga) for the year 2007.

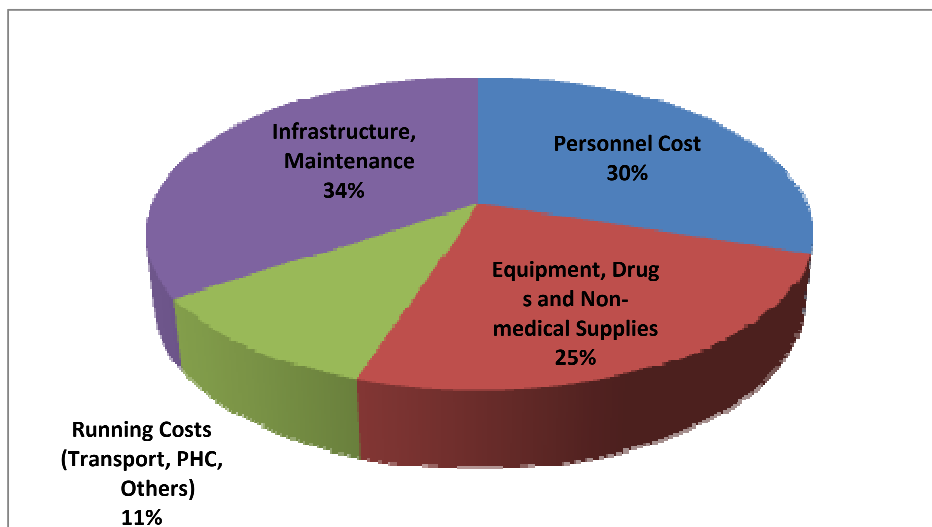
It was disappointing to find out that expenditure on personnel costs was low especially as staff motivation is an extremely important component of the PBF, and considering the low salaries and the human resources crisis in Zambia. At Muzeyi RHC, it was noted that no monies were allocated at all for staff motivation in 2008.

There was also an issue with the use of Cordaid funds for the procurement of essential drugs. The Cordaid tracer drug list is often followed when procuring

drugs and certain expensive drugs like Coartem could not be procured even if out of stock because the ceiling on drugs was too low. Generally, it was stated that the ceilings were restrictive and that it could be better to let the health facilities decide for themselves what they wanted to procure or spend the money on. The other issue was that the health facilities might not be in full control of the indicator on drug availability as the bulk of the drugs are procured centrally by MoH.

Health managers further indicated that the switch from input to P4P mode of funding had led to a neglect in the financing of Primary Health Care (PHC) activities as Cordaid expenditure ceilings did not include PHC activities. Of all the health facilities visited it was only at St. Pauls where the P4P funds were being used extensively for so-called primary health care activities. St. Pauls motivates patients to utilize the health facility by providing free nutrition supplements to malnourished children, and HIV and AIDS patients.

Figure 9: Use of PBF Cordaid Funds – Hospitals (Lubwe, Kasaba, St. Pauls and Minga), 2007

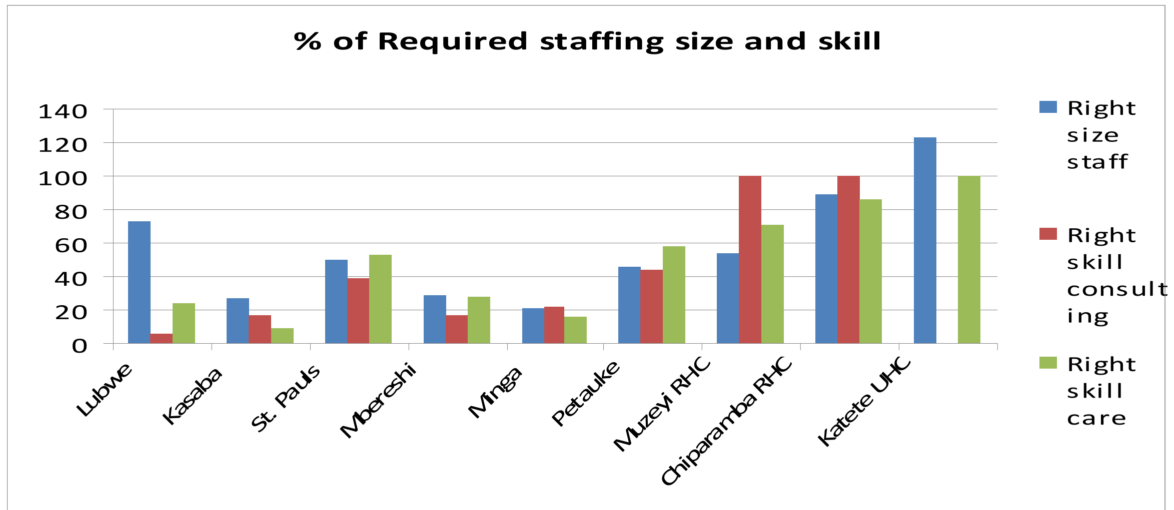


2.3.2 Human resources

The government through the Public Service Management Division (PSMD) in 2006 approved a new staff establishment structure that will increase the number of human resources in the public health service from the old structure of 26,088 to 51,404. The actual staffing levels for the facilities visited reveal that achieving such basic health care package norms for 1st, 2nd and 3rd level of referral (as costed by CBoH/UNZA/IHE, 2004) will not be feasible in the short term as the existing establishments for the facilities were not even filled by 50%, as seen in figure 10 below and highlighted by the staff spoken to. Figure 10 further shows the extent to which each facility has the right size of staff as well as the skills required in relation to consulting (i.e. medical and clinical officers) and care providers (i.e. nurses and midwives). The graph confirms that none of the hospitals have the required staffing levels and particularly the skill mix needed, while the health centres seem to be better staffed than the hospitals, except for Katete which reported no medical/clinical officers present. Moreover, it highlights the urgent need for more qualified staff as expressed by the members of staff and the clients. The human resources crisis is compounded by the fact that the Government of the Netherlands no longer provides expatriate medical doctors to address this need. Cordaid has

also terminated such support, a case in point is Minga where the contract of the expatriate medical doctor expired and the medical doctor has since left.

Figure 10: % of Available versus the Required Staffing, both in size and skills



Appropriate staffing is an important precondition for being able to provide health services as well as ensuring quality of care. Cordaid funding can be used to recruit retired staff. However, given the Human Resource crisis throughout Zambia; availability is likely to be limited for qualified health staff, particularly medical doctors. Hence, the main strategy to improve the quality of care and staff availability was through motivating the existing human resources to work more effective and efficient as well as longer hours.

2.4 Efficiency

2.4.1 Efficient organisation of the program / project in support of PBF

The World Health Organization (2007) observes that improving efficiency of resource use requires focusing on the appropriate mix of activities and interventions to fund, and inputs to purchase. It also requires aligning provider payment methods with organizational arrangements for service providers and other incentives for service provision and use. Henceforth, the functionality of the PBF facilities was assessed looking at how efficient the provision of services has been.

Our evaluation of the Cordaid supported P4P programme in Zambia revealed that there is no specific institutional set up for the programme and its implementation at facility level varies according to how the health facility managers understand the PBF concept, which was limited in most cases. The organisational design routinely adopts institutional arrangements set by the MoH and the management instruments, annual action plans, and systems for monitoring and evaluation. MoH has in place a robust Financial Administrative Management System and HMIS. For example, Cordaid adopts indicators from the HMIS. However, while it is then expected that during planning and reporting, the common management arrangements would be used, this is not the case. Cordaid requires separate financial and performance reports before the release of funds, not merely providing info which is already collected but a separate report on the PBF project implementation is requested. This raises questions on how administratively efficient this arrangement is. On the other hand, the established planning, monitoring and evaluative system in place in the health sector provide ample opportunities for Cordaid to utilise, support

and strengthen which will promote a sustainable approach. Nevertheless, this would require extensive consultation with the relevant stakeholders and a change in the institutional set up of the Cordaid PBF program in Zambia.

Related to administrative efficiency is technical and allocative efficiency. Technical inefficiency was highlighted in Section 2.2.1 where some of the PBF facilities namely Lubwe and Kasaba were not able to fully utilise their P4P monies. On the other hand, other PBF facilities like St. Pauls and Minga indicated that they required more resources in order to operate efficiently. The way Cordaid allocates the P4P funds across the PBF facilities was not clear and even if a formula is in place, it has not addressed efficiency in resource allocation and use due to the ceilings set on the use of resources by cost item, which are not necessarily indicative of the needs in the facilities. Efficiency could improve if these ceilings were removed to allow managers to shift resources efficiently to underfunded areas. Further, it was difficult to tell if it has been possible to apply the P4P funds equitably and if indeed geographical disparities have been reduced. The Provincial Health Director exemplified this point by saying,

"It is understandable that Cordaid only chose Roman Catholic Mission facilities. But PBF should have a multiplier effect and a cascade type of improvement should aim be targeted at those health facilities doing badly. We need to build in a system that identifies institutions based on their challenges. Issues of equity in resource allocation. There is need for MoH to be proactive in resource allocation for mission health facilities versus government facilities. It seems government facilities are disadvantaged".

2.4.2 Transaction costs

There are divergent views on transaction costs with certain authors/scholars relating it to management (administration) or investment costs. From an administrative aspect, in a situation where a new programme relies heavily on the institutional arrangement of an already existing programme, it is sufficient to look at the impact of the additional administrative burden and consider this as the transaction cost. In this case, Cordaid did provide sufficient money for investment as part of the P4P programme in Zambia but technical support and investments in capacity building have been insufficient. For example, there has been no specific PBF related costs for technical support, training, financial-administrative personnel, and salaries of participants of the regulatory body. In fact, there is no regulatory body and the M&E which is supposed to be done by the Diocesian Health Coordinators had not been conducted at the time of the evaluation. There were no financial and HMIS data audits at the time of the evaluation.

Thus, the P4P in Zambia uses already existing administrative systems and it in turn increases the administrative burden or transaction costs. The P4P programme uses existing systems but requires separate financial and performance reports before the release of funds. Consequently, a lot of time is spent preparing these reports and health staff expressed their displeasure on this parallel reporting arrangement. For example at Kasaba, it was explained that they have a serious shortage of human resources and that it takes them a lot time to complete the Cordaid reports. Although it is to be noted that none of the facilities highlighted employing additional staff for this purpose, hence no additional costs. However, late reporting in turn leads to delays in disbursing money to Kasaba. Further still, even if this money is received, there are delays in using it because there is no time to hold resource allocation meetings.

3 Results

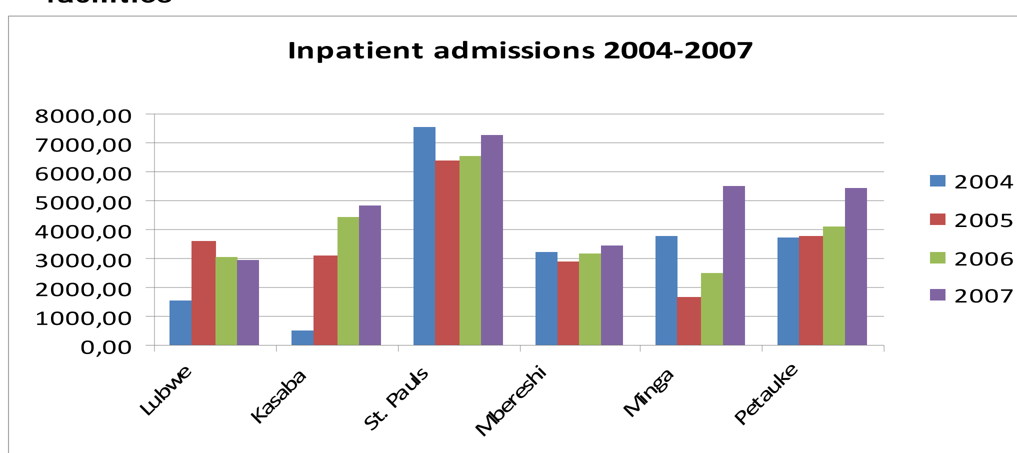
Improving productivity, quality of care and access are major reasons for implementing performance based financing. Several indicators have been selected by Cordaid which will be reviewed here to verify certain assumptions about PBF and/or potential negative effects of selecting these indicators. Given that the implementation of PBF started in 2007 in St. Paul's, Lubwe, Kasaba and Minga hospital, data trends from 2004 to 2007 will be assessed to reveal if it has created any change. In addition, the trends will be compared with facilities which have not received PBF, namely Mbereshi and Petauke, in order to assess the extent to which the results are attributable to PBF. The health centre data has been omitted in most case due to data limitations.

3.1 Performance in terms of productivity

3.1.1 Inpatient admissions and workload

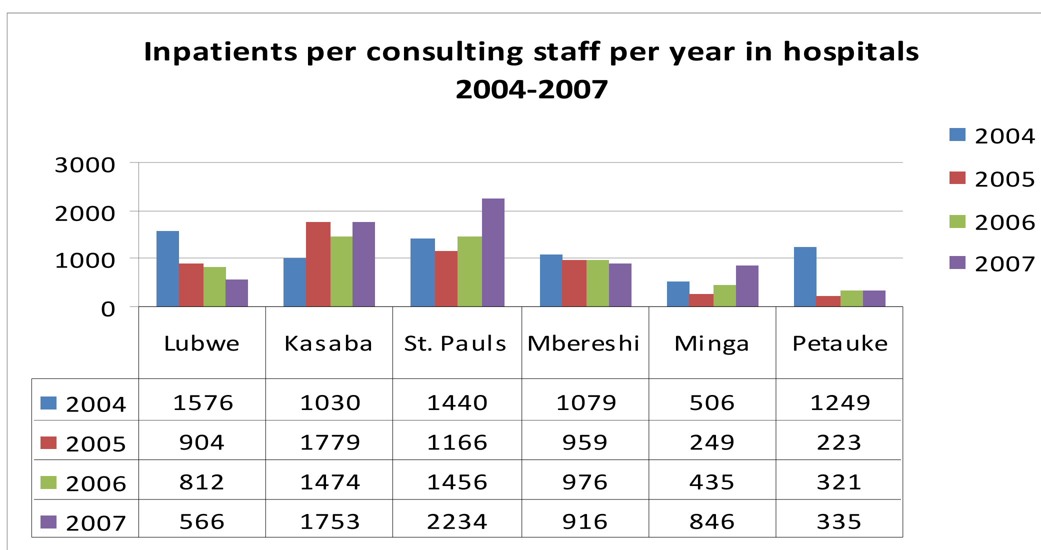
One of the indicators selected by Cordaid with the aim of improving productivity is the inpatient turnover rate. Due to variations in the number of beds reported over the years in the different facilities, it was deemed more appropriate to look at the absolute number of inpatient admissions over the years. As reflected in figure 11, this reveals that Lubwe does not show an increase, while Kasaba has been showing a steady increase over the years. St. Paul's shows a varied picture with high numbers in 2004 and 2007, which is the same at Mbereshi, a facility located not too far from St. Paul's which was selected for comparison. Minga does show a significant increase in its inpatient admissions, which is also the case at Petauke (the control facility located about 15km from Minga), although to a much lesser extent. Petauke has more recently expanded the specialised services it provides as well as the opening of a new theatre allowing for elective cases, while there has also been an increase in medical doctors. However, all facilities highlighted that the impact of abolishing user fees in April 2006, cannot be underestimated and that it is difficult to attribute increases in inpatient admissions to PBF. Furthermore, it did not appear that specific activities were undertaken in the PBF supported facilities to increase the number of inpatients, except maybe for St. Paul's which provides nutritional support to malnourished children and HIV positive mothers and their children, although the latter can also be funded through Global Funding.

Figure 11: Inpatient admissions 2004-2007, PBF and non-PBF facilities



In the facilities it was furthermore highlighted that one of the negative sides of PBF has been that as more patients are admitted, there has been an increase in workload more so that this is not accompanied with an increase in staffing levels. For that reason, it was decided to look at the workload by average number of inpatients seen per year per consulting staff, as seen in figure 12 below. It generally reveals that overall productivity of consulting staff in relation to inpatients is very different in the different locations, potentially highlighting inequity in consulting staff distribution or at least allocation of consulting staff to inpatient. The workload for consultants is highest at Kasaba and St Paul's and both institutions mentioned having major problems in retaining staff due to remoteness, particularly at Kasaba. This is followed by Mbereshi, a non-PBF mission hospital, and then Minga, while for Lubwe and Petauke (non PBF government hospital) the staff workloads appear less intense. It is beyond the scope of this formative evaluation to determine the required staffing levels or provide an analysis on the efficiency of the use of staff, but it can be said that the workload at Minga and St Paul's increased significantly without significant staff increases. Petauke on the other hand, while seeing an increase in its inpatients, appears to have had an augmentation in consulting staff and consequently a reduction in productivity of individual staff. The decrease in inpatient admissions at Lubwe does not appear to have been accompanied by a decrease in staff levels, which implies that the productivity of the individual consulting staff has reduced.

Figure 12: Inpatients per consulting staff in PBF and non-PBF hospitals, 2004-2007

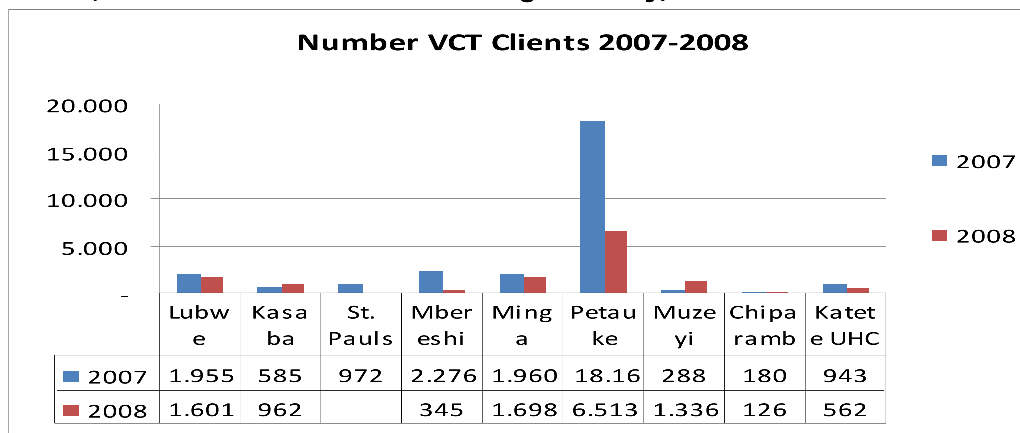


	Lubwe	Kasaba	St. Pauls	Mbereshi	Minga	Petauke
2004	1576	1030	1440	1079	506	1249
2005	904	1779	1166	959	249	223
2006	812	1474	1456	976	435	321
2007	566	1753	2234	916	846	335

3.1.2 Voluntary Counselling and Testing and Tuberculosis case detection

Another indicator chosen for the PBF implementation through Cordaid is the Voluntary Counselling and Testing (VCT) user rate. Data prior to 2007 is not complete and/or some facilities were not providing VCT, whereas calculating user-rates based on population figures was problematic due to disagreements on the catchment areas. For this reason, the trend in the absolute numbers of clients counselled for testing, including pregnant mothers accessing the Prevention of Mother to Child Transmission (PMTCT), were explored. Data for 2007 and quarter 1 and 2 of 2008 are provided in figure 13, except for St. Paul's where data was not available at the time of the visit. For Petauke, the data reflected is only for the first quarter of 2008.

Figure 13: Number of VCT Clients in PBF and non-PBF facilities, 2007 and 2008
(Note: for 2008 first 6 months figures only)



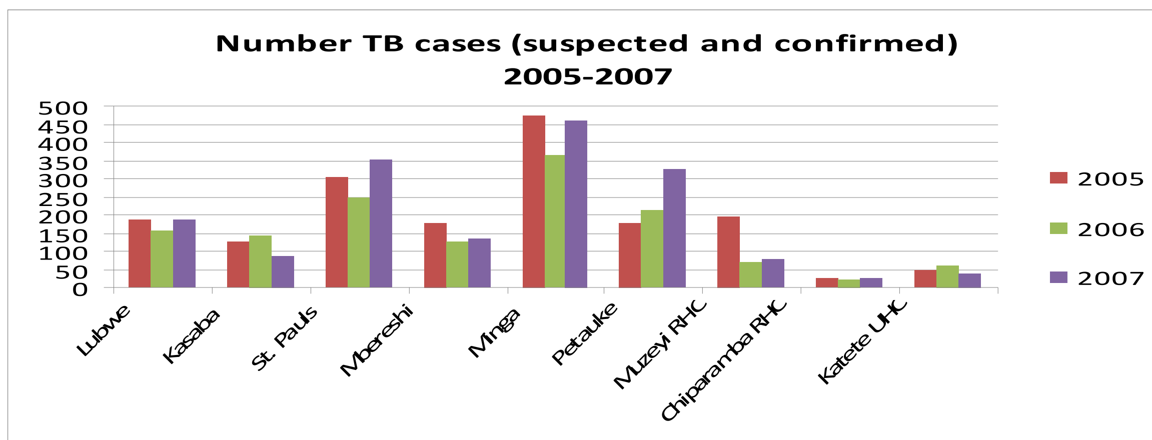
	Lubwe	Kasaba	St. Pauls	Mbereshi	Minga	Petauke	Muzeyi	Chiparamb	Katete UHC
2007	1.955	585	972	2.276	1.960	18.16	288	180	943
2008	1.601	962		345	1.698	6.513	1.336	126	562

It is evident that all facilities have expanded their VCT services considerably, given that the figures for two quarters in 2008 almost exceeds the numbers seen in 2007 for the whole year. This is highly commendable, given the importance of VCT in Zambia as there is a HIV prevalence rate of 14.3%. Nevertheless, the high figures in Petauke (a non-PBF facility) illustrate that this rise cannot be (solely) credited to the PBF implementation as there is extensive external support for HIV and AIDS programme from the World Bank, GFATM, PEPFAR, and other bilateral donors. However, some facilities highlighted the use of PBF funding to ensure availability of HIV testing kits at all times so that VCTs can be done. This was especially important at Muzeyi RHC which highlighted that PBF funding received in 2008 was used to procure sufficient supplies of reagents. This contributed to a significant rise in the VCT user rate as compared to the nearby Chiparamba.

There are also other performance based incentive initiatives, like the CIDRZ program implemented in parts of Eastern Province, which provides an incentive (of about K9,000) to each staff member who counsels a PMTCT client. Katete Urban Health Centre is part of this program and staff indicated that this incentive has lead to an increase in VCT counselling. In addition, at Katete UHC, mothers attending ANC for the first time also receive a meal as the PMTCT testing requires them to stay at the health centre for a longer period of time. Investigating the effect of this incentive program more in depth will be of interest, if Cordaid intends to continue with this indicator.

The selection of an indicator for PBF can lead to significant emphasis being paid to that particular disease or service with the adverse affect that others are neglected. Hence, a rise in VCT consultations may see a decrease in TB case detection rate. The graph in figure 11 shows that this may be the case only for PBF supported Kasaba. While the TB detection rate has been increasing at Lubwe, St Paul's, Minga and Petauke (non-PBF), while at Mbereshi (non PBF) it has remained stable. In the health centres a decline is witnessed at Muzeyi and Katete (non PBF) while Chiparamba (non PBF) remains stable. In the case of Muzeyi, the declining trend cannot be attributed to PBF or VCT as PBF commenced in 2008. The figures at Katete Urban Health centre appear rather low in comparison to Muzeyi health centre. This is rather strange as Katete district remunerates the TB supporters (responsible for ensuring patient compliance with treatment) with an incentive of K10,000 per month. An in-depth study is required into the effect of the approach utilised in Katete district.

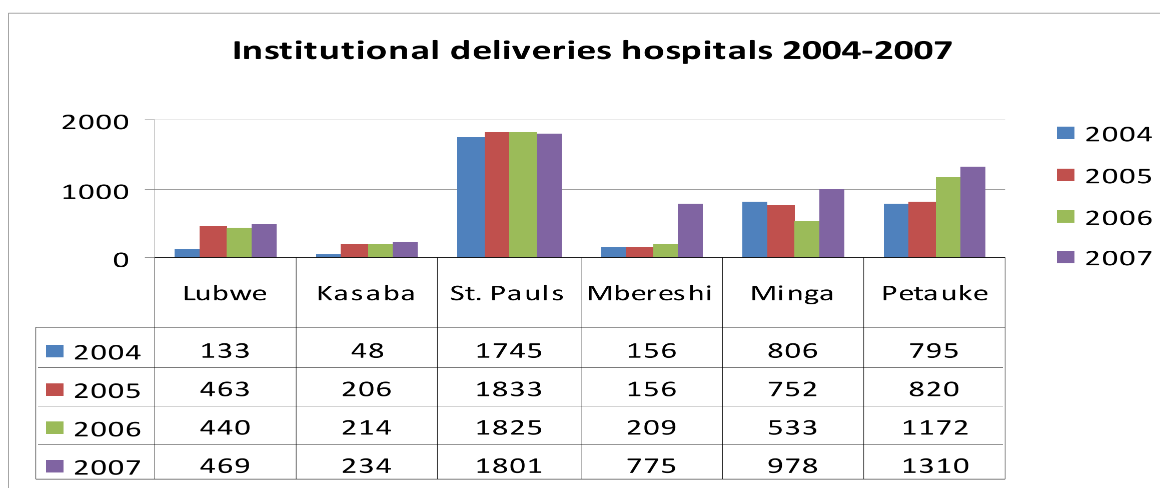
Figure 14: Number of TB cases, PBF and non PBF facilities 2005-2007



3.1.3 Institutional deliveries and ante-natal care

Increasing institutional deliveries is the aim of the third PBF indicator reviewed. The hospital trends on institutional deliveries are shown in the figure 15.

Figure 15: Institutional deliveries PBF and non-PBF hospitals, 2004-2007



	Lubwe	Kasaba	St. Pauls	Mbereshi	Minga	Petauke
2004	133	48	1745	156	806	795
2005	463	206	1833	156	752	820
2006	440	214	1825	209	533	1172
2007	469	234	1801	775	978	1310

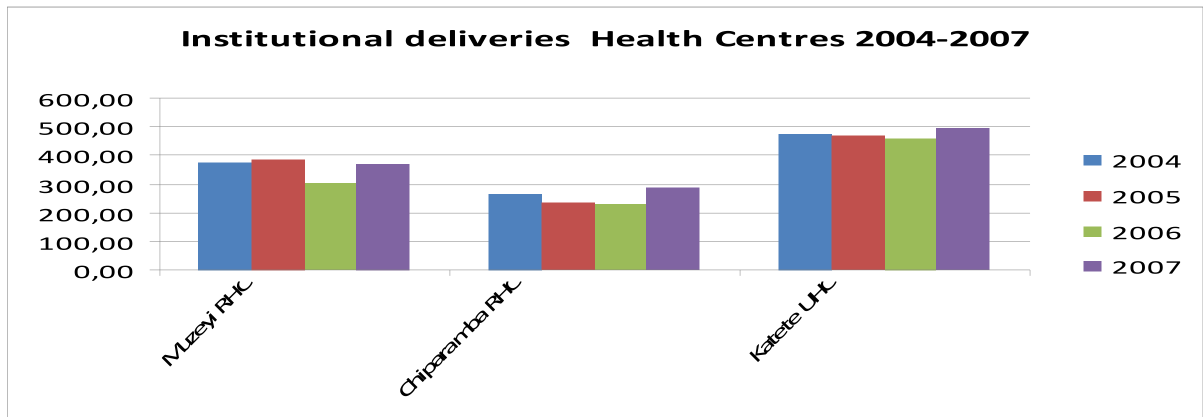
Reviewing the pre and post PBF indicates that for Lubwe, Kasaba and St Paul institutional deliveries have remained more or less stable. Mbereshi mission hospital (non-PBF supported) shows an enormous increase from 209 in 2006 to 775 deliveries in 2007. However, given that there are only 52 deliveries reported in the first quarter of 2008 this may be a reporting error. Minga also reveals a significant increase in deliveries but so does Petauke district hospital, a non PBF facility. This makes attribution to PBF unlikely.

The health centres are reviewed separately to assess the impact of the PBF approach promoted in the health centres[1]. Katete district currently implements a form of PBF which focuses on trying to increase the number of patients coming to the clinic for care. One of the strategies is to provide conditional cash/in-kind transfers to Traditional Birth Attendants (TBA's) based on the number of mothers they refer for delivering in the health centres. These include the provision of a piece of traditional cloth or K10, 000 for every 5 mothers they refer. This approach has been in implementation for the last

[1] There are no 1st level hospitals in Katete district and this approach is not implemented in the 2nd level hospitals in the district

three years and is not supported through Cordaid but in view of lessons to be learnt, it was explored. Further study is required as the district boasts of having the highest number of institutional deliveries in the country, which was beyond the scope of this study. One individual health centre was visited, namely Katete Urban Health Centre, which did not reveal a significant increase in deliveries in comparison to the previous years and also in relation to the two other health centres visited[2] , as seen in the figure below.

Figure 16: Institutional deliveries, PBF and non PBF Health Centres, 2004-2007

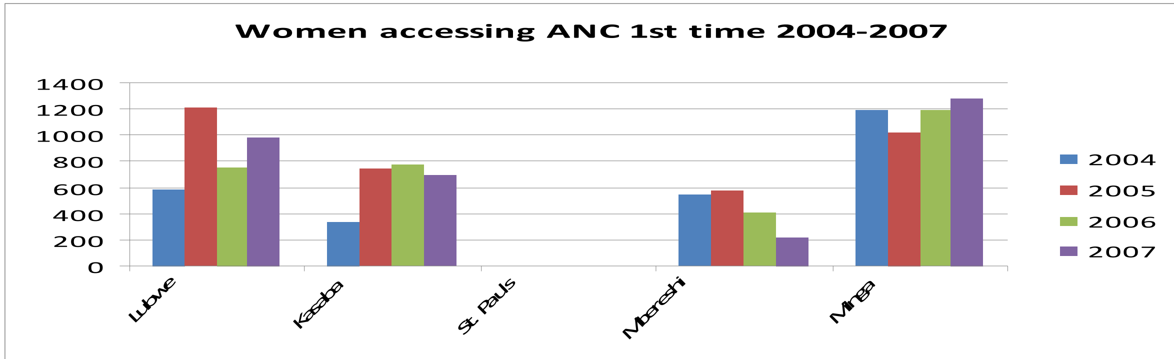


The Cordaid PBF could have a negative effect on the health status of the people, if the facilities increased focus on curative care lead to a neglect of vital prevention or early treatment. At this stage such effects were not seen. Management teams did express that they were conducting more outreach activities for ANC, PMTCT and VCT. However, a review of figures available revealed that the total number of outreach visits health facilities carried out or the type of health promotion activities undertaken remained stable, except for Minga and Muzeyi which did see an increase and Katete which in fact saw a decrease in number of visits carried out over the years.

Another example would be if with the institutional deliveries indicator limited consideration were given to antenatal care which is to prevent complications and identify women at risk receiving appropriate care. Of concern is that St Paul's with the highest rate in deliveries does not provide such vital antenatal care. The numbers of women attending ANC for the first time are displayed in the graph below.

[2] It needs to be noted though that Muzeyi and Chiparamba are rural health centres in Chipata district, while also located in Eastern Province, the health centres are not necessarily comparable in population and services offered as Katete is an Urban Health Centre

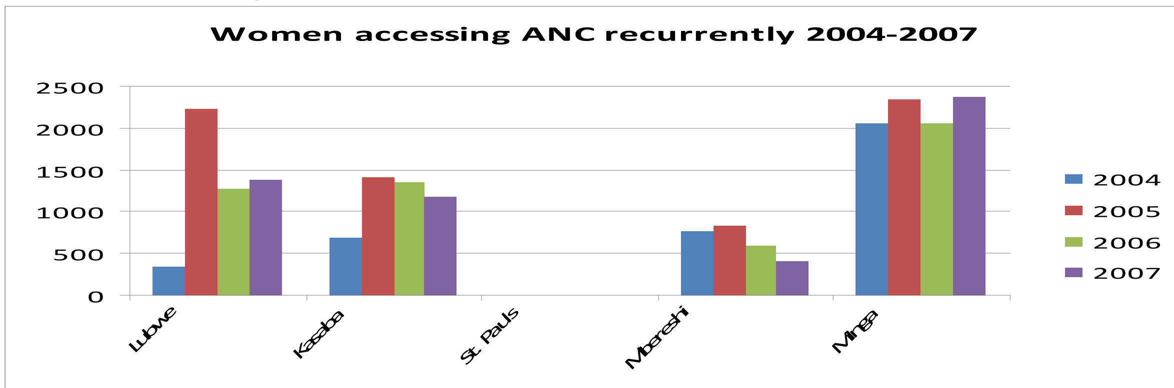
Figure 17: Women accessing ANC 1st time, PBF and non-PBF hospitals 2004-2007



Next to St Paul's, the situation in Mbereshi (non-PBF) is alarming as it has witnessed a significant increase in deliveries while the prenatal care has decreased significantly. Kasaba has remained relatively stable but reduced since PBF started which could be worrying, if this were a consequence to PBF, which is unlikely given the fact that Kasaba has not significantly increased its performance on PBF indicators. Lubwe and Minga show a varied picture, both with a significant increase in first ANC visits since the start of PBF, although it is to be noted that deliveries have not augmented much at Lubwe in 2007 but did so at Minga. Unfortunately data from Petauke district hospital was not available for comparison to assess the attribution of PBF, also in view of the promotion of PMTCT through MoH and other donors.

Pregnant women's satisfaction with the services provided, as well as the success of raising awareness for continued prenatal care can be assessed through reviewing the number of women re-attending ANC visits, as illustrated in figure 18 below. For Lubwe this has reduced over the years, with a slight increase in 2007, whereas at Kasaba it reduced which is worrying. At St. Paul's the service not available while Mbereshi (non PBF mission) reveals a steady decline. Minga, shows a varied picture with an increase since 2007. Petauke data was not available for comparison but as with the 1st ANC visits there is unlikely any correlation with the introduction of PBF in any of the hospitals.

Figure 18: Women accessing ANC for recurrent visits, PBF and non-PBF hospitals 2004-2007

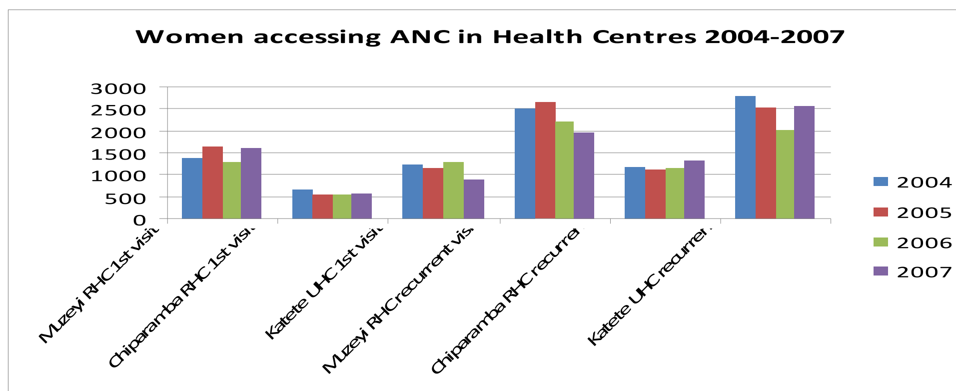


Antenatal care visits for health centres are reviewed separate here as since 2006 Katete district has been providing additional incentives to mothers who come to attend the ANC clinics. It was explained that in Katete district food is provided to all mothers attending ANC in health centres with the aim of increasing the number and recurrent visits for antenatal care. Its introduction in 2006 appears to have led to a slight increase of first ANC visits but in 2007,

there was a reduction. The recurrent visits also displayed in figure 16, do not show a significant rise over the years. However, it was also found that in Katete UHC mothers do receive food on the first ANC visit but not during subsequent follow up visits.

In comparison, as also seen in figure 19, Muzeyi (PBF) has seen a varied picture in regards to first ANC visits while nearby Chiparamba (non PBF) has remained stable. For recurrent ANC visits, Muzeyi has seen a steady decrease which is generally worrying, while Chiparamba saw a slight increase.

Figure 19: Women ANC for 1st and recurrent visits, Health Centres 2004-2007



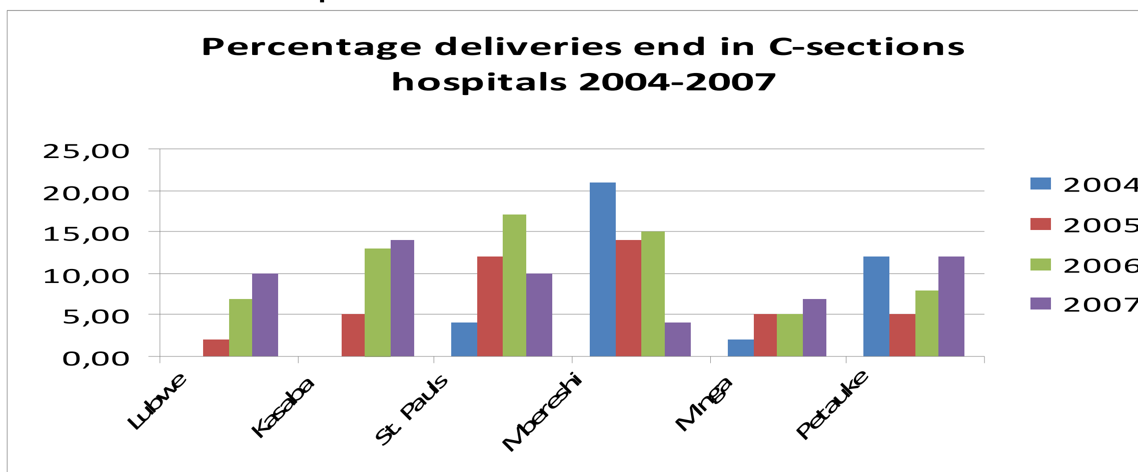
3.2 Performance in terms of quality of care

3.2.1 Deliveries ending in caesarean section or referred

While PBF aims to improve the quality of care, the selection of certain indicators focusing on increasing output and productivity could negatively impact on the quality of care provided if no attention is given to these aspects. An example of this would be if the PBF institutional delivery rate in Zambia lead to a reduction in the number of patients with complications referred from a health centre to a first level facility. This would be because the facility would prefer patients to deliver in their facility so as to increase their target of number of institutional deliveries. Reviewing this information for the health centres indicates that this does not seem to be the case at Katete health centre just as Muzeyi health centre.

In hospitals such a perverse effect of the indicator on institutional deliveries could be seen through an increase in the number of caesarean sections (C-sections) due to not wanting to refer patients to a secondary hospital. In Zambia, the PBF indicator for institutional deliveries did not show a significant increase and thus such an effect is unlikely to be seen, as also witnessed in figure 20. However, an increase can also be due to the availability of staff with the appropriate skills to carry out C-sections, as seen with the presence of a doctor in Minga. Generally it is recognised that if 15% of deliveries end in a C-section, this is acceptable. All hospitals visited were within this range both the PBF and non-PBF.

Figure 20: Percentage of deliveries ending in C-sections in PBF and non-PBF hospitals 2004-2007



3.2.2 *Post operative wound infections*

Another quality of care indicator could be post-operative wound infections, proposed initially as first choice indicator by several hospitals. The following data was reported in the HMIS:

Figure 21: Percentage of postoperative wound-infections, PBF and non-PBF hospitals 2004-2007

The data highlights the relative high postoperative wound infection rate in St. Pauls, which staff elaborated as having been identified during the performance assessments by the district with subsequent action having been taken. As a result, no post operative wound infections were reported in the first quarter of 2008[3]. Petauke district hospital, not supported through Cordaid, shows a very high postoperative wound infection rate.

3.2.3 *Conditions for quality of care*

Providing quality of care depends on the availability of conditions such as the status of the building, including the cleanliness; the set up of the facility in relation to patient flow; the functionality of services like the laboratory; and the availability of guidelines and action plans to improve quality. An assessment

[3] Data for 2nd quarter 2008 was not yet available.

was made of these tracer indicators in all the facilities visited, with a score assigned of 0 (=no), 0.5 (=partly) or 1 (=yes), leading to total scores as reflected in table 10 below.

This shows that the PBF supported facilities generally score better than the non PBF supported facilities. Staff in many PBF facilities highlighted the importance of the use of PBF funding to purchase domestic cleaning materials, while some stressed the importance of the Cordaid investment fund like in Lubwe where these funds were used for painting the hospital. However, support received through other (missionary) stakeholders were also mentioned which led to, for example, the rebuilding of the theatre in Lubwe. As such, mission health facilities (some mentioned especially catholic mission facilities) may generally be better off than non-mission hospitals.

Table 10: Conditions for the provision of Quality of Care

CONDITIONS FOR QUALITY OF CARE	Lubwe	Kasaba	St Paul's	Mbereshi	Minga	Petauke	Muzeyi	Chiparamba	Katete
Building is correct, functional, maintained	1,00	0,00	1,00	0,00	1,00	0,50	1,00	0,00	0,50
Patient flow in the HS is correct	1,00	1,00	1,00	1,00	1,00	0,00	1,00	1,00	0,50
Privacy and comfort of patients	0,50	0,50	0,50	0,00	0,50	0,00	0,50	0,00	0,50
Functionality of the laboratory	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,00	1,00
Action plan for Quality	1,00	1,00	1,00	0,00	1,00	1,00	1,00	0,50	1,00
Communication system available	1,00	0,50	1,00	1,00	1,00	1,00	1,00	0,00	1,00
Guidelines available	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,00
Quality of Care Conditions	**6,50**	**5,00**	**6,50**	**4,00**	**6,50**	**4,50**	**6,50**	**2,50**	**4,50**

Staff spoken to in the PBF supported facilities highlighted the positive impact on the availability of drugs, through support from PBF. This has, to some extent, significantly impacted on the quality of care provided. Availability of drugs will be explored further in 3.4.1.2 In addition, staff stressed the importance of the PBF staff motivation allowances to ensure the availability of staff as well as the positive effect that motivated staff has on the provision of quality of care. This will be explored further in section 3.3.

3.2.4 Quality of care as perceived by consumers

Other than looking at the quality of care provided from the supply side, it is equally important to look at perceptions of users of health services, the clients/patients. Client satisfaction was evaluated through group discussions with out-patients and in-patients (12 to 15 patients, gender balanced groups) that were found at the PBF and non-PBF facilities at the time of the evaluation. Specific questions related to satisfaction and quality of care such as content/package of the services provided, staff attitude and respect, confidentiality, waiting time, provision of appropriate diagnosis and treatment, referral system, cost-sharing, state of health facility (cleanliness, electricity, provision of water), provision of food and beddings for in-patients, and drug availability were poised to the interviewees. The sections below highlight some of the general findings from the PBF and non-PBF facilities.

Patients were happy with the way they are received: worthiness, respect, politeness at all the PBF facilities and some non-PBF facilities. This was not the case at Katete (non Cordaid supported) and Chiparamba (non PBF). The clients that were interviewed at Katete explained that the majority of the staff at the clinic do not treat them well and that this problem was prevalent at the out-patient and maternity wings. One of the disgruntled clients told us, *"They are very bad at the maternity wing. During my last delivery, one of the midwives shouted at me and told me to dance like the way I was dancing when I was making love to my husband".* In contrast, all the clients interviewed at the PBF and other non-PBF facilities explained that their privacy was sufficiently respected and guaranteed. They also indicated that the health staff were competent enough and that the disease and treatment were well-explained.

Clients also considered the content and package of services provided at their facilities as being adequate except for Kasaba (no x-ray, mothers shelter), and Chiparamba (non-PBF) with a range of services not being provided. The clients were also not happy with the provision of meals for in-patients at Lubwe, Kasaba, and Muzeyi. While Lubwe and Kasaba were providing only one meal per day at 15:00 hours, no meals were being provided at all at Muzeyi. One of the respondents from Muzeyi had this to say, *"I have been here for 4 days and no food has been given to me not even tea. Me as a patient I have to get a K500 to buy food. All they give are drugs. Yet they ask us to feed our kids before they provide the drugs. This hurts. Some of us come from very far and no one brings us food and we only depend on well wishers. Look at me, I just started off from home not knowing that I will be admitted but now I have been admitted. What will I do? This is a mission hospital which is supposed to have a kind heart. At Kapara and Chiparamba (nearby health centres) they provide food for relatives to cook for patients. At Chipata General Hospital they do provide 3 meals, what is wrong at Muzeyi?".* Muzeyi management team elaborated not having funds available for this, while stressing this as another concern of having to increase the number of inpatients for Cordaid P4P.

There was also general dissatisfaction at time spent at all facilities (PBF and non-PBF) which averaged from 2 to 8 hours. The clients explained that the queues were too long and that this had to do with the shortage of health workers. *"How can one person attend to so many people"*, they asked. *"We have a number of people from within our village and outside who come to our hospital because of the good services and drugs we have here"*, they further explained. Thus, the clients felt that staff workload had increased due to the availability of drugs and provision of quality services at the PBF facilities. This had in turn led to an increase in the waiting times as more people had to be attended to by a few health workers.

Close probing on the availability of drugs also revealed that there was a marked improvement over the past 1½ years in all the facilities visited (PBF and non-PBF) except for Chiparamba (non-PBF) where it was reported that there was a persistent shortage of drugs and that the situation was worsening. The Health Centre Committee chairperson at Chiparamba explained that drug shortages increased with the removal of user fees and that patients are usually given prescriptions to buy drugs. It was also explained that sometimes there was no Coartem at Minga but patients would be told to come later to collect the same.

The other aspect of quality that was explored was client perception on the general cleanliness of the health facility vis-à-vis the surroundings, condition of the wards, beddings, electricity, provision of water. Provision of electricity and water was a problem persistent at all the facilities. The clients explained that

surroundings were clean and that the wards were in habitable condition but that much more could be done. For example, it was learnt that patients were being made to clean toilets at Lubwe and Kasaba (PBF facilities) while there was no isolation wards for TB patients at Mbereshi (non-PBF). In addition, even though all the facilities (PBF and non-PBF) did provide clean beddings at the time of admitting patients, these were rarely changed during the entire stay of the patients at some of the facilities. For example, it was reported that beddings were not changed at all until a patient is discharged at Muzeyi (PBF) and Mbereshi, Petauke, Chiparamba, and Katete (non-PBF facilities). For the other PBF facilities (St. Pauls, Kasaba, Minga), bedding were said to be changed regularly.

Sentiments over some forms of user fees that some of the facilities were charging were elicited. The clients indicated that they were not happy with the fees being charged at St. Pauls, Lubwe, and Muzeyi (PBF facilities) and Mbereshi (non-PBF). The management of some of the health facilities and the Neighbourhood Health Committee (NHC) were also not really working well in harmony. At Lubwe, the NHC revealed that the new management had not been fully involving them during the planning and implementation of activities.

3.3 Performance in terms of Human Resource Development

One of the most significant impacts the implementation of PBF has made according to the health staff, is the improved motivation of the staff. This will be explored more in depth in this section.

3.3.1 PBF improving quality of care

It is felt that improving the quality of care through the availability of drugs motivates staff to work, especially in those locations like Kasaba where there are no places for medicines to be purchased locally, has increased the motivation of staff. In addition, maintenance like the painting of the hospital in Lubwe helps to lift the spirit of the health workers.

3.3.2 Individual PBF staff incentives

In the PBF facilities staff incentives are often provided as some form of allowance. The provision of a staff incentive is very motivating as it forces them to work hard but also gives a sense of recognition especially given that workload is usually high. Furthermore, incentives help as the salaries are generally considered too low, with rising prices affecting their standards of living while the abolishment of user fees led to a reduction in their staff bonuses[4]. Nevertheless, analysis of the PBF personal costs showed that salary top-ups, part-time allowances, on-call allowances, lunch allowances, subsistence allowances, and training related costs constituted the bulk of what was paid. Many such allowances can also be paid through the MoH health grant while top-ups were also being provided by other funders like the Global Fund through CHAZ, and USAID projects for PMTCT and ART. This is evidenced by the non-PBF supported facilities, like Petauke which provides about ZMK300,000 per month per staff member for overtime (so-called moonlighting). Given that in most PBF facilities the link between improved performance and the incentive was not evident, the particular effect of PBF on staff motivation is likely limited. Although the actual provision of the incentive is appreciated.

[4] About 10% of the user fees used to be spend on staff bonuses

This appeared to be different in Minga, where individual performance is determined through a score card that weighs the attitude, initiative, discipline, seniority, punctuality, and category (meaning professional ranking). The total score obtained from the 6 measurement factors decides how well one performs and payments are made accordingly. As such, it doesn't matter if you are a doctor – if you didn't perform adequately you get a lower reward. Consequently, it is highly valued by all the staff in Minga. Certainly, it is also recognised that this system may need to be developed further as staff at Minga mentioned that currently they do not receive feedback on how and what they should actually improve upon, making it hard for them to improve. Similarly, the system could evolve further as assessments are currently done by hospital management while input from patients, the community committee members or even other staff may be valuable to consider. Furthermore, currently such assessments are only done when the money comes and not on a regular basis.

During the debrief workshop, discussions were held about the performance bonus for staff (see Annex 6). Attendees brought to the fore that such an individual system can be very motivating but also highlighted concerns about ensuring it is applied in a fair and transparent matter. Generally, there was a request for support and technical assistance from Cordaid to assist in the development of an appropriate incentive system.

This is important because the PBF incentives may create significant dissatisfaction as staff dealing mostly with the patients, feel they receive less of the incentives as compared to doctors and members of the management teams. In some facilities the allowance paid from PBF is a flat rate for all staff but in others, it depends on the staff's position with doctors and management team members receiving more than the nurses and midwives. paramedicals, and general workers. Such awarding of incentives based on the position of the staff is not necessarily considered fair by the staff. Doctors at most of the facilities visited were given a higher top-up than the other health cadres, as decided on by the management teams. However, it needs to be noted that this is also partly because some facilities try to compensate for the top up which medical doctors used to receive directly from the Dutch government or through Memisa/Cordaid. A case in point is Lubwe where the doctors still receive US$250 per month as management is afraid to lower the amount as the doctors will leave. Subsequently, the remainder of the PBF incentive is divided amongst the rest of the staff. Consequently, the next highly paid health cadre gets US$29 per month as top-up. The frontline health cadres who feel they even do more work than the doctors are demotivated by this large discrepancy in allowances. This problem is further compounded by the fact that there is often limited transparency to staff who are not part of the management team, on the criteria for disbursement, how much funding is provided by Cordaid, and how the money is spent. This has created significant suspicion in some facilities, like Kasaba where staff received ZMK60,000 as incentive which they considered too low to motivate anyone. In fact, some of the staff indicated that they would prefer not to receive such a low amount which they feel is almost more offensive than a sign of appreciation.

3.3.3 PBF improving working and living conditions

The investment funding provided at the commencement of PBF contracting has led to some major improvements in the working and/or living conditions of staff through renovating some staff houses in Minga and Muzeyi. Ambulances were purchased in St Paul's and Kasaba, providing patient transport but also used at times as transport for staff to enable them to collect their salary and do necessary shopping for those working in more remote locations. This has had a

positive effect on the motivation of staff and the facilities hope that these investment funds will continue through PBF as it is thought to make a significant contribution to staff motivation and quality of care provided. Alternatively, allowing the facilities to determine themselves how the PBF funds can best be used, rather than providing expenditure allocation ceilings, may help solve this problem.

3.3.4 Staff satisfaction

Staff who are not part of the management team were interviewed and asked to give an individual scoring from 0 to 3[5], on their satisfaction with different categories, namely staffing levels, feedback received, patient load, working hours, opportunities for training, working conditions, team work, salary, allowances and responsibilities entrusted. Qualitative information was collected in subsequent group discussions with the staff. However, given the small numbers of staff involved, it is not thought to be necessarily representative and scientifically valid to compare the facilities on these aspects, individual health facility reports on staff motivation will elaborate on this instead.

What can be said is that generally all staff were satisfied with the team work and the majority were dissatisfied with the salary. Although it is to be noted that the salary, scored low in all facilities, is outside the control of the facilities. Most staff felt that the official working hours are appropriate but that it is the workload in these hours which dissatisfies them due to the shortage of staff in most facilities. Again, the fact that staff recruitment falls under the MoH, means that it is difficult for individual facilities to dictate their staffing levels and improve on it. Nevertheless, retired qualified health workers could be recruited by management, according to some health staff. Options for long term training appeared to be equally available to all members of staff, while there was some dissatisfaction over short term training and workshops as it was felt that the same people were attending them. Satisfaction with allowances depended on perceived fairness vis-a-vis the incentive system and how the rewards were provided. This was the case for both PBF and non-PBF allowances, given that mostly these were offered in the form of top-up allowances whether from PBF or the health grant.

Overall, it was felt that staff satisfaction appeared higher in Minga and St. Paul’s although the discussions did not necessarily highlight a direct correlation to PBF. The relationship between the staff and management cannot be underestimated as observed at Minga where staff expressed willingness to work there whether there is a PBF allowance or not. With the exception of Minga and St Paul’s, it seemed that staff satisfaction was not necessarily higher in PBF versus non PBF facilities or between mission and non-mission health facilities. Moreover, it reveals that there is scope for improvement in all facilities as none scored the maximum possible 30 points.

3.4 Probable Outcomes

Improving the access to quality health services is one of the main reasons for Cordaid to implement PBF in Zambia. This is aimed to be achieved through ensuring ease of access as well as quality services provided leading to increased utilisation of the services. Secondly, Cordaid strives to enhance participation of and accountability to the community to ensure the services are

[5] Scoring classified as: 0 (not satisfied at all), 1 (not very satisfied), 2 (sufficiently satisfied) and 3 (very satisfied)

in line with the desired needs. These factors will be explored here in relation to the PBF implementation in Zambia.

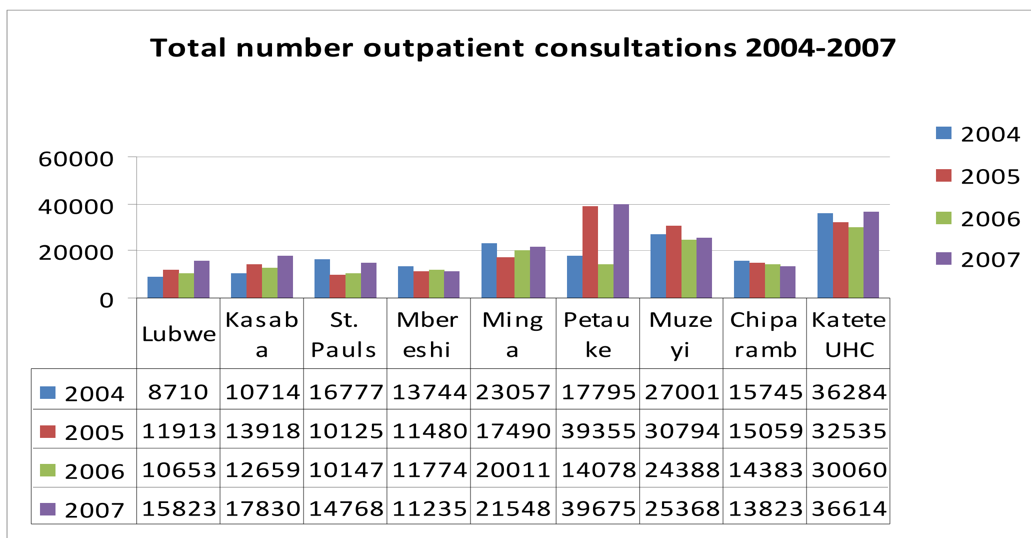
3.4.1 *Accessibility of services*

User Fees

User fees have been officially abolished in Zambia in2006, aiming to improve access to health care for patients. It is interesting to note that section 3.1.1 explored trends in inpatient admissions, whereby no significant increase in inpatient admissions was witnessed in any of the hospitals visited other than Minga and Petauke. The same can be said in relation to institutional deliveries.

Figure 22 illustrates the number of total outpatient consultations in the facilities visited, showing a varied picture over the years with no tremendous rise seen since the abolishment of user fees, except for maybe Kasaba and Lubwe hospital.

Figure 22: Total number of outpatient consultations in PBF and non-PBF health facilities, 2004-2007



	Lubwe	Kasaba	St. Pauls	Mbereshi	Minga	Petauke	Muzeyi	Chiparamb	Katete UHC
2004	8710	10714	16777	13744	23057	17795	27001	15745	36284
2005	11913	13918	10125	11480	17490	39355	30794	15059	32535
2006	10653	12659	10147	11774	20011	14078	24388	14383	30060
2007	15823	17830	14768	11235	21548	39675	25368	13823	36614

Although user fees are abolished, most facilities do charge some minor fees for e.g. patient booklet, as described in section 3.2.1. Such fees are not thought to negatively affect patient access to services, especially given there are exemptions for those who are unable to pay. However, the bypass fee at St. Pauls is considered quite high, especially in view of the fact that it does not have a HAHC. At Muzeyi, patients are charged quite a large fee on Sundays or holidays which could impede access on these days.

Interviewees generally thought that the abolishment of user fees makes performance based financing more effective as most argued that given that PBF funds were not needed to enhance access, achieved through the elimination of user fees, the focus will be more on boosting the quality of care.

Access to drugs

A selected PBF indicator to measure quality of services provided is the drug stock outs for essential drugs, which also illustrates accessibility of services. There is no baseline data available on the tracer drugs, either in the baseline report or through the MoH, as they are different from those reported on in the

HMIS. The following graph shows the number of stock out days in 2007 in the visited hospitals, except for Mbereshi (non-PBF mission).

Figure 23: Number of stock-out days of PBF tracer drugs hospitals 2007

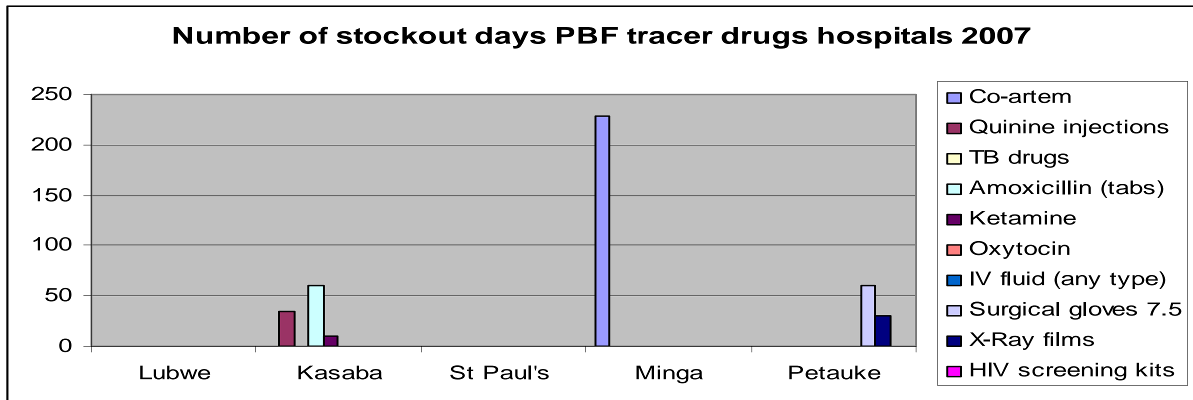
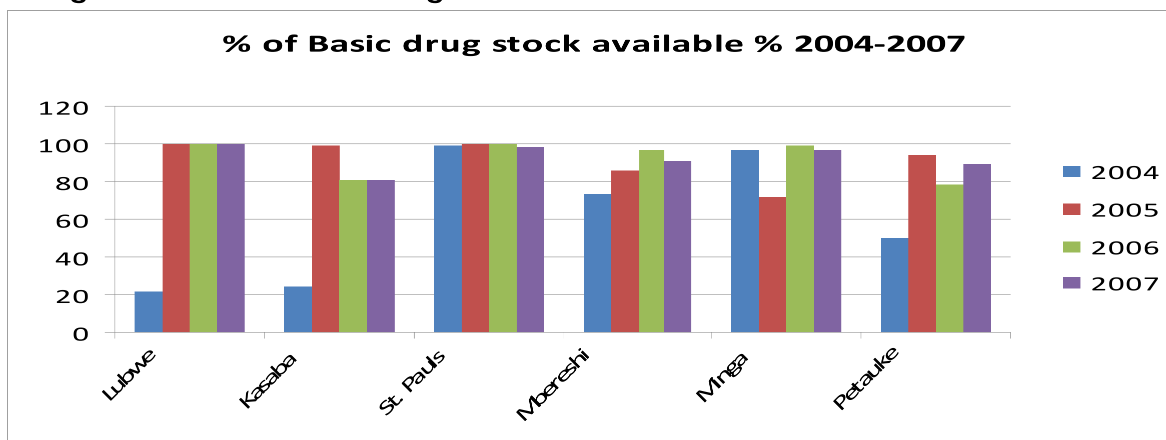


Figure 23 shows that there were no stock outs reported at Lubwe or St Paul's, while Kasaba reveals several shortages. Kasaba is located in a remote area and the importance of PBF funding on improving quality of care and staff motivation was stressed. Patients do not have alternative means of obtaining the needed drugs as there are no private pharmacies in the area. The reasons for these shortages are not known and whether there is a difference in actions undertaken by other facilities, i.e. Lubwe located about 30Km away in the same district, does not have shortages. It does seem to indicate that Lubwe and Kasaba do not actively share stocks. Minga shows extensive periods of shortage of Coartem (the first line drug for malaria) while nearby Petauke hospital has not experienced any such shortage in Coartem although it ran out of gloves and X-ray films. Again, it is not known what specific actions have been taken by Minga to deal with the Coartem shortage, other than the hospital management elaborating that Coartem is not available on the local market (Petauke district). The pharmacist at Petauke hospital explained that a change in procedures may have contributed to this as since November 2007, medical stores stopped supplying Coartem directly to the hospitals but to the district health office from which hospitals are to order. However, this cannot completely explain the unavailability of Coartem reported by Minga which was continuous since July 2007, while being out of stock half of the time from April to June 2007.

One of the potential drawbacks of utilising tracer drugs as an indicator for performance, against which incentives are paid, is the fact that there may be an attempt to ensure the availability of these specific medicines while others may not be made available. Hence, an analysis of the availability of other essential drugs is appropriate. Similarly, as medicines are supplied through the medical stores an increase in the availability of any drugs may be more an effect of an improvement in their performance. The HMIS reports on the availability of 12 tracer drugs namely; Coartem, Amoxycillin, Benzyl Pennicilin, Rifampicin/Isoniazid, Ketamine, Lancets, RPR kits as well as HIV kits.

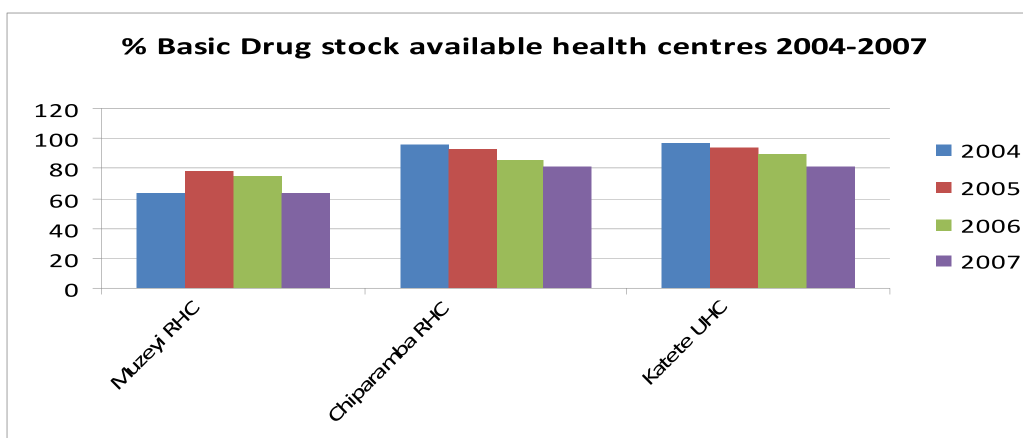
Figure 24: % of Basic drug stock available 2004-2007



In line with the findings on the PBF indicators, there appears to be limited issues with stock availability in Lubwe and St Paul's, while the situation in Kasaba is not that good. Mbereshi, Minga and Petauke, on the other hand, showed a varied picture. This may highlight a more structural problem specifically related to Kasaba hospital, either in relation to requests made from the hospital and/or from the supply side at the medical store. Although there appears to be no other significant structural shortages from this graph, it became evident that all facilities regularly had to use funds to supplement the availability of essential and other drugs, to deal with existing scarcity of medicines supplied by the medical store. Hospitals are entitled to spend 4% of the grant received from the MoH on drugs but most hospital managers noted this is not sufficient, with Petauke hospital (non PBF) mentioning the need to divert resources from other areas to ensure the availability of essential drugs while all PBF facilities also highlighted the importance of PBF funding in preventing drug shortage.

In health centres these same issues were mentioned, while deficiencies in drug stock available appear to be larger, as reflected in the graph in figure 25. This may stress the importance the PBF funding contribution has made to the availability of medical supplies. The drugs reported on for health centres in the HMIS are Coartem, Paracetamol, Cotrimoxazol, Oral Contraceptives, BCG, DPT, OPV, Measles and TT vaccines.

Figure 25: % Basic drug stock available PBF and non-PBF health centres 2004-2007



When looking at the specific data on drug stock available it becomes clear that Muzeyi's stock availability between 60 to 80% is largely due to oral contraceptives being only at 25% of the required stock.

Access to family planning methods and condoms

It was found that none of the PBF facilities provide women's access to family planning. Health data reported limited access at Minga but this was in fact said to be based on the promotion of natural family planning methods (Correspondence IvB 4/10/2008). The government health facilities[6] show a completely different picture, as does the non PBF mission hospital of Mbereshi. During the review it was furthermore noted that distribution of condoms was taking place in the non-PBF facilities while none of the PBF supported facilities currently supply condoms, although VCT for HIV is provided.

[6] Data of Petauke district hospital was not available

4 Sustainability

4.1 Institutional sustainability

Zambia has developed four National Health Strategic Plans since 1992, and it is expected that all programmes and activities in the health sector should be drawn from the National Health Strategic Plan. It is the vision of the government to implement all its programmes and activities in a holistic and comprehensive manner through the use of joint planning, implementation, and monitoring and evaluation systems, and thus, a health SWAp has been operational since 1993. The 2006 Memorandum of Understanding (MoU) which provides guidelines towards support to the National Health Strategic Plan 2006-2010 has been signed between the MoH and all the major donors. The MoU is a guiding tool that reflects partnership and joint commitment to the implementation of the NHSP. It also provides for pooling of government and donor resources into basket funding mechanisms to provide flexible funding to beneficiary institutions, with the ultimate view that all funding to the sector should be 'on-budget'.

It is believed that implementation of programmes in this manner can strengthen national systems and in the process encourage ownership and sustainability. The Institute for Health Sector Development (2004) suggests that sustainability, capacity building and systems development are an integral part of engaging in SWAps. Programmes that make use of existing national systems and common management arrangements potentially offers protection and continuity overtime. The question then is; to what extent is the PBF sustainable? Is it mainstreamed into the wider health system? Who owns the process? How is it institutionally embedded?

Review of how the PBF was introduced in Zambia indicated that there was no consultation with the MoH, Cooperating Partners, CHAZ, the Provincial and District Health Offices. This puts in jeopardy the institutional sustainability of the P4P programme. Senior management at the MoH headquarters, Cooperating partners, and CHAZ were totally unaware of the existence of the Cordaid supported P4P programme in Zambia. The provincial health office in Luapula and the district health office in Samfya were aware of the P4P programme but they revealed that they had not been involved in its design, institutional set up, and actual implementation. The two dioceses that were visited also expressed little knowledge on its conceptualisation, design, and contractual arrangements. It was explained that the idea was initiated by Cordaid which sent an expert to come and orient the dioceses and health facilities on the P4P programme, with a design already thought through, similar to that in Tanzania.

Follow-up with the management at the beneficiary health facilities on the institutional embedding also showed limited and variant knowledge on the P4P programme. For example, the management team at all the health facilities didn't understand how Cordaid had come up with the four performance indicators which they felt were not reflective of the actual situation or needs at the respective health facilities and targets thereof unattainable.

The other missing link in the set up of the Cordaid P4P programme in Zambia is that there is no fund holder that provides the administrative and public health expertise. The regulator, which is supposed to be the MoH and/or CHAZ are not aware of the existence of the P4P programme. As such, the regulator that should be responsible for the stewardship, policy and standardization of approaches to health service delivery is absent. Additionally, the strength of the internal organisation of the P4P programme is weak. While the health

facilities have a relatively good financial administration management system, it was learnt that channelling of funds through the diocese was causing delays in programme implementation. Procedures for fraud control and how the incentive payment system is set-up are not well explained and the system of rewarding performance varies considerably by health facility. Supervisory or supportive visits by the diocesian health office were limited and for Chipata diocese, no supportive visits had been conducted at the time of the evaluation. So far, no verification of the performance on the PBF indicators had occurred, which raises questions on the functionality of the monitoring and evaluation as well as the supportive system.

From the foregoing it is apparent that the design and institutional set up of the Cordaid P4P programme in Zambia might not be sustainable. The P4P programme use separate planning and reporting systems and is not mainstreamed into the wider health system even though it uses existing financial and HMIS indicators. There appears to be no complete ownership of the programme by MoH, CHAZ, Diocese, provincial and district health offices, and the implementing facilities themselves. As such, the feasibility of replicating the model in other heterogeneous geographic locations and continuity at the expiry of Cordaid funding is at this stage questionable, not just from a financial point of view. For example, at facility level, the management teams and members of staff are not fully aware of the P4P programme, and individual contribution to the attainment of the performance indicators. Therefore, promotion of extrinsic rewards over intrinsic motivators will still remain a hot issue and it might take some time to build up organizational values of trust, respect and support which have longer term gains than immediate incentive payments.

4.2 Social-economical sustainability

One of the most important issues to consider when designing a programme/project is its poverty focus. Cross-cutting issues like gender focus, an institutionalised strategy for inclusion of the poor and vulnerable, and clear decision-making power for civil society organisations in the organisation of health services and health activities is critical. The P4P programme as seen by the increasing amount of financial resources being disbursed by Cordaid over the previous year is testimony of the desire by Cordaid to provide additional financial resources while also maintaining the poverty focus. Increased financial commitments and disbursements by Cordaid were highlighted in Section 2.2.1.

Highlighting the commitment to alleviating the financial burden at the time of ill-health, especially by vulnerable and poor members of society, is the removal of user fees in all primary health care facilities in April 2006 prior to the commencement of the P4P programme in 2007. However, whilst almost all the PBF and non-PBF facilities have complied to this directive, certain PBF facilities (St. Pauls and Lubwe) do charge by-pass fees to the displeasure of the clients. At Muzeyi patients are charged ZMK5,000 (US$1.4) for being attended to during weekends and holidays. These charges undermine government's efforts to make the system social-economically sustainable especially the gender and poverty focus. Moreover, it was found that in Zambia no pro-poor strategy was developed as part of PBF, through for example the development of an exemption scheme or decrease of fees in such facilities, if only to increase utilisation which is rewarded by PBF.

4.3 Financial sustainability

McPake and Kutzin (1997) define financial sustainability as the extent to which national health expenditures are funded from domestic resources or the long-term stability of a mix of funding sources. The aim of analysing financial sustainability is to ascertain to which extent financial arrangements in place that would guarantee the programme's continuity in funding after the incumbent's expiry of financial commitments. Financial sustainability borders heavily on how the institutional framework was embedded, involvement and awareness of major stakeholders in the planning and implementation of the programme.

Foremost as indicated above, the set up and involvement of stakeholders during the formation of the P4P programme in Zambia was low and not widely consultative. Major stakeholders who hold the potential to take over (partly) the funding consequences of PBF, like MoH, Cooperating Partners and CHAZ were not involved in the design and implementation of the programme raising concerns on the financial sustainability of the programme. In view of the MoH's plan to introduce performance based financing in several districts, the climate is favourable to commence such consultation and discussions as soon as possible. As in the current format, it is not guaranteed whether financial commitments would be available after the expiry of Cordaid support. This is particularly true in the sense that Cordaid support has increased considerably since the commencement of the P4P funding and it might not be sustainable without the involvement of other stakeholders. Trends in Cordaid support as well as other modes of funding are highlighted in section 2.2.1 above. The growth rate of MoH funding, which is supposed to take over the long term funding of the P4P programme was slower as compared to the Cordaid funding (Section 2.2.1). Inevitably, it is rather pessimistic whether a potentially viable funder would be able to take over the project/programme without full knowledge of its cost implications. Related to this fact is the understanding that Zambia is a resource constrained nation which is not able to provide basic quality health care to all its people. It is recommended that Cordaid creates sustainable partnerships with the other stakeholders in the Zambian health sector and should lengthen the life span of the PBF programme.

It should also be borne in mind that user fees were abolished in April 2006 and it is not possible to recover a proportion of costs to mitigate for the lost revenue from the P4P programme. In this case, it is rather difficult to assess possibilities for substitution of the financial contribution of Cordaid with cost sharing. As such, assessing the future perspectives for cost recovery, and for involvement of the MoH, Cooperating Partners and CHAZ depends on prior knowledge of the existence, design and implementation of the programme.

4.4 Technical sustainability

Most facilities expressed receiving limited support from Cordaid, with no induction workshop and just one Cordaid visit during 2007. This in addition to the Cordaid adviser from Tanzania who came to explain the indicators used and discuss planning, which was highly appreciated but also viewed as simply following the Tanzania approach rather than tailoring it to the local context. Hence, it appears that no capacity building/training on the concept and the adaptation to PBF has occurred for any of the beneficiary institutions, including the diocese. The diocese is responsible for coordination, training and reporting according to the contracts signed. However, the Diocesian Health Officer in Mansa highlighted that training and data collection for PBF are beyond his scope of expertise and elaborated that reporting is mainly done by the health facilities. There is currently no Diocesian Health Officer in Chipata. Hence, the support the dioceses had been able to provide has been limited in most facilities visited.

The facilities have consequently merely continued with input planning while the PBF concept promotes an entrepreneurial spirit which usually leaves it to the facility to decide how to best spend the money to achieve the agreed upon indicators. Instead, the PBF funds are mainly seen as another source of input funding allocated according to a different criteria set by Cordaid. A clear example of this is at Muzeyi Rural Health Centre which upon request submitted a 2008 plan and budget to Cordaid according to the four indicators. Their interpretation of the budget allocation as described in the contract has resulted in a budget of ZMK12,500,000 for each of the four indicators. For example, to ensure continuous availability of drugs and medical supplies, medicines were purchased at a value of ZMK12,500,000 while in fact the costs are much higher. In addition, no funds are allocated to staff motivation in 2008 which is a very important aspect of PBF. Cordaid did also not pick up on this, to explain to Muzeyi the way the funds are to be used.

Generally, there was very little understanding and knowledge by frontline members of staff (core staff not part of management) in the facility on how PBF was to function, with many questions and queries being poised to the Consultants during this evaluation, aimed at clarifying some issues. It was for example not clear to all health managers that the provision of 50% fixed funding (baseline) was not dependant on performance. There were also questions on the money for investment regarding whether it is part of the PBF. Thus, during the de-briefing workshop, it was decided to focus on increasing the knowledge on the conceptualization and implementation of PBF. The workshop was well received as people were keen to learn more about PBF and, if anything, people were wondering why they had not learnt about the concept and thinking behind PBF earlier. Further support and capacity building is required in order for PBF to be successfully implemented in Zambia, the first step of which should be made during the Round table conference scheduled in October. It is expected that the Round table conference will be the start of the process to redefine the institutional set up, clarifying roles and responsibilities as well as re-negotiating contracts.

It is advised that the indicators should be linked to appropriate targets which are regularly adapted and negotiated according to the specific context, needs and performance (i.e. targets may increase each year to enhance performance rather than remain the same) of the individual health facilities. Negotiating for such a contracting approach will be a new encounter for many health managers, requiring negotiation skills to be acquired. This is essential for PBF to work so as to instil accountability for results. Ensuring community input in such priority-setting is vital but health managers were seen to have limited experience with stakeholder management which is to be improved significantly for PBF to be sustainable.

Considering that development of annual action plans is based on priorities identified by specific institutions through local morbidity and mortality data, it may be an option to negotiate and select corresponding output indicators for Cordaid performance based funding. The need to improve such evidence based planning became evident in several facilities, while learning how to develop business plans with strategies to attain results was highlighted in many PBF facilities as requiring Cordaid support. Cordaid can play an important role in ensuring sufficient capacity building occurs in relation to such planning. This is not a role it has played in the past and while the MoH and CHAZ provide significant support in this, ensuring planning and managing for achieving results is a new concept. Whereby inclusion of all staff in the complete planning

process can augment staff motivation and empowerment but is not yet the experience in most of the PBF facilities visited.

In addition, Cordaid will need to ensure that other technical capacities are build to sustain PBF, such as management capacity in the facility to take up the foreseen autonomy. The need to improve financial management skills has been highlighted by most of those spoken to. Increasing transparency and accountability on PBF to the community and other actors like the MoH, is vital in improving impact as well as ensuring the changes made will have long lasting effects. This PBF review has highlighted the desire for further support in developing reward systems while most health managers expressed a desire for improved management skills

Monitoring the community perception of the health service delivery is essential to incorporate. Supporting the development of monitoring client and community perceptions is an important area for Cordaid to consider in its capacity building. More important even is ensuring community involvement in priority setting, management and planning as well as the monitoring and evaluation of PBF.

Utilising and strengthening the existing processes used in the health system like annual planning, consultation with the neighbourhood health and health advisory committees, HMIS data and performance assessments is advisable from a harmonisation perspective. This will further ensure that the benefits of such capacity building and system strengthening not only affects selective activities but the overall performance of the health facility. Close collaboration and discussion with the MoH and CHAZ to ensure complementarity in training is important. Moreover, this approach will enhance the sustainability of the Cordaid activities in the health facilities in Zambia.

5 Discussion and conclusion

The aim of Cordaid is to improve access and quality of the health services, especially for the poor and vulnerable, mainly through empowering the users and strengthening the performance of the health workers. PBF was introduced in Zambia in 2007 as a means of achieving this through paying for performance on selected indicators. A formative evaluation of the PBF approach in Zambia was undertaken through the review of health and financial data as well as discussions with staff, management and clients of selected PBF supported facilities in comparison to several non-PBF supported facilities. This section will analyse these findings accordingly, followed by recommendations.

5.1 The results

Improved access, especially for the poor and vulnerable?

Based on this study which explored health data over four years (2004-2007) it can be said that there have been limited improvements in access to curative care, whether due to PBF or user fee abolition. Out of all the facilities, Minga (PBF) and nearby Petauke (non-PBF) hospital saw the most increases in their patient numbers but unlikely to be attributable to PBF.

Although several facilities (both PBF and non-PBF) still charge some fees for e.g. exercise books but those unable to pay are exempt. Patients highlighted concern about the bypass fees at St. Paul, Lubwe and fees charged in Muzeyi on Sunday and public holidays impeding access on certain days. While assault patients are treated freely, they are often charged for police reports (in PBF and non-PBF facilities alike) which may hinder vulnerable people, such as women experiencing gender based violence other than rape (which is exempted), to take action.

Similarly, there was not much improvement in access through promotion and preventative activities. Even though many of the health managers highlighted more outreach activities were undertaken to sensitize communities about institutional deliveries and the availability of VCT, data on the number of visits or activities undertaken did not confirm this, except for Minga. Antenatal care is important to identify women at risk and prevent complications during deliveries as well as promote institutional deliveries. The findings of this study revealed that St. Paul's does not provide any ANC, whereas in Kasaba this reduced slightly in 2007. In Mbereshi (non-PBF), the ANC showed an even more worrying decrease, thus cannot be attributed to PBF. The evaluators of this study promote the use of an integrated approach to health care by Cordaid, focusing on prevention and promotion next to curative care. This matter is best illustrated with the example of Muzeyi which as a health centre is to focus mainly on preventing diseases and early treatment while Cordaid is currently paying for increasing the number of inpatient admissions.

A significant increase was seen in the number of clients who were counselled for HIV testing. Again, this was the case in both PBF and non-PBF facilities and can therefore not be (only) due to the introduction of PBF. Global Fund support as well as incentives provided through USAID could have contributed to this. At Muzeyi health centre, it was seen that the rise in VCT users was attributable to PBF funds being available for the purchase of testing reagents. However, this health centre is not yet a designated VCT centre of the MoH and therefore does not provide treatment, raising queries on the appropriateness of merely increasing their VCT user rate. Similarly, this study revealed that none of the

PBF facilities ensured access to condoms, while non-PBF facilities did. This highlights serious concerns about access to preventive methods for those in need, especially as the PBF supported facilities are often in remote locations. For example, at Kasaba Mission Hospital clients are unlikely to obtain condoms through other means. Equally, it was seen that most PBF facilities were not providing family planning methods, although Minga and Muzeyi did so previously. Several of the staff, posted through the MoH in the mission facilities, expressed dissatisfaction about not being able to provide reproductive health methods, which is not in line with MoH policy. It is interesting to note that in Rwanda, PBF in fact seems to have contributed to enhancing availability of condoms through mission health facilities.

Improved quality of the health services?

The evaluators used several tracer indicators to assess the conditions available for providing quality of care in each facility. It became evident that these conditions were overall significantly better in the PBF facilities when compared with non-PBF facilities. Many of the staff also highlighted the use of PBF funding for cleaning materials and maintenance such as painting of the hospital in Lubwe. Given that it was not possible to compare these conditions with the situation prior to PBF, it could not be determined by the evaluators whether this is entirely due to PBF or has always been the case as suggested by some of those spoken to.

Cordaid's selection for a PBF indicator on availability of drugs can assist in ensuring quality of care is provided, especially when there is an increase in patients. It was found that stock-outs were experienced in Kasaba and Minga while Lubwe and St Paul's had all the essential drugs available. However, this may not be (solely) linked to PBF but rather the provision of supplies through the medical store of the MoH. The PBF indicator selection of tracer drugs and especially medical equipment, varies slightly from those reported on in the HMIS and may therefore be more appropriate to use. An updated version of the HMIS is currently being implemented which is recommended to be considered during review of the PBF indicators

Another quality of care indicator is the percentage of postoperative wound infections in hospitals. This indicator was proposed by several facilities at the start of PBF. The HMIS data revealed that this was an area of concern in Kasaba, Minga and St. Paul's. The latter has taken specific action to address this and was able to report no new cases in the first quarter of 2008. Given that this was not selected as a PBF indicator or strategized on in the context of PBF, the improvement cannot be attributed to PBF, furthermore staff at St Paul's highlighted the importance of the supervisory performance assessment visit of the district in this. Postoperative wound-infections are also a concern in Petauke and to a lesser extent Mbereshi, both non-PBF facilities.

Improving access to care does not always necessarily coincide with quality of care. In fact, it could lead to the contrary. For example, the PBF institutional deliveries indicator may result in delays in necessary referral as staff are keen to increase the number of deliveries in their facility. However, this study did not find a decrease in referrals from health centres or an increase in caesarean sections in PBF hospitals. These were also within acceptable limits in non-PBF facilities.

This study explored patient's satisfaction through interviews with small groups of patients in both PBF and non-PBF facilities. It was found that patients were satisfied with the care provided in all PBF facilities, while there were concerns

in some non-PBF facilities. It cannot be ascertained whether this can be related to PBF or other causes, given that it was not possible to compare the levels of satisfaction before the implementation of PBF. Nevertheless, inpatients expressed discontent in some PBF facilities about the limited meals provided (Lubwe, Kasaba, Muzeyi) which was likely to worsen with an increase in inpatients.

Users been empowered?

This study found no evidence of community or patient involvement in the planning and monitoring of PBF in Zambia. No regular monitoring of patient's perception through exit interviews or surveys was being done. The health system in Zambia requests involvement of Neighbourhood Health Committees (NHC) in the planning of health centres, while Hospital Advisory Committees are to be affiliated with hospitals for this purpose. Most hospitals visited did not have an Advisory Committee and while some included the NHC during annual planning, the level of consultation and involvement of the NHC during implementation was very minimal. It was felt this needed improvement. It was also found that planning for the PBF was being done separately from the annual planning processes without input from any of these committees, and the district health offices. Moreover, no community representatives are involved in steering the PBF implementation which is an area requiring urgent attention.

Performance of the health workers strengthened?

PBF aims to improve the intrinsic and extrinsic motivation of the health workers which is thought to subsequently strengthen the performance of the health workers. This is especially important in Zambia, where significant human resource shortages mean that it is unlikely that quality and access to health care can be improved through increasing the number of staff. Therefore, motivating the existing health workers to work more efficient and effective becomes even more important. One of the most significant effects of PBF funding in Zambia did appear to be in strengthening the extrinsic motivation of staff through the provision of incentives. However, it should be recognised that the provision of a top-up allowances may have happened anyway, as was seen in non-PBF supported facilities using the MoH health grant provided through the district. Notwithstanding this, the improvements made to living conditions through the Cordaid investment fund were an important enhancer for staff motivation. Respondents, nonetheless, revealed that more staff houses needed to be repaired and it was hoped this fund would continue.

The introduction of PBF in Zambia did not seem to be accompanied by a shift in organisational culture towards a more results oriented way of working, an intrinsic motivational factor. This was evident as most of the staff, and even some health managers, were not aware of the exact PBF indicators. In most facilities staff are involved in annual health planning, although often not financial planning, with no differences seen between PBF and non-PBF facilities. Moreover, PBF is not part of this planning process. Overall staff satisfaction was higher in St. Paul's and Minga, both PBF facilities, compared to other facilities. For Minga this seemed strongly linked to the positive feelings of staff about the relation between management and staff and the use of an individual PBF incentive system which is linked to performance rather than staff ranking. In fact, staff in other facilities noted how staff incentives contributed to increased dissatisfaction as it was felt PBF criteria were not clear and disbursement not equitable with doctors receiving significantly more than other staff.

5.2 The conceptualisation

It was observed that PBF appears to have had limited results in regards to improving access to quality health care through empowering the users and strengthening the performance of the health workers in Zambia. There are several plausible explanations for this. It could of course be that PBF did not create the desired effect. Similarly, it may be too early to see results given that PBF became operational in Zambia in 2007. Preliminary findings in DRC, however, seem to indicate that this can be possible. In addition, there could be issues with the way PBF is implemented and conceptualised which will be explored in this section, an area which the TOR also asked specific attention for. The evaluators explored the current status of P4P and how it was envisaged to evolve and become sustainable over the longer term.

PBF set-up correct?

The current P4P project in Zambia was developed based on a similar Cordaid project in Tanzania, which was also informed by previous Cordaid supported performance based projects in the Great Lakes region which demonstrated success with increased utilization and quality of care for the populations served. The conceptualisation of P4P in Zambia was undertaken through limited consultation, which consequently did not allow for sufficient contextual analysis and a tailored approach to the local context. The focus was mainly on verification of the feasibility to utilise selected curative indicators used in Tanzania rather than strategically planning how PBF can be best implemented in Zambia.

The PBF regulatory role was allegedly with the MoH, but there was no consultation on this and due to their limited awareness and involvement in the PBF, MoH has not been able to take on this responsibility. Similarly, there was no exploration on who would be most appropriate as fund-holder, especially in the long-term. Like in Tanzania, the contract has not been between the fund-holder and the relevant health facilities responsible for results, but with the diocese. There were no subsequent contracts found between the diocese and the health facilities to this end. It further became evident during the review that no negotiation process took place between the fund-holder and the facility (or the diocese for that matter) on the appropriateness of the indicators for pay for performance. Instead contracts mainly described inputs and expected outputs set by Cordaid.

The indicators and targets set were determined by Cordaid in The Hague and *the same for all facilities*. Health managers expressed much dissatisfaction with the indicators selected. This evaluation furthermore established that the performance baseline and the feasibility to improve performance were different for each of the facilities, confirming the need for negotiation with *individual* facilities was necessary. Hence, some health managers felt; they did not have equal opportunity to obtain the pay for performance.
Equally, the amount of baseline and investment funding received was the same for all facilities while their circumstances and coverage proved to be different as was their capacity to use the funds; findings revealed Lubwe and Kasaba where under-spent while St Paul's overspent. Expenditure ceilings were found to be set on the budget which did not empower facilities to be entrepreneurial and make improvements for results based on their identified needs as promoted under PBF, rather it maintained the input funding approach. A division between PBF and investment funding (with separate proposals and reporting) was also found to be confusing and did not contribute to shifting

away from the input approach. Delays were experienced in the arrival of the funds in 2007 as well as 2008. Late reporting of the health facilities on the performance against the indicators may have contributed to this, although this should have mainly affected the performance funding and not the baseline. The evaluators found no evidence of other monitoring or verification carried out on the performance, or a comprehensive proposal on how this would be done for PBF in Zambia.

Capacity to implement PBF?

No full scale needs assessment was done to accompany the PBF project, which would have supported identification of gaps in skills levels that required capacity building. Most of the health managers expressed being deficient in their capacity to implement PBF. There also uncertainty about how the project was to function. For example, in one facility it was not clear that the baseline funding was guaranteed and did not dependent on performance. Moreover, it was not clear to many managers what the underlying principles of PBF were. Hence, it is not surprising that no significant shift was witnessed in the organisational functioning of any of the health facilities visited, except to some extent, Minga which had individual performance scheme in place.
Technical support is limited as Cordaid do not have in-country health systems program advisors and rely on a program officer at head office to provide project oversight together with a financial manager (responsible for multiple countries). Most facilities reported a visit once a year but this was not said to include much capacity building on PBF.

A review of the funding revealed that no funds were spent on the provision of technical assistance to strengthen areas such as financial management, evidence based planning and monitoring or health management, key issues identified during the course of this evaluation. The contract describes that the diocesian health office receives 20% of the funding to facilitate coordination and training of the PBF facilities. However, Chipata diocese was found to have no health officer while the Mansa diocesian health officer indicated that he required more capacity building and up-skilling for him to perform this role. No technical assistance was provided by Cordaid to the diocesian health office at the time of the evaluation. However, the MoH and CHAZ did provide training and support to the health facilities in the fields of planning and management but not in the results based planning and accountability for results. These are in fact, the areas which PBF aims to change the ways of working within institutions. Most facilities visited revealed a major vacuum between the senior to middle level management and skilled health workers (doctors, midwives) while a concerted effort and ownership is needed to improve performance, in line with PBF thinking.

One major concern found in relation to capacity to perform in any of the Zambian health facilities visited is the shortage of staff and especially that the skilled staff. . PBF funding were used to try to improve motivation and supply of those already employed but exploring options to recruit additional qualified staff is thought to be useful.

Sustainability of PBF?

Cordaid was found to be a major funder in most of the PBF supported facilities visited, with an average of 17% of funding, compared to MoH's input of almost 30% and CHAZ more than 45%. Moreover, Cordaid increased its funding to the hospitals significantly with the introduction of PBF in 2007, especially in Kasaba and Lubwe where funding contributions from Cordaid to the budget

quadrupled. Such amounts of Cordaid funding certainly makes a difference. On the other hand, concerns were raised about the short term nature of the 3 year PBF project. Concerns were raised by health managers and MoH stakeholders about the consequences of its coming to an end, whether potentially negatively affecting the motivation of the staff and the performance of the facility. It is important to explore how the project will evolve over time and carried on after the designated time span.

The Government of Zambia established the CBoH in 1996 with the core mandate of implementing health services, while the MoH remained with the task of policy making and strategic planning. The CBoH used to sub-contract District and Hospital Management Boards to implement health programmes on its behalf. In 2006, the CBoH was abolished and its function transferred to the MoH as service delivery and health outcomes did not necessarily improve while there were concerns about the duplication of roles between the MoH and CBoH and if the provider-purchaser split did really happen. This may include important lessons learnt for the PBF approach in Zambia. More recently, the MoH has decided to implement a performance contracting pilot in nine districts with Noraid support via the World Bank. This may provide important links for the current Cordaid PBF project as the evaluators did not find a plan on how this is to become sustainable over the long term and this further gives urgency to wider consultation at central level. The previous section already brought to the fore the importance of consultation on the conceptualisation and implementation of PBF with relevant stakeholders. The establishment of, for example, a steering committee of the project may assist in ensuring a more integrated and sustainable approach.

Currently, the facilities receive funding through the MoH health grant next to the Cordaid funds. This brought to the fore issues of transparency with the district health offices as most of them were unaware the PBF funding. It appeared most mission hospitals did not disclose their full resources availability for fear of cuts in government budgets. On the other hand, lack of full disclosure can be detrimental to the mission facilities as district health offices assume additional funding is available at mission hospitals. Moreover, inequity between facilities supported by Cordaid and those which did not was highlighted. Selection of the facilities for PBF was found to be based on historical ties between Cordaid and mission facilities supported in the past, although new facilities have been added. It became apparent during the evaluation that there were no other criteria used for selection of facilities, other than the catholic background. If Cordaid's aim is to contribute to improved health outcomes for the people in Zambia, criteria related to highest need or those serving specifically poor or vulnerable people may be required, rather than just religious (in this case catholic) background.

This evaluation observed that the Cordaid PBF project had put separate processes in place for planning and reporting, additional to those existing within the Zambian health system. It was felt that the specific reporting provided additional work to the existing reporting obligations. Staff in health facilities visited highlighted the significance and usefulness of the performance assessments from the district health teams, thought to provide a form of quality assurance. Nevertheless, instilling accountability for improving the quality of care provided is required at the facility level. Alignment with, and further strengthening of, the existing planning and quality assurance processes is thought to improve efficiency and effectiveness. It was seen during the evaluation that all facilities did carry out annual health planning which identified local priorities for each facility, as identified through the HMIS as well as national priorities.

The need to ensure community representation in the institutional set up of PBF as well as enhancing community inputs in the planning and management processes is critical. The existing health sector planning process could form the basis for individual PBF facility priority setting and subsequent performance indicator contracting and planning. In fact, PBF could ensure community involvement in the planning process is enhanced. Furthermore, it is felt that overall strengthening of evidence based planning for results would be of value. This would allow for support to a more integrated health system approach which aims at improving, not only the performance on those indicators which have currently been selected, but also on the overall performance and consequently longer lasting improvements on the functioning of the health facilities supported.

5.3 Recommendations

Based on the findings of this evaluation, as described in the previous section, it can be said that PBF in Zambia has at this stage not (yet) attained the desired results. However, it was shown that this may be due to concerns about its conceptualisation and implementation. This section provides recommendations to address these concerns. During the debrief workshop, participants also provided suggestions for improvement to PBF implementation which are described in Annex 8.

1. Discuss and agree with the participating facilities and other relevant stakeholders (MoH, donors, CHAZ) the most suitable design and institutional set up for the PBF programme in relation to the regulator, fund holder, and service providers. Subsequently develop an institutional framework describing the respective roles and responsibilities.

2. Ensure community involvement in the development of the PBF set up as well as continuous input through a PBF steering committee to be established as soon as possible. Provide relevant capacity building to relevant partners to take on this role.

3. In view of increasing transparency, Cordaid is advised to discuss and involve the relevant MoH district and provincial health staff in the development of the plan. Their regulatory role is to be explicitly explored while cooperation in view of the building of capacity of health facility staff is essential to ensure complementarity.

4. The same process is to apply for CHAZ, while exploring complementarity in up-skilling of health staff.

5. Review the role of the Diocesan Health Offices in view of the above points. Allocate sufficient resources and relevant support systems for it to take on any proposed role.

6. Contribute to improved health outcomes through support to those in highest need or those serving specifically poor or vulnerable people, rather than just religious background. Hence, include non-catholic mission health facilities and promote an integrated approach to health care by including both primary and secondary health care facilities.

7. Develop a strategic plan for implementation of PBF in line with national health policies, strategic plans and action plans. Including strategies on

how to get there, based on relevant needs assessments and incorporating strategies to build required capacity of all partners involved in PBF. Alignment with emerging PBF pilots is essential. A pilot at district level may be an option, provided Cordaid ensures the provision of technical capacity to support this. Consideration for sustainability is of utmost concern.

8. Provide technical assistance throughout the process to ensure an appropriate design of the PBF: an institutional set up in line with national and contextual factors and the (separation of responsibilities) of the contracting approach. Study lessons to be learnt from the previous MoH division of responsibility between fund-holder and regulator and service providers. Agree on an appropriate distribution of roles and tasks between different stakeholders. Ensure participation of national/policy making level from the start. This may include important lessons learnt for the PBF approach in Zambia. Introduce appropriate instruments needed for the operationalisation of PBF.

9. PBF has the potential to lead to entrepreneurial management activities which aim to improve results as well as motivate and empower health staff. Health facilities should be given autonomy to decide on how the funds are spent so they can use them in line with the priorities identified at facility level. Similarly, discussions are to occur with the relevant health authorities in relation to autonomy of decision making.

10. Ensure inclusion and development of quality indicators, next to the existing performance based assessment system.

11. Verify the appropriateness of existing systems for monitoring and verification of outputs, data collection and periodic audits. Discuss and agree at all levels on the M&E system, while as much as possible utilising existing systems and processes.

12. Extend the verification system to the community to include; client satisfaction interviews, focus groups discussion with target groups, (eg women users) and annual reviews with community groups. In addition, promote greater accountability to the community by the health providers, through use of feedback mechanisms and regular meetings and annual reviews with the community. Where possible, through strengthening existing systems such as NHC's and Hospital Advisory Committees.

13. Build in an operational research component to determine the contribution of PBF to health outcomes and impact over time. Document lessons learned and disseminate to all interested parties. Including further investigation of the transaction costs to implement PBF.

14. Develop a tool kit (expanded implementation manual) on the organizational an operational steps to effective performance financing. Include guidance on the development of appropriate incentive systems.

15. Further study of the approaches used and the effects of the demand side incentives supplied to patients in Katete district with the aim of increasing utilisation.

16. Assess the need for the development of separate business plans versus the feasibility of incorporating and improving existing planning processes. Provide technical assistance accordingly.

17. Following a needs-assessment, develop a capacity building plan; the health providers and managers are in need of urgent technical assistance, to include skills for evidence based planning and management for results, HMIS and M&E, financial management training. Moreover, improve health managers' skills in negotiation and stakeholder management.

18. Strengthen access to the availability of condoms and other family planning methods at Cordaid supported facilities. Similarly, advocate for access of the poor and vulnerable to required care in view of user fees charged in the health facilities.

19. Explore opportunities with the health facilities to recruit additional qualified staff.

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Annex 1: Terms of Reference Formative Evaluation Performance Based Financing in Cordaid (supported) projects

Zambia P4P evaluation

A. Introduction

In many low income countries with high disease burden, health systems are not responsive to the health needs of the population, due to low human resource capacity, poor infrastructure and technology resulting in poor coverage and access to quality health services by the catchment population.
Cordaid aims at improving the access and quality of health services for people in low income countries, with emphasis on the poor and vulnerable. Reducing poverty also means changing power relations. Empowerment of the users of health services and enhancing the performance of the health work force are seen as important prerequisites for sustainable improvement in accessibility and quality of care.

Cordaid's main strategy is supporting partner organisations through capacity building. Where local partners are not available, as for example in some (post-) conflict countries, Cordaid implements programs by itself. The organisation adopted a programmatic approach, intervening at three levels: direct poverty reduction, civil society building and policy influencing. Cordaid assists in developing new innovative, approaches in order to achieve its aim.

One of these new approaches used in supporting health developments is **Performance Based Financing (PBF).** PBF means financing of health care based on results that are measurable and agreed upon in contracts. This is in contrast with many still existing systems within de-concentrated health services, being based on input planning and financing. So far PBF seems theoretically having many advantages compared to the classic input based planning and financing model. This however is based on assumptions, often context specific and depending on the way PBF is operationalised. On the other hand PBF is questioned internationally for bearing a number of important risks.

In Zambia Cordaid started introducing Performance Based Financing in 2007 through the P4P –project (Pay for Performance). In this project, the focus shifted from merely input based support in three dioceses, towards a results based scheme with four indicators (IPD, institutional deliveries, VCT and stock outs of essential drugs). The total target population is estimated at 2 million and the average per capita investment is … (to be calculated still by Financial officer Cordaid)The scheme covers hospitals, as well as health centres and dispensaries. User-fees are abolished in Zambia April 2006, but only for rural health institutions. . .

In the context of "linking and learning" within Cordaid's program Access to Health and on the basis of its PBF position paper 2007, Cordaid initiates a process of formative evaluation and linking and learning with and among partners. Cordaid is implementing the PBF approach in a number of Sub-Saharan countries and has expressed interest to evaluate systematically its PBF projects with the aim to analyse findings to date, document lessons learned and share lessons with all stakeholders involved. It has invited the Royal Tropical Institute to coordinate and supervise this review. The World

Health Organisation has shown keen interest to accompany Cordaid and KIT in this exercise.

Key assumption in this systematic formative evaluation is:

Provision of incentives to health service provider for meeting agreed health service delivery targets will result in increased access to quality health services for the catchment population, enhances participation and influence in health care provision by the users of the services (and consequently suiting the needs and priorities of the poor).
For this reason PBF is a suitable approach for Cordaid to support and lobby for.

This assumption can be split into the following assumptions:
On Direct Poverty Alleviation:

- *Health service providers will increase productivity by actively contacting clients through out reach services*
- *Health service providers will improve quality of services (through buying knowledge and skills) to increase utilisation of services and hence incentives*
- *The provider/purchaser partition increases the efficiency of the health care system*
- *Fees will decrease by using PBF*

On Civil Society building

- *Communities involvement in monitoring outputs and quality of services will have direct influence on quality of services and users choice on provider (if choice is available)*
- *Capacity building needs are revealed from the quality assistance monitoring and community feedback and form a comprehensive output monitoring status*

Testing these assumptions requires studying grey literature and defining conditions and potential risks of PBF. Some of these are listed in Annex 1. Annex II provides a short overview of Cordaid's present PBF supported project activities in DRC (Katana and Kananga), Tanzania, Zambia and Burundi. Rwanda concerns a desk study only. Annex III provides background on terminology used.

B. Overarching objective of the multi country review

The multi country evaluation will consist of 3 components. It starts with a desk study involving grey literature, relevant project documents and reports, followed by country specific evaluations. These countries differ in that some are so called fragile states and others are more 'stable'. In these countries different approaches were used. Therefore the evaluations are conducted on basis of country specific terms of references and bear elements of accountability studies (what has been the effect of the PBF approach towards achieving the overall aim). For comparison all individual country studies will fit in one overall framework, which is this terms of reference.
Findings of these country evaluations are fed back to the respective partner organizations and Cordaid liaison- and project offices.
The third component in this evaluation process is an analysis and comparison of the separate country evaluation documents, using the overall framework to answer the question: what can we learn from applying PBF in different contexts? Is PBF in general a suitable approach for Cordaid to use, considering Cordaid's vision? Which conditions are more favorable to PBF?. Findings of this third component will be shared with all stakeholders within Cordaid and in various countries.

Overall aim:
What can we learn so far from the results of Performance Based Financing support on the improvement of quality and accessibility of healthcare for the poor and vulnerable.

Specific objectives for the Zambia P4P evaluation

- To which extent have determinants be taken into account in the situation analysis at time of defining the program (perspective health consumers, providers, policy makers, national policies /guidelines, gender issues, HIV/AIDS, are priority problems addressed)? Which determinants have been identified and integrated in the project and project indicators? Have these determinants consistently been taken into account during the implementation of the program? In relation to this, what has been the relevance and appropriateness of the interventions chosen from the perspectives of government, donor, implementers and beneficiaries?
- What has been the aim of the project in terms of efficiency and efficacy?
  Based on this what can be said about the actual:
  Input: -resources used, incl. government (transaction costs versus providers payments)
  -level of TA required (short term/long term)
  Output: -performance of health services in terms of productivity
  -performance of health services in terms of quality of care
  -geographical/financial/socio-cultural accessibility and utilization of services
  -extent of sustained involvement of the users
  -organizational management of health services, taking in account gender aspects
  -human resource development (capacity building, staff retention, skills-mix)
  Outcome: -appreciation of indicators (trends towards expected impact)
  -analysis of household studies (trends towards expected impact)
  -accountability to the user, including the level of involvement of the users
  -effect on health system organization
- To which extend did substitution of utilization take place? In other words, if utilization in the participating facilities increased, did the utilization in non-participating facilities decrease?
- What is the likely sustainability of the results achieved? Sustainability can be measured in terms of financial dependency and level of support from others. But also the level of embedding in the national system: does the project cohere with policies of the Ministry of Health or has separate vertical systems been realized? Is there a prospect for the MoH to adopt P4P in future?
- Is P4P institutionalized properly? What lessons can be learnt from the start-up process?
- How is the scheme appreciated in terms of complexity? Is clear how P4P works and how incentives can be obtained? Is the number of indicators optimal? Is it clear how targets are calculated and decided upon in view of the purchaser-provider split?
- Which conclusions can be drawn concerning the usage of catchment population as an important denominator?
- To which extent has the capacity of the organization been improved with regard to technical and managerial capacity?

- What has been the quality of M&E of the partner organizations? This concerns adequacy of indicators, and quality of collection, analysis and use of data.
- How can PBF be summarized in terms of Strength, Weaknesses Opportunities and Threats in the project? What can be concluded considering the applicability in the various contexts/countries?

In terms of Linking, learning and lobbying:

- What have organizations been doing to enhance linking and learning in order to enhance their operations?
- Have organizations targeted policy influencing in the field of PBF and what has been the result?
-

In terms of real impact it will be too early to measure any results here

C. Methodology

The review will consist of 3 components being a desk study, followed by country specific reviews. The specific country study for Zambia will be done by: 1 local consultant, 1 international consultant (KIT; Royal tropical institute) and 1 participant from another program to be evaluated and will be coordinated by KIT.

Tasks of the local consultants include:

- Preparatory work (collection of data & documents as described in the research document) – 1 week
- Visit stakeholders at 'central level' (MOH, MOF, EFA's), discuss national policy issues, together with international consultant (2 days)
- Visit diocesan health offices & local stakeholders, analysis doc's and HIS, together with international consultant (2 days)
- Visit selected clinics/ HC/ Hospitals: staff and local stakeholders: data collection, interviews, analysis operationalisation PBF, together with international consultant: 4 days
- Development aid memoire (collecting of results and findings)- together with the Zambia international consultant and another international (KIT) person (JT) to support analysis in each review during the last week: 3 days
- Feed back workshops immediately after the reviews (country specific) for last input by respective country assigned consultants : 1 days
- Assistance in drafting the country report: 2 days
- Travel days: 4 days

As indicated above, the assignment will involve 32 working days for the local consultant. This includes travel days. The assignment will take place in July and August 2008. As the majority of the work is done in an international team, the local consultant will need to guarantee full availability from the 24th of July until the 14th of August. Some preparatory work will need to be done before the 24st of July, as described in the research instruments. A briefing (telephone conference), to discuss final issues and details of the assignment will take place as soon as possible,

Annex 2: Semi-structured Interviews (FGD) with health staff in selected health facilities

Q1: In general:
(Please introduce your self, explain the aim of the discussion, explain what you understand by the P4P= PBF-approach).

a. Why did you introduce PBF? What were the drivers for change? What were the challenges of introducing it?
b. What are the most important changes that are evident since the introduction of the PBF approach?
c. Give example of some key positive and negative changes that have occurred since PBF was introduced?

Factors (De-) motivating the health staff
Q2: Of the following list of factors of (de-)**motivation**, a score is requested from health workers

i. Sufficient numbers of skilled health workers in the facility?
ii. The received support from the direct superior level
iii. The feedback received on his/her work, the assessment,
iv. The number of patients that presents themselves to the HS
v. The working hours
vi. The received continued education
vii. Working conditions (building, infrastructure, equipment)
viii. Job security
ix. Team work
x. Salary
xi. The PBF-bonuses received
xii. The tasks and responsibilities entrusted to him/her

For each of the criteria, a score of 0 (not satisfied at all), 1 (not very satisfied), 2 (sufficiently satisfied) and 3 (very satisfied). Based on this, the accumulated total arrives at:

The health workers are not at all motivated (<10 points)
The health workers are little motivated (10 - 19 points)
The health workers are sufficiently motivated (20 - 30 points)
The health workers are very motivated (31-40 points)

Ask an explanation of the answer ("but why")

Q3: Did the introduction of PBF change your **motivation** for working here? In what way?

a. How long have you worked here? How long do you plan to continue to work here?
b. Is an increased motivation because of the financial incentive, the increased autonomy, or was there another reason?

Q4: Are systems in place and function well to manage the PBF approach?

a. fraud control/ verification,
b. M&E, Q/A, criteria for incentives/ disbursements
c. Is a system in place to ensure that the poor have access to services – in your perception, does it work?
d. What are opportunities to improve the systems and procedures?

Q5: Did you receive any capacity building (training, technical support) to adapt yourself to PBF?

a. What type of support did you receive?
b. What are the gaps in your skills and knowledge for use of PBF? What actions are taken to address the capacity gaps?

Q6: About changes after introducing PBF

a. Do more patients use the Health Facility after introducing PBF – how can you tell?
b. What types of services are offered– are there other health services needed that are not currently offered?
c. Did quality of care improve after introducing PBF – how can you tell? What did improve? Did conditions to deliver quality of care, continuity of care, diagnostics, or the results of treatment improve?
d. Did the level of user fees change – if so, did they increase or decrease? Is the PBF approach feasible now user fees are abolished?

Additional questions for the Health Management Team:

Q1: About the institutional framework for PBF

a. What is your role? Can you influence decisions, bring changes?
b. What was your role in developing the business plan – what could be improved?
c. How is your relationship with the MOH organised – at central level/ at district level?
d. How is your relationship with the CSO and with the community organised?
e. How is your relationship with the private sector organised – be it for profit or not?

Q2: About the support provided (by Cordaid et al) for PBF:

a. Is funding predictable and timely, the amount related to agreed criteria? Clear exit strategy?
b. How is technical assistance organised – needs based? Planned? Efficient and effective?

Q3: About human resources for PBF-health facilities:

a. Does the facility count with enough personnel to meet the demand for services?
b. Does the facility count with personnel having the right skills to meet the demand for services?
c. Is there a training plan?
d. What kind of incentives are in place to motivate the HRH – besides the financial ones?

Q4: About efficient use of resources in PBF-health facilities:

a. What could you do to reduce the waste in the system?
b. What is your opinion on the efficiency and effectiveness of checks and balances (fraud control, verification,) – what could be improved?

Client Satisfaction (FGD in health centre) for PBF and control

General Satisfaction

Q1 Are you satisfied with the content of the services that your health facility offers?

Q2 Are you satisfied with the package of services offered by your nearest hospital facility*?*

Q3 The last time when you needed health services, did you visit the HC/hospital close to you or did you go elsewhere? Where did you attend if you do not use your local health facility?

Q4 Are you in general satisfied with the quality of care in the HC/hospital?

List of specific points on satisfaction

Start with questions like: "last time you were ill", or "were you ill last 3 months"- then:

Q5. Quality of care

The last time you visited a Health Structure (HS = Health center or hospital) during the last three months:

I. Were you received well, i.e.: worthy, respectful and polite

II. Were the health staff, in your opinion, competent to cure your illness / disease?

III. Was the disease / illness well enough explained?

IV. Was the treatment well enough explained?

V. Was your privacy sufficiently respected / guaranteed in the health structure (HS)?

VI. Was the waiting time acceptable (staff was punctual)?

VII. Was the disease history noted and a diagnosis made?

VIII. Were you offered health information and advice as relevant to your needs?

IX. Where the health staff could offer appropriate diagnosis and treatment– was a referral to a higher level health facility discussed and actioned?

X. Was the care offered contrary to your cultural values?

Other aspects of satisfaction, related to the quality of care

Q6: Are the costs in the center reasonable and affordable for you?

Q7: Are the costs, way of tarification transparent (eg; payment is announced and a bill is provided?)

Q8: Is the state of the hardware of the HS in order (cleanliness, electricity, provision of water, etc)?

Q9: Were the drugs that you needed the last time that you were sick available (in the HS)?

Semi-structured Interviews (FGD) with regulatory body- MOH, MOF at central level as well as donors. Provincial is courtesy call

***Q 1:* In general:**
(Please introduce your self, explain the aim of the discussion, explain what you understand by the PBF-approach –P4P).

a. **Have you heard of the PBF approach being utilized by CHAZ, through Cordaid, to support selected health facilities in Zambia?**
b. **If not, would you like to be involved? How?**
c. **Can you elaborate on any forms of PBF in Zambia (before) and are there lessons to be learnt?**
d. **What do you think will be the strength and weaknesses and challenges (obstacles and enabling factors) for introducing this approach in Zambia?**

e. Why did you introduce PBF? What were the drivers for change? What were the challenges of introducing it?
f. What are the most important changes in management and implementation of health services that are evident since the introduction of the PBF approach?
g. Give specific examples of some key positive and negative changes that have occurred since PBF was introduced?
h. What were the challenges (obstacles and/ or enabling factors) when introducing PBF? What were the drivers for change?

***Q2:* Are organizational systems in place to manage the PBF approach (fraud control/ verification, M&E, Q/A, criteria for incentives/ disbursements)?**

a. **Do they function well? If not why not?**
b. **What are opportunities to improve them?**

Q3: Did the introduction of PBF change the **motivation** of the health staff here?

a. Is an increased motivation because of the financial incentive
b. Have the conditions for staff changed eg; support, capacity building with PBF
c. Are there other human resource needs to ensure improved healthcare for your population?

Q4: About changes after introducing PBF

a. Do more patients use the Health Facility after introducing PBF – how can you tell?
b. What types of services are offered– are there other health services needed that are not offered?
c. Did quality of care in the Health Facility improve after introducing PBF – how can you tell? Did conditions to deliver quality of care, continuity of care, diagnostics, or the results of treatment improve?
d. Did the level of user fees change – if so, did they increase or decrease?
e. **Is PBF approach feasible if user fees are abolished? Why (not)?**

***Q5*: About your role in managing (PBF) and your involvement in the management of the health facilities?**

a. **Did you participate in developing the business plan – what was your role, where your needs and priorities taken into account?**
b. **What is your role in managing the facility? In day to day management; can you influence decisions, bring changes – or even take decisions? Which type of decisions?**
c. **Are you involved in planning, implementing and monitoring the health activities?**
d. **Do you contribute financially, from your own resources (besides fee for services)?**
e. **What is the system of recording and reporting in the health facility? Is the information reliable?**
f. **Is a system in place to ensure that the poor members of the community use the facility? How are they treated?**

***Q6:* About your preparation for your role in PBF**

a. **How was the institutional framework for PBF developed – who is participating, what is the distribution of roles and responsibilities? (triangulate with Q4a)**
b. **Did you receive any capacity building (training, technical support) to prepare for implementing of PBF? What type of support did you receive?**
c. **What are the gaps in your skills and knowledge for use of PBF? What actions are taken to address the capacity gaps?**

Semi-structured Interviews (FGD) with regulatory body- MOH at district level

Q 1: **In general:**

(Please introduce your self, explain the aim of the discussion, explain what you understand by the PBF-approach –P4P).

i. **Have you heard of the PBF approach being utilized by CHAZ, through Cordaid, to support selected health facilities in Zambia?**
j. **If not, would you like to be involved? How?**
k. **Can you elaborate on any forms of PBF in Zambia before and are there lessons to be learnt?**
l. **What do you think will be the strength and weaknesses and challenges (obstacles and enabling factors) for introducing this approach in Zambia?**

m. Why did you introduce PBF? What were the drivers for change? What were the challenges of introducing it?
n. What are the most important changes in management and implementation of health services that are evident since the introduction of the PBF approach?
o. Give specific examples of some key positive and negative changes that have occurred since PBF was introduced?
p. What were the challenges (obstacles and/ or enabling factors) when introducing PBF? What were the drivers for change?

Q2: **Are organizational systems in place to manage the PBF approach (fraud control/ verification, M&E, Q/A, criteria for incentives/ disbursements)?**

c. **Do they function well? If not why not?**
d. **What are opportunities to improve them?**

Q3: Did the introduction of PBF change the **motivation** of the health staff here?

d. Is an increased motivation because of the financial incentive
e. Have the conditions for staff changed eg; support, capacity building with PBF
f. Are there other human resource needs to ensure improved healthcare for your population?

Q4: About changes after introducing PBF

f. **Do more patients use the Health Facility after introducing PBF – how can you tell? Are you aware of 'shifting' i.e. pts moving from govt to PBF facilities or vice versa?**
g. What **types of services** are offered– are there other health services needed that are not offered?
h. Did **quality of care** in the Health Facility improve after introducing PBF – how can you tell? Did conditions to deliver quality of care, continuity of care, diagnostics, or the results of treatment improve?
i. Did the **level of user fees** change – if so, did they increase or decrease?
j. **Is PBF approach feasible if user fees are abolished? Why (not)?**

Q4:**About your role in managing PBF and your involvement in the management of the health facilities?**

g. **Did you participate in developing the business plan – what was your role, where your needs and priorities taken into account?**
h. **What is your role in managing the facility? In day to day management; can you influence decisions, bring changes – or even take decisions? Which type of decisions?**
i. **Are you involved in planning, implementing and monitoring the health activities?**
    - ***Priority setting, establishing the expected results***
    - ***Planning of the health activities***
    - ***Planning of the expenditure on capital costs***
    - ***Planning of the expenditure on recurrent costs***
    - ***Implementation of health activities***
    - ***Monitoring & evaluation of the (health) results***
    - ***Monitoring & evaluation of the (financial) results***
    - ***Feedback to your community and advocating for service improvement?***
j. **Do you contribute financially, from your own resources (besides fee for services)?**
k. **What is the system of recording and reporting in the health facility? Is the information reliable?**
l. **Is a system in place to ensure that the poor members of the community use the facility? How are they treated?**

Q5: **About your preparation for your role in PBF**

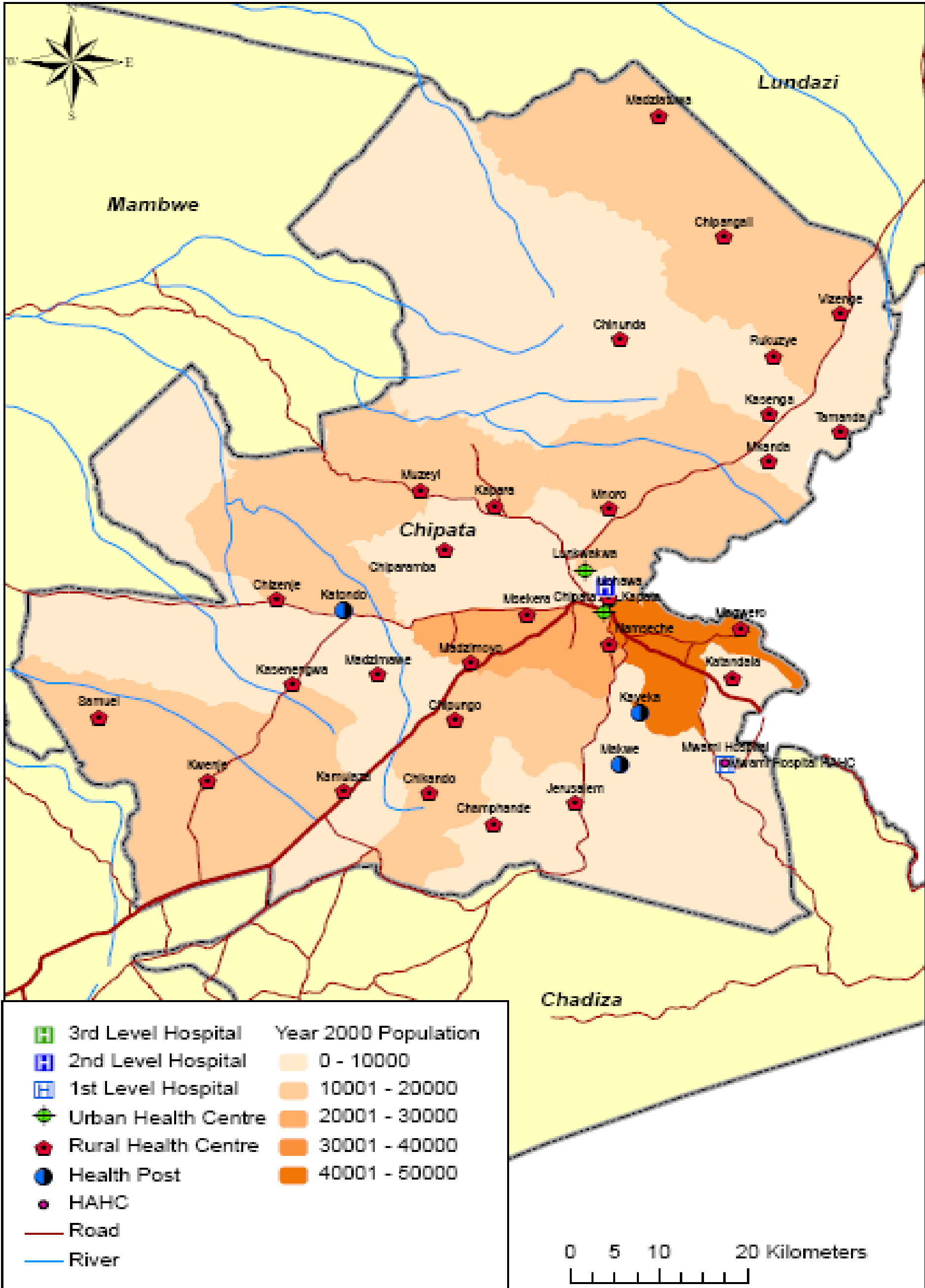
d. **How was the institutional framework for PBF developed – who is participating, what is the distribution of roles and responsibilities? (triangulate with Q4a)**
e. **Did you receive any capacity building (training, technical support) to prepare for implementing of PBF? What type of support did you receive?**
f. **What are the gaps in your skills and knowledge for use of PBF? What actions are taken to address the capacity gaps?**

Travel schedule

Date	Activity
22-jul	International consultant departs Amsterdam to arrive in Lusaka on 23rd
23-jul	Meeting national and international consultant Collins, Discuss selection PBF and control facilities
24-jul	Develop Zambia quantitative data report, meet HMIS specialist MOH, interview financial specialist MOH
25-jul	Interview health economist UNZA and different staff members of MOH planning division and CHAZ
26-jul	Read reports
27-jul	Drive from Lusaka to Nchelenge
28-jul	Visit St. Paul's Mission Hospital and District Health Director Nchelenge
29-jul	Visit Mbereshi Mission Hospital (control), visit Mansa Diocesian Health Coordinator
30-jul	Visit Provincial Health Director Luapula and HMIS officer, Visit Kasaba Mission Hospital
31-jul	Visit Kasaba Mission Hospital, Visit Libwe Mission Hospital
1-aug	Visit Samfya District Health Director, Collect health information, Return to Lusaka
2-aug	Analysis of data collected
3-aug	Travel from Lusaka to Petauke
4-aug	Visit Minga hospital, Meet Director of planning and management of Petauke district
5-aug	Visit Petauke district hospital, short PBF presentation district planning launch, Meet Health Director Katete District
6-aug	Visit Katete Urban Health Clinic, Visit Bishop Chipata Diocese
7-aug	Visit Chipata District Health Director, Visit Chiparamba RHC, Visit Muzeyi Mission Health Centre
8-aug	Collect health information Chipata District and Petauke Hospital, Visit Pharmacy Technologist Petauke, Return to Lusaka
9-aug	Data entry and analysis
10-aug	Arrival international consultants; from KIT- Jurrien Toonen and from WHO - Riku Elovainio, followed by briefing and discussion
11-aug	Meeting World Bank, Data analysis and Preparation debrief workshop
12-aug	Preparation debrief workshop
13-aug	Debrief workshop, departure international consultants from Lusaka

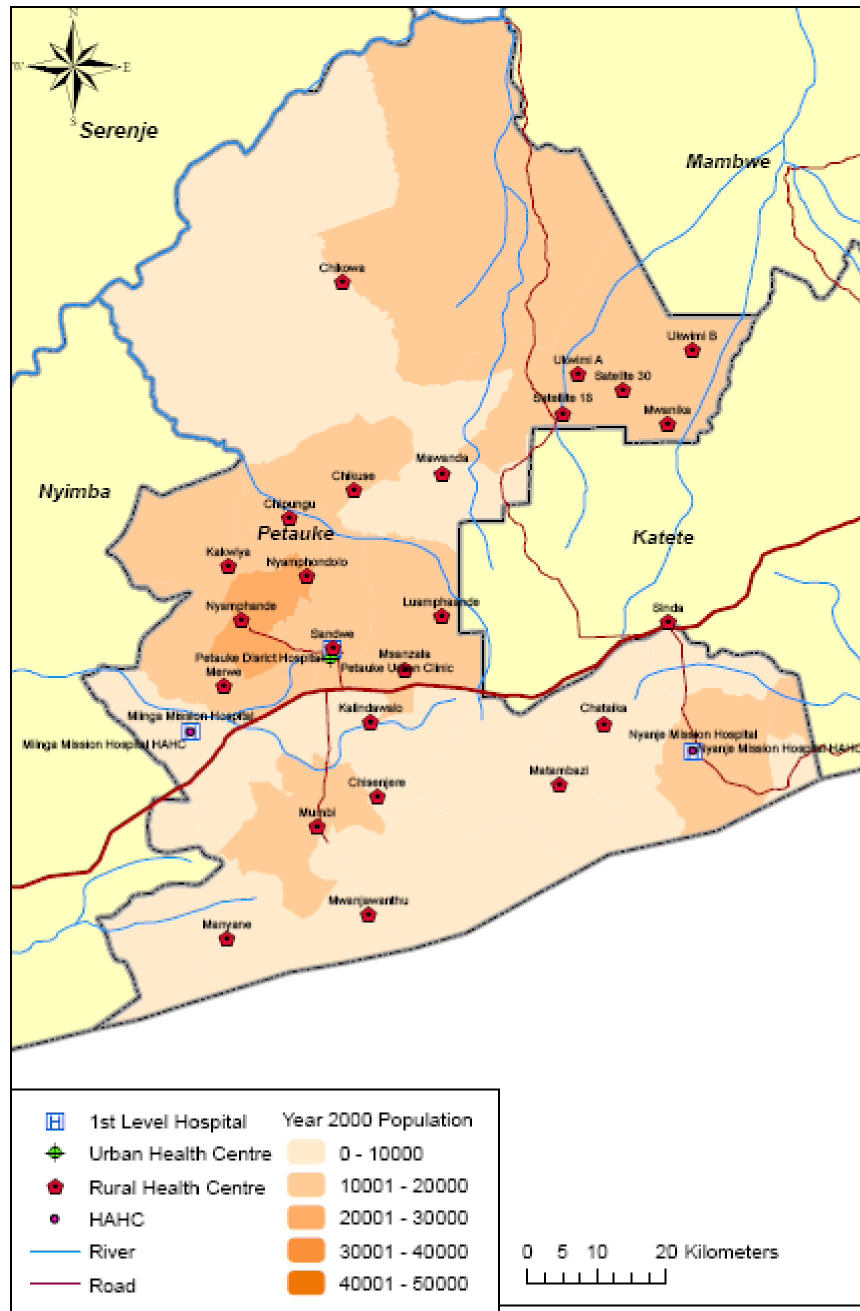
Annex 4: Maps

Chipata District/ Eastern Province

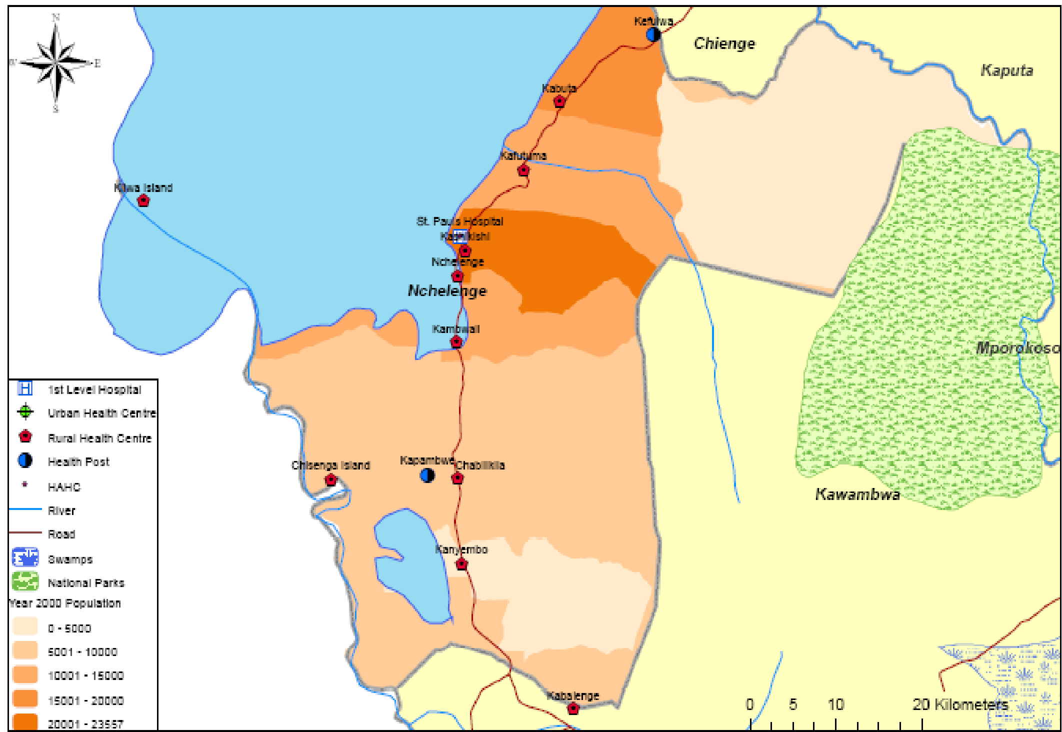


Katete District

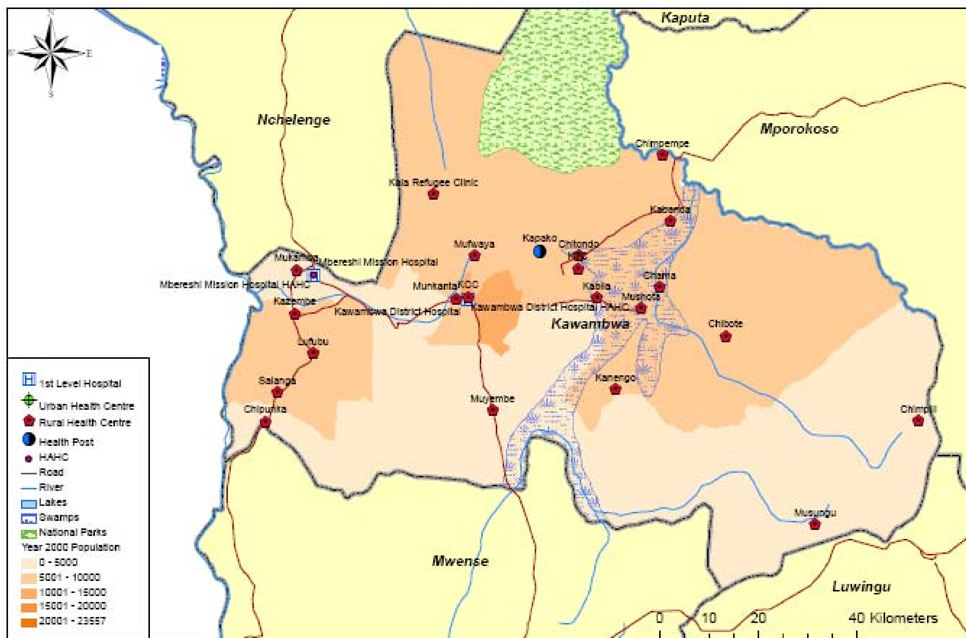
Petauke District/ Eastern Province



Nchelenge District/ Luapula Province



Kawambwa District/ Luapula Province



Annex 5: Indicators and their Consequences – Open Space discussion De-Briefing meeting of 13th August 2008

The participants from the three diocese were asked to indicate how they felt about the design, adequacy and attainability. Each of the 4 indicators were assessed individually through detailed discussions and these were the responses.

1. Patient turnover indicator.

The indicator was found to be inadequate due to the following reasons:

- Seasonality of some diseases
- Patients were being kept longer due to the condition and nature of the disease, and distance. Thus, turnover was affected.
- Outreach activities had been intensified and this meant that lesser patients were presenting themselves to the health facilities.
- Indicator was against the Ministry of Health Policy on prevention while some health centres are not particularly meant to admit patients.
- Leads to overloading of patients
- Mushrooming of drug outlets prevents people utilising health facilities.

2. Availability of Drugs

- Cordaid list of drugs not conclusive (its limited)
- List to be tailored to each institution to decide
- Coartem is part of list but very expensive. All cordaid funds could be consumed if coartem is procured. There is need to increase the drug component of the cordaid funds.
- Availability of drugs depends on the time of the year. i.e. certain seasons came with increased cases of diarrhoea or malaria and thus, increased uptake of drugs.

3. Institutional deliveries

- Poor staffing levels were making it difficult to attain the indicators. Further, some mothers stay very far from the health facilities and cannot access the health facilities during pregnancy and delivery. In most cases, complicated cases are referred to the health facilities while the normal deliveries are done in the communities by the Traditional Birth Attendants (TBAs).
- The indicator was affected by a number of factors beyond what the health management staff can do. Target difficult to meet. Need for the indicator to be defined individually by facility.
- Due to the above, some PBF facilities have also been including deliveries by the Traditional Birth Attendants (TBAs) when calculating the institutional deliveries.
- Need to increase communication to community.

Conclusions:

- Need to set achievable targets by health facility. The indicators shouldn't be uniform across all facilities and they should also be revised constantly when need arises. Results orientation and provision of quality services should also surround the discussion on the indicators.
- While it was appreciated that the TBAs were doing a lot of work in the communities, it was concluded that they should be used to bring mothers to health facilities to deliver. An incentive package can also be prepared for them. Equally, mothers delivering at health facilities can also be given something so as to encourage more mothers to come.
- Health promotion. There is need to have an indicator so that at an early stage people present themselves to facility.

Annex 6: Use of the performance bonus for the staff- Open space discussion De-Briefing meeting August 2008

I. Objective of the discussion:
To gather opinions and suggestions on the ways that the PBF related extra resources, the performance bonus, should be used for staff reward and motivation .

II. Background:
The PBF schemes are basically constructed around organizational indicators and organizational incentives: the targets are set for the health facility and the (cash) payment that is related to these targets will be added to the income of the facility. The logic of PBF being that if the facility produces for example X number of deliveries, Y number of VCT visits and if there is a Y percent of out-of stock days, then the facility will receive N amount of money.
The question that remains somewhat open in the PBF setup is the way that these organizational incentives are articulated into health worker incentives.
The trivial fact is that an organizational performance is dictated by performance of its staff (although organizational performance is not a simple sum of individual staff performances). So, if the are no incentives and rewards (or sanctions) that reach, directly or indirectly, the health worker level, it is unlikely that there will be a change in the motivation of the staff and, causally, in their productivity.
The starting point of the discussion described hereunder derives thus from the need to find solutions and set-ups that ensure that the organizational incentives in the PBF schemes will trickle down to the health workers.

III. The discussion:
1. Motivating the staff by using the extra resources for increased quality of care
Although the group discussion was more focused on methods of rewarding the staff, it was pointed out that there are also indirect ways for increasing staff motivation. Using the extra resources generated by PBF for a general improvement in the quality of care was seen as one important element for increasing staff motivation.
This aspect of staff motivation is linked with the intrinsic motivational factors, which are the factors that are determined, if put briefly, by the general satisfaction that an individual gets from a work well done and from helping others. So, if the facility uses the extra resources for better drug supply for better equipment and instruments or for other investments that increase the overall quality of care, then the intrinsic motivation of the staff should increase because they are able to do a better job.
There seemed to be a general agreement among the discussion participants that the resources generated by PBF should be substantially used for increasing the quality of care; it was emphasized that the experience has showed that this a very effective way of increasing staff motivation.

2. Distribution of rewards among the personnel - individual vs. general reward
Even if the intrinsic motivational factors where deemed important, the discussion mainly turned around issues that are related to the extrinsic motivational factors. In other words, these discussions focused on the modalities of rewarding the staff and on increasing their motivation and productivity through these rewards.
The choice between individual rewards and blanket rewards for the whole staff, is a question that sparked a lot of debate.

2.1 Individual rewarding and the problems related to it

Distributing the reward individually was often seen problematic because it was felt that it was difficult to judge individual performance and merit. It was underlined for example that a health worker's performance is often linked with the performance of one's colleagues and therefore it is difficult to define a measure stick for individual performance that would take into account this factor. Also, the position occupied by a health worker in the organization can influence the performance level: it is easier for some to produce measurable outputs because of the nature of their post - for others, in other posts, more effort may be needed in order to produce a similar level of output. Finally, it was pointed out that in some facilities the rewards are unevenly balanced between different category of personnel - doctors getting more than the nurses for example. This was seen unjustified because the burden of work had not been taken into account and because this type of settlement was not seen as merit based.

The general problem behind the individual reward seemed to be the difficulty of measuring individual performance and individual merit. There was some discussion around the use of an explicit and predefined method of evaluating individual performance as used at the Minga hospital, but many in the discussion group issued concerns over the transparency and objectivity of such an approach.

Finally, there was also some discussion on the notion of performance itself. One intervention stressed the fact that most of the work done in health facilities is routine work and there it is quite difficult to distinguish a good and a bad performance.

2.2 The better option : blanket reward

Considering the problems related to individual performance rewards, the discussion group participants often made the case for different type of blanket rewards.

There was a wide consensus on the fact that the one of the best ways of using the performance bonus was to offer non-monetary advantages to the health workers. Concretely, an investment to the housing of all the health workers, bringing tap water to the houses for example, was seen as a pertinent way to use these funds. It was also suggested to use the money to organize transportation for the workers, for example the facility could use the money to by a minivan which could be used to transport the staff to work and back. These type of interventions where seen very important for increasing the staff motivation.

A general monetary reward, a top up of salary for example, was generally seen as an ineffective way to use the performance bonus. The main argument against this method was that if divided equally to all the personnel, the part of an individual worker was deemed to be too little to have a real influence on the general income and thus there was no or little effect on the motivation. This of course varies from establishment to another; as one participant noted, currently there is only two levels of calculating the basic rate of performance bonus (and other payments): one for the hospitals and another for health centres; thus all the health centres for example will get the same amount of money (for a same level of performance) without any link with size of the facility - a health centre with a larger staff has less to distribute per capita than a health centre with less staff.

2.3 The problem of the blanket reward : how to reward individual innovation and reactivity

Even though the blanket reward, preferably in a non monetary form, got a large approval among the group, there were still some dissident opinions who stressed that, in the context of PBF, there should also be some kind of reward for those who have been reactive and innovative. So, some sort of personal reward could also be purposeful, but taken into account the problems mentioned above related to individual rewards, there were no clear suggestions

on what would be the best method to put in place a system that would reward innovative and reactive individuals.

3. Monetary vs. non-monetary rewards

The choice between monetary and non-monetary rewards is linked already to the choice between individual and blanket payments: there was already a clear preference towards non-monetary rewards because there was already a large consensus (but not unanimity) on the fact that blanket rewards should be preferred and that giving blanket top ups would not be effective because of the small amount that each staff member would get. In other words the question about monetary and non-monetary rewards was mainly treated indirectly through the question of individual and blanket rewards.

However, there was also some discussions that concerned directly this question. For example, it was mentioned that monetary rewards can often create frustrations, because there is an uneven way to distribute it, because there is a delay in the payment, etc. But a case was also made for monetary payments, the logic behind this opinion was that the individual needs differ and people want to use their resources in different ways; thus a monetary reward, individual or general, would be preferable because then each individual can use the money as they see best.

4. The case for technical assistance for setting up a reward system

Finally, it was brought up that there has been little or no technical assistance focused on the way how the performance bonuses should be distributed. There seemed to be a demand, for some type of guidelines on how the reward should be distributed and what are the best practices.

Annex 7: Organisational set-up and institutional framework- Open space discussion De-Briefing meeting

Questions posed;

1. First question: we should have had this kind of discussions earlier, before the start of it all – we didn't understand the basics of PBF. In Rwanda the advantages were seen, not the 'how to do it'.
2. The question most frequently posed: who, which institution, should be the fund holder. Of course the one right answer is not possible to give. We discussed different examples of the organisational set-up, the institutional framework, the distribution of tasks and responsibilities, in Africa (DRC/Burundi, Rwanda, Mali).
3. Important question linked to the former: what should be the role of the Diocese? Actually it is used by Cordaid as a fund-holder. It was discussed if this was appropriate, certainly in relation to the (public sector) MOH – as all salaries are paid by the Ministry, information is collected by the MOH and with respect to the future situation in which NFP/ FP private sector providers equally will be treated through a contracted approach. And also depending on the approach chosen – the Diocese(s) as a pilot, or the FBO and other public/ private all together in developing a 'promising practice' (rather than a pilot) within a broader national context. Feelings were mixed here …….
4. It was asked which institution would be the administrator of the system. Of course partly the providers (H/MIS, information and 'pièces justificatives' linked to the contract) and partly the local (!) fund holder (not the donor e.g.) – functions should be separated to enable internal checks & balances. This is the internal audit – an external audit also is needed – another frequent question. But mostly aiming at the financial control rather than on the (health service) results (remainder of 'input' system?).
5. Who will decide on what kind of decisions if expected results (targets) were not attained. The fund holder, but based on mutual agreements laid down in the contract, and ex-post control by the steering committee. Linked to this:
   What then will be the predictability of my funding ("I have 300 AIDS patients to take care of"). Different possibilities here – but predictability will certainly decrease after input funding: make sure that targets in the contract are feasible, use the fixed 50% for some essentials (like your AIDS patients – although the fixed part may disappear); make priorities in the money you receive – but before all, make sure that you reach your target, and use that money to create conditions that you may increase your performance even more. Of course, the donor must make sure that predictability at the local fund-holder is guaranteed – control ex-post in stead of ex-ante?!
   I don't have a shortage of staff, so I will not be able to reach my target. You may have a higher rewarding if you will attain your target because of your shortage, adapt the expected result in the contract to the HR available, don't base targets on the national target but adapt your contribution to it.
   It was not understood that it should be possible to adapt the expected results over time – e.g. each 3 months when signing a new contract ….. – in each individual facility;
   Most questions here were about 'how to negotiate with whom' these targets in the contract – between local provider and the local fund-holder, in which hopefully the ultimate target group (the population, the potential clients) is well represented;
6. How the verification should be set-up. Not one right answer possible here – so different examples of other countries was given (VHC, the

community representatives in the health centre board, ….). It was also discussed that this is a costly transaction cost, that the opportunity could be used for a patient satisfaction survey, or a survey on healthy behaviour – if only for efficiency reasons.

Annex 8: Moving forward with PBF in Zambia- Open space discussion De-Briefing meeting

Objective: Allow health managers to express their questions and suggestions to Cordaid on the process to follow to improve the PBF implementation.

The following suggestions were made:

- Cordaid to visit each facility to determine the needs, based on each institutions situation.
- Cordaid meeting to discuss how to implement PBF and revise where necessary, highlighting a desire for the institution to decide how to allocate resources and for what results being held accountable, specifically in relation to:
  - Guaranteed funding (timing, amount and conditions)
  - Capital investment (needs and allocations)
  - Indicators (based on needs and circumstances institution)
  - Incentives (targets set)
- Exchange visits with other countries where PBF is implemented i.e. DRC and Rwanda people to come and talk about their experiences)
- Rewarding system specific for each facility, to allow staff input in determining how the rewarding system works.
- Like the Minga incentive system at individual level which holds people accountable but who will be scoring the individual; there is a risk for bias. Support and capacity building requested from Cordaid in this and how to develop tools for its implementation.
- Autonomy on training funds and capacity building allocation directly to HF rather than through other sources e.g. diocesan health office.
- Increase overall funding from Cordaid so that % allocated for each expenditure item is sufficient
- Shift in mind-set required at Cordaid side in regards to their own needs and demands as currently felt input has been merely replaced with Pay for Performance. There has not been a discussion whether and how to implement P4P, rather a donor-driven discussions on expectations.
- Patient satisfaction indicator inclusion sounds useful but how determine this and how satisfy?
- Importance of community input in facility assessment.
- How ensure community involvement in planning though as many are not well educated and want to receive payments. Examples are provided of current (elected) community members input in the receiving committees (e.g. observe receiving equipment and drugs thus knowing what is available or not as well as held staff accountable) and planning committees (assist in determining priorities). Question is posed how to motivate these members to increase involvement.
- Create room for income generation in the facilities to ensure sustainability of incentive system in the long term.