NHSSP Nepal Health Sector Support Programme

A REVIEW OF DEMAND SIDE FINANCING SCHEMES IN THE HEALTH SECTOR IN NEPAL

Shiva Raj Adhikari
Devi Prasad Prasai
Sharad Kumar Sharma

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Contents

Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ARV	Antiretroviral (Therapy)
CB-NCP	Community Based Newborn Care Programme
CHD	Child Health Division
CREHPA	Centre for Research on Environment Health and Population Activities
C-Section	Caesarean Section
DoHS	Department of Health Services
DSF	Demand Side Financing
EDCD	Epidemiology and Diseases Control Division
EDP	External Development Partner
FCHV	Female Community Health Volunteer
FHD	Family Health Division
GoN	Government of Nepal
HDI	Human Development Index
HIV	Human Immune Deficiency Virus
HMIS	Health Management Information System
I/NGO	International/ Non-Government Organisation
KA	Kala Azar
LLIN	Long Lasting Insecticide Treated Bed Nets
MDR TB	Multi-drug Resistant Tuberculosis
MoHP	Ministry of Health and Population
NCASC	National Centre for AIDs and HIV/AIDs Control
NHTC	National Health Training Centre
NRs	Nepalese Rupees
NTP	National Tuberculosis Programme
OT	Operating Theatre
PHCC	Primary Health Care Centre
PMTCT	Prevention of Mother to Child Transmission
PNC	Postnatal Care
PPP	Public Private Partnership
SDIP	Safe Delivery Incentive Programme
SBA	Skilled Birth Attendant
TB	Tuberculosis
UP	Uterine Prolapse
VDC	Village Development Committee
VSC	Voluntary Surgical Contraception
WHO	World Health Organisation

Executive Summary

In common with many other low and middle income countries, Nepal has introduced a number of Demand Side Financing (DSF) initiatives to address the financial barriers that limit access to health care services, particularly for poor, marginalised and vulnerable populations and thus improve access to health care services.

DSF schemes currently being implemented in Nepal include those related to maternal safe delivery care (the Aama Programme), four Antenatal Care (ANC) visits, Uterine Prolapse (UP), family planning, Kala Azar (KA). These schemes normally consist of output based payments to service providers and demand side payments to consumers accessing health care services at facilities. Some have been introduced only recently, while others have been in-place long enough to show results across the country.

This report provides a brief review of these schemes, including coverage, effects and bottlenecks. The specific objectives of the study are as follows:

1) To assess the effects in terms of coverage and utilisation and identify the bottlenecks of each scheme

2) To examine potential problems, such as incentives that result in by-passing of lower level services and over crowding of higher facilities, thus limiting their ability to provide other services

3) To assess the status of DSF fund management

4) To explore the scope for integrating and improving the efficiency of DSF schemes.

This study draws principally on secondary data, although some data were collected from primary sources in order to explore particular situations in depth and prepare informative case studies.

The majority of DSF schemes in place use both consumer and provider mechanisms to improve results. A major bottleneck identified was the low levels of awareness of these schemes, resulting in their under utilisation. Some schemes, particularly the Aama Programme, may create new problems as clients by-pass peripheral health facilities in favour of referral hospitals, which then become over crowded. Other schemes disproportionately consume hospital resources, undermining other services. For example, the high demand for maternal delivery services frequently means that Operating Theatres (OT) and associated equipment and human resources are tied up and patients requiring other services, such that surgical treatment of UP, must wait.

Some facilities are facing financial problems due to the delayed release of government budgets and the mis-matching of funds allocated compared with actual needs. Some DSF schemes have also been subject to false claims by institutions and their staff, although this practice is reported to be waning.

Each of the DSF schemes is being implemented independently by different divisions within the Department of Health Services (DoHS). Each has its own operational guidelines, reporting, recording, monitoring and supervision mechanisms, which increases total transactional costs. The Aama Programme, for example, is estimated to absorb around nine percent of total programme spend on facility level administration.

A number of policy options are recommended to ensure the supply of services, particularly at peripheral facilities, matches the stimulated demand, and there is sufficient cash flow at facility level to make all payments. Three ways of enhancing specific programmes are suggested:

a) Streamline administration, including combining budget estimation and information systems;

b) Merge delivery mechanisms, in particular the Aama and ANC4 programmes, which serve the same client group;

c) Improve purchasing functions within the public health sector. New skills and tools are needed for targeting priority groups, developing public and private sector contracts, accreditation and paying providers. Within some programmes, skills have begun to develop which are of value to the health system as a whole. One possibility here is to develop a general purchasing capability within DoHS/MoHP, based on these programmes, which can later encompass other health services. Whether or not this capability remains within MoHP or is eventually split off and contracted out to a purchasing agency will depend on the policy choices made on the future shape of the system.

1. Introduction

In common with many other developing countries, Nepal is actively adopting Demand Side Financing (DSF) approaches to address financial barriers that limit access to health care services for poor, marginalised and vulnerable populations. Conventional supply side mechanisms are often unable to reach the poor because of a lack of penetration of services into these communities. The challenge, therefore, is to explore innovative ways through which government subsidies can better target those who cannot afford to pay and can improve equity, efficiency and quality of services.

The DSF approach aims to increase the utilisation of services by transferring greater purchasing power for goods and services to beneficiaries. Broadly, consumer led DSF mechanisms seek to reimburse service providers by (Ensor, 2004):

1. Paying facilities or other service providers on an activity or performance basis;
2. Encouraging choice for consumers among good quality (accredited) providers;
3. Encouraging uptake of priority services, particularly those that are otherwise under-utilised;
4. Directing resources to high priority populations;
5. Giving consumers of services responsibility for part, or all, of the decision about which providers are chosen.

A number of DSF schemes including the Aama (Mother) Programme, four Antenatal Care (ANC) visits, Multi-Drug Resistant Tuberculosis (MDR TB), Kala Azar (KA), and Uterine Prolapse (UP) are currently operating in Nepal. These schemes consist of a combination of output based payments to service providers and demand side payments to consumers accessing a continuum of health services at facilities. Each of these schemes is organised and operated separately under the Department of Health Services (DoHS).

Although all the schemes mentioned have demand side elements, some features vary. Three of the schemes (ANC4, KA and MDR TB) provide specific payments designed to overcome demand side barriers and thereby incentivise the use of existing services. These services are financed through the usual budgetary (supply side) funding. The Aama and UP schemes, on the other hand, incorporate demand side incentives but also include payments for services at facilities chosen by clients, according to the level of activity (case based payment).

The primary objective of this study is to describe and provide a review of existing DSF schemes in Nepal. Specific objectives are to:

- Assess the effects of currently implemented DSF schemes in terms of coverage and utilisation, and identify the bottlenecks of each scheme;
- Examine potential problems resulting from the incentive programmes, such as by-passing of lower level services, over crowding of facilities (especially at higher levels), the impact on their ability to provide other services (if any) and the recent status of fund management;
- Explore the scope for integration and improving the efficiency of DSF schemes.

A desk review of published and unpublished documents relating to these schemes was carried out, focusing on their impacts, challenges, and bottlenecks. Secondary data and descriptions were obtained for all schemes to provide an initial situational analysis. This was supplemented by interviews with senior and mid-level managers, section chiefs, and other staff of concerned divisions or sections directly involved with the DSF schemes, in order to understand their practices and experiences, and to establish any weaknesses, gaps and problems. Where possible, the study team triangulated information from independent sources. However, where schemes have only recently been initiated, no assessment reports or documents were available.

As one of the leading DSF schemes in terms of size, coverage and experience, many reports are available on the process and impact of the Aama Programme, but in other cases, less documentation is available. Inevitably, this review reports more fully on schemes that have been more extensively documented. It should also be noted that cost estimations are based on operating costs and current expenditure on the programmes, and while these yield indicative results, they are not the unit costs of services provided.

2. Short description of DSF Schemes

1) Aama Programme

Although there has been a significant reduction of maternal mortality and morbidity, maternal health remains a serious public health problem in Nepal (Pradhan, et al, 2010). In order to remove financial barriers and improve access to delivery services, in 2005 the Government of Nepal (GoN) introduced a scheme to provide financial incentives to women and health workers through the Safe Delivery Incentive

Programme (SDIP). In 2009, user fees were removed for all types of delivery in public health facilities across the country. Together, these two interventions are now known as the Aama Programme, which includes both consumer led demand side payments and provider payments. Consumers receive 1,500 Nepalese Rupees (NRs) in high mountain districts, NRs.1,000 in hill districts, and NRs.500 in Terai districts, to cover transportation and other access costs. Health staff receive NRs.200 per home delivery assisted, and health facilities of up to 25 beds receive NRs.1,000 per delivery and facilities with more than 25 beds receive NRs.1,500 for normal deliveries. While normal delivery service provided in facilities is supposed to be of uniform quality, unit costs may vary in different geographic zones, depending on the context, a point which is not addressed in the guidelines. For example, facilities with more than 25 beds may have more experienced staff and newer technology leading to higher efficiency in providing delivery services and reduced unit costs. For complicated deliveries and Caesarean Sections (C-Sections), facilities receive NRs.3,000 and NRs.7,000 respectively.

From the amounts provided, health facilities are expected to provide all services, drugs, and equipment related to delivery free of cost. However, consumers who receive services from private cabins (beds and space allocated for those willing and able to afford to pay) must still pay for services (Family Health Division (FHD), 2010a).

A number of evaluation studies of SDIP and the Aama Programme have been carried out.

2) Incentives for Pregnant Women for Four Antenatal Care Visits

The DSF scheme for four ANC visits was introduced in July 2009 and is still in the early stages of implementation. It is intended to encourage women to complete the recommended programme of four ANC check-ups (at the fourth, sixth, eighth and ninth months), promote the continuum of care and reduce low birth weight among newborns. Each woman receives NRs.400 as an incentive if she completes the four visits, delivers at an institution and has one Postnatal Care (PNC) check-up. At the time of delivery she should possess a completed ANC card (FHD, 2010b). Procedures related to the reporting, recording and payment, including data on the beneficiaries themselves, are similar to those of the Aama Programme.

3) Incentives for Surgical Sterilisation

The main focus of the Ministry of Health and Population (MoHP) family planning programme is to expand and sustain adequate quality family planning services for communities through the health service network and mobile Voluntary Surgical Contraception (VSC) camps. VSC services are provided free of cost and include vasectomy, and laparoscopic sterilisation. A DSF scheme for family planning services was introduced more than three decades ago, with NRs.100 provided to each accepter, but it is not well documented. The scheme has recently been revised to include both provider and consumer components. For the consumers, NRs.100 is provided as compensation for wage losses and NRs.25 for tea and snacks. The service providers receive between NRs.170 and NRs.230 per case. The scheme is awaiting evaluation.

4) Free Treatment of Uterine Prolapse

As a major initiative for improving women's health, the programme for prevention and management of Uterine Prolapse was initiated in 2008. It is estimated that 600,000 women are living with UP and as many as 200,000 require immediate surgical treatment (Shahi, 2010).

Women requiring treatment may select public or certified private health care providers, and services can be provided at hospitals or mobile health camps. The public and certified private health care facilities provide surgery free of charge and receive NRs.12,000 for each case in the Terai, NRs.13,000 in the hills and NRs.15,000 in the mountains, to cover their unit costs. The institutions also receive an incentive for mobile camps as follows: NRs.1,500 per treated case in the Terai, NRs.3,000 in the hills and NRs.5,000 in the mountains. It is expected that at least 40 women will receive treatment at each Village Development (VDC) mobile camp and each woman is provided with a cash incentive of NRs.500 in the Terai, NRs.1,000 in the hills and NRs.1,500 in the mountains (FHD, 2009c). In the current financial year (until July 2011) the plan is to provide UP treatment services for 13,000 beneficiaries. The scheme is awaiting evaluation.

5) Transport Scheme for Kala Azar

Kala Azar is a vector borne disease, transmitted by sand flies. KA and HIV connections have emerged as a health problem in recent years, and the GoN is committed to eliminating KA, initially aiming to reduce its incidence to less than 1 case per 10,000 by 2015. To this end a number of strategies have been adopted including a DSF scheme in public hospitals. An incentive package for KA patients is being implemented in the 12 significantly KA affected districts. KA patients who utilise services from public facilities are provided with NRs.1,000 and a durable impregnated bed net at the time of discharge.

6) Multi-Drug Resistant Tuberculosis Incentives

Multi-Drug Resistant Tuberculosis is a major health problem in Nepal. The National Tuberculosis Programme (NTP) has coordinated with public and private sector organisations, local government bodies, I/NGOs, social workers, educational sectors and others in order to implement appropriate control and treatment services.

The MDR TB management programme was initiated in September 2005 at five treatment centres and 16 sub-treatment centres, with technical and financial support provided by WHO, and has subsequently been further expanded. By July 2010, a total of 882 MDR TB cases had been registered for treatment through 12 main centres and 54 sub-centres. In order to incentivise uptake of services, the DSF scheme offers each MDR TB sufferer NRs.1,500 per month to finance improved food intake, nutrition and transport to the facility for treatment.

Table 1: Summary of targets for utilisation and expenditure

DSF scheme	Type of scheme	Target coverage (%)	Utilisation (%)	Annual expenditure (NRs Millions)	
				Programme	Incentive
Aama	Incentive to women plus service payment	60.0	47.0	657.58	150.92
4th ANC visits	Conditional payment to women	80.0	60.0	150.45	150.45
UP	Incentive to women plus service payment	100.0	10.0	134.4	6.72
Kala Azar	Conditional payment /bed net to clients	100.0	60.8	2.57	0.79
MDR TB	Conditional payment to clients	100.0	76.3	8.15	4.58

Source: DoHS 2011 and estimated

Targets with utilisation achieved and expenditure on the major DSF schemes in Nepal are summarised in Table 1. Although the ultimate target of each scheme would be to cover 100 percent of the need, government targets for 2015 are more modest at 60 percent for the Aama programme, 80 percent for delivery with a Skilled Birth Attendant (SBA) and 80 percent for four ANC visits (MoHP, 2010). In the Aama Programme, utilisation means deliveries conducted by trained health workers including SBAs.

Some schemes have not defined their 2015 goals while others have set clear annual targets. For example, in 2009/10, 8,000 UP surgery cases were planned and 10,645 achieved (DoHS, 2010), and in 2010/11, the target is 13,000 cases. Those schemes that have not explicitly defined 2015 targets are assumed to be working to a 100 percent target. Figures for expenditure on DSF schemes are derived from DoHS data with the amount spent on incentives for UP, KA and MDR TB calculated from the number of persons utilising services multiplied by the unit incentive payment.

3. DSF Coverage Utilisation and Bottlenecks

In this section we examine the main DSF mechanisms from the point of view of their coverage, utilisation, equity and links with the private sector. The aim here is to describe the evidence (or lack of) for impact and the underlying reasons for various trends.

3.1 Coverage Utilisation and Costs

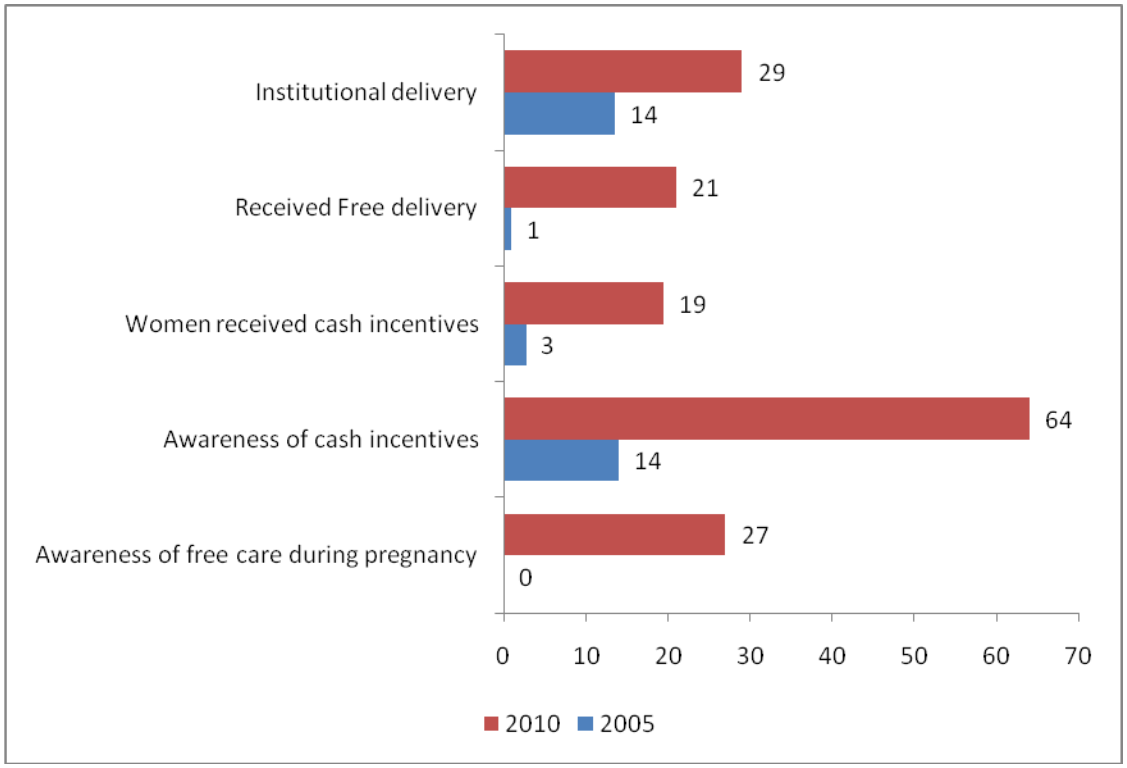
Health service coverage depends on the ability of a health programme to interact with a target population and is expressed as a proportion of the total target population receiving the service. Potential coverage normally relates to service coverage and service capacity. Utilisation is the relationship between the service coverage and output. We collected data from different sources (summarised in Annex A) to measure coverage and utilisation of the various DSF schemes. Where data were available we compared the coverage and utilisation of scheme across two periods of time.

We have also attempted to assemble data on the main bottlenecks in service uptake for each scheme. Bottleneck analysis assembles information on the patient decision making path in order to better understand the factors that limit the utilisation of services. The stages and factors include knowledge, accessibility, availability, acceptability and uptake of financing mechanisms, and utilisation of services. By comparing information on stages on the path, we can understand where the system is failing those who do not receive services.

Since the Aama scheme has received most attention from researchers, data on its utilisation effects are most readily available. Between 2005 and 2010 a huge jump in awareness of the cash incentives was recorded, from 14 to 64 percent (Figure 1). Awareness of free delivery care, which was not available in all districts in 2005, was recorded at 27 percent in 2010, following its country wide introduction in 2009.

Despite high levels of awareness of the incentive scheme, those in receipt of cash incentives in 2010 represented only 19 percent of all women who had recently delivered. Although a substantial increase on the 2005 figure of 3 percent, it still falls far short of the numbers who know about the scheme. Uptake of free delivery was similar to those receiving the cash incentive, which was 21 percent. Overall the institutional delivery rate was 29 percent, suggesting that at least 10 percent of women (around a third of facility deliveries) did not receive the free delivery or cash benefit.

Figure 1: Outputs of Aama Programme



Source: Annex A, Table 1

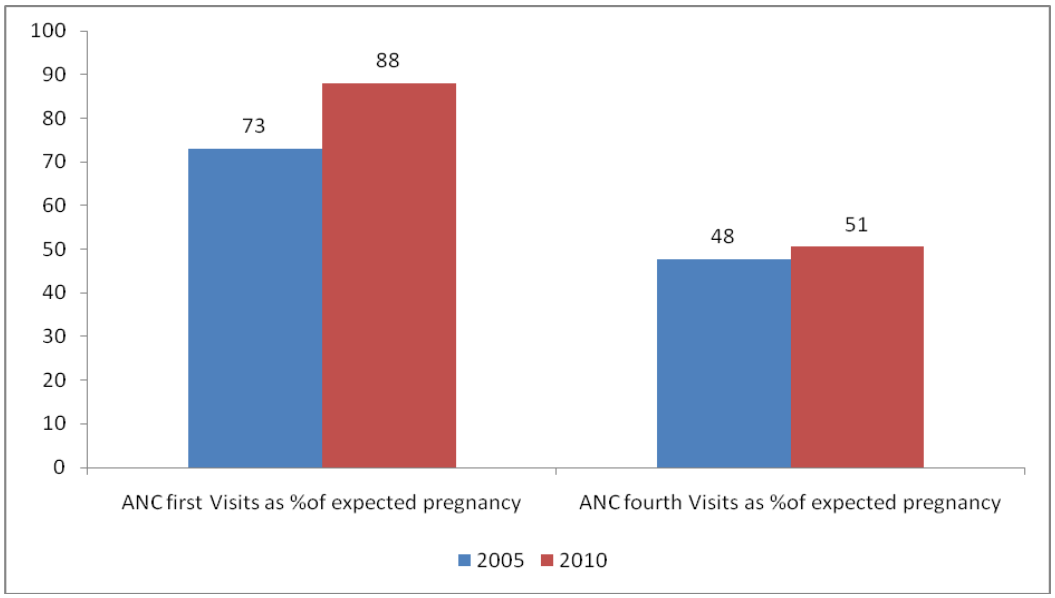
The results suggest low awareness of the free delivery scheme. It is assumed that uptake is similar to that of the cash incentive because women who receive the incentive will also be offered free delivery care, since the facility is implementing the whole scheme.

The disparity between knowledge of the cash incentive and uptake of the benefit is of concern. It is difficult to be entirely sure of the reasons for the difference. One possibility is that although women know about the scheme they do not value the benefit or believe that it will be available at the facility. It is probable that if women know that they will also be guaranteed a free delivery (at the moment only 21 percent are aware of this) then the uptake of both free delivery and incentives would be greater. A second issue is the availability of cash once a woman is at

a facility. Lack of budget for the cash incentive and service bottlenecks in providing free delivery remain important supply impediments to the success of the programme (see Section 6).

The ANC4 scheme arose out of concern that women did not persist with ANC throughout their pregnancy, but it is still in the early stages of implementation. While there was a significant increase in the first ANC visit in 2010 compared to 2005, drop out between the first and fourth visits was high, with more than 40 percent of women who received one ANC contact failing to receive all four (Figure 2). This high attrition level is likely to impact on the health of both the woman and unborn baby during pregnancy and may further reduce the likelihood of a facility based delivery, since there is some evidence that ANC visits closer to delivery are most important in ensuring a facility delivery.

Figure 2: Antenatal care visits

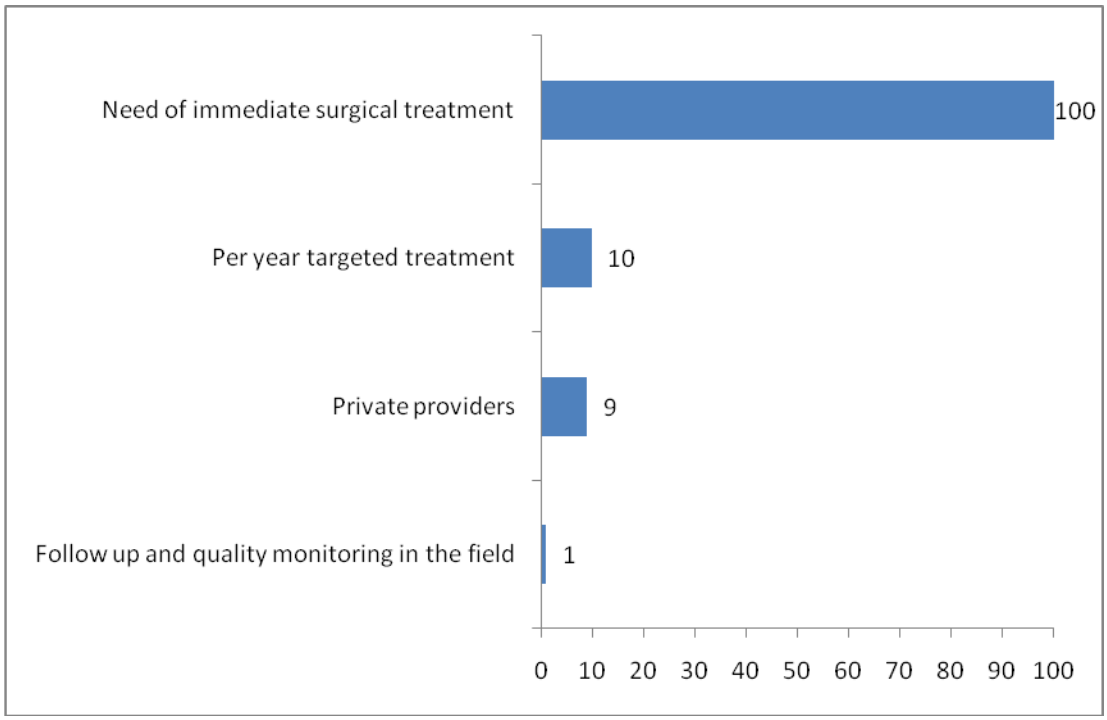


Source: Annex A, Table 1

Recognition of this link prompted GoN to introduce the DSF scheme, although it has yet to be evaluated.

Uterine Prolapse is recognised as a significant public health problem that has not been adequately addressed within the health system. A 2006 population based survey found a high incidence of UP with one in three women (200,000 out of an estimated 600,000) in immediate need of surgery. The government targeted the provision of surgical treatment for 8,000 women in 2009/10 and 13,000 in 2010/11 but this still represents only around 10 percent of the need (Figure 3). Treatment services are provided through mobile camps and hospitals.

Figure 3: Treatment of UP



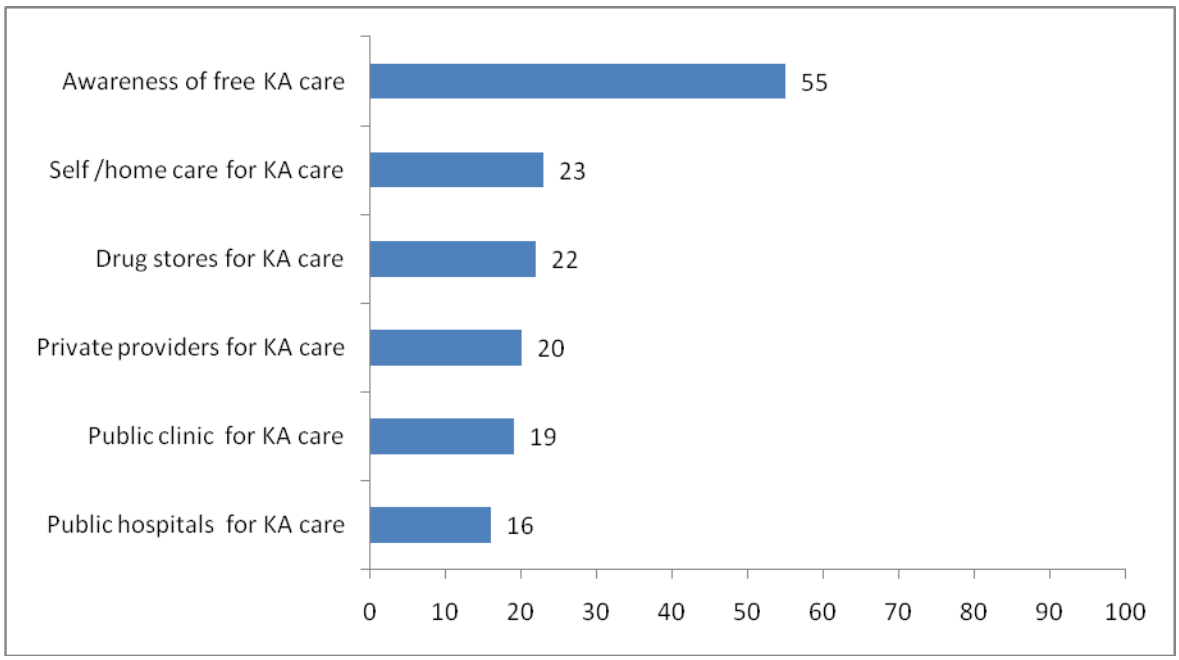
Source: Annex A, table 2

Kala Azar is known as a disease of the poor because the characteristics of rural poverty facilitate its transmission, consequently KA patients are almost always poor. The government provides free KA care at public hospitals (Adhikari et al, 2011) which are the only KA care providers in the sector. The DSF scheme is designed to increase utilisation of care in public hospitals.

Low levels of awareness on the availability of treatment are the main bottlenecks to service uptake (Annex A, Table 3), although there remains a large gap between awareness of the cash incentive scheme and free care programme (around 55 percent) and actual utilisation of care in facilities (Figure 4).

It was thought that another major bottleneck could be transport costs, but as no previous data on the client choice of health providers for KA care are available, it is not yet possible to identify whether the DSF transport scheme is having an effect on utilisation.

Figure 4: Awareness of free care and utilisation of public facilities



Source: Annex A, table 3

The DSF scheme for MDR TB focuses on patients who are already in contact with health facilities, who need long term care and receive government support in the form of cash and commodities. While the scheme is being widely implemented, no formal assessment has been carried out, making it difficult to specify coverage, effects and specific bottlenecks.

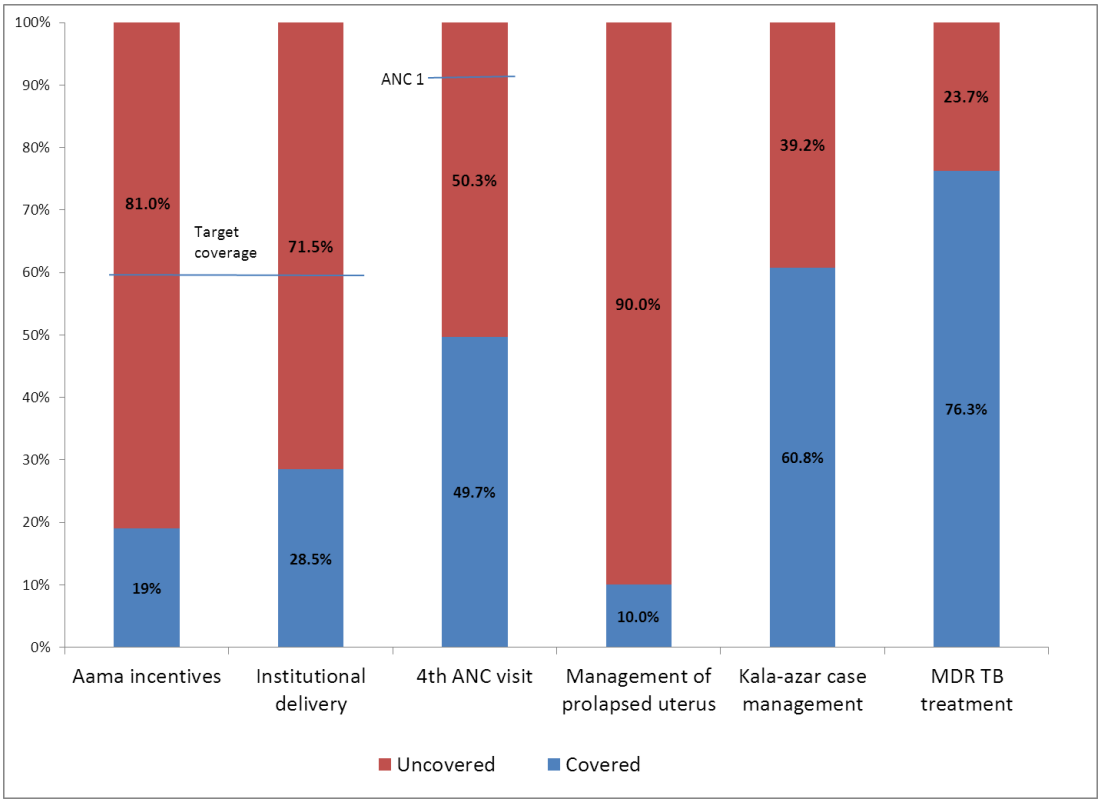
The proportion of MDR TB among new TB cases in Nepal has fluctuated from a little over 1.0 percent to 2.9 percent in the four surveys conducted since 1996, making it difficult to reach conclusions about trends. The latest estimate is 2.9 percent among new cases and 11.7 percent among repeat treatment cases (MoHP, 2011). The low impact of the scheme is a major issue, as it appears to play a supportive role in patient utilisation of services rather than reducing the incidence of the disease. The scheme has been unable to provide services to all MDR TB patients due to the high marginal costs of services.

It is clear that coverage for each DSF scheme varies considerably (Figure 5). The Aama incentive covers around 19 percent of the total number of women delivering, but since the target coverage for institutional delivery is 60 percent, coverage is only around a third of the target. Coverage for ANC4 is higher at around a half of total pregnant women. This comparison reinforces the impression that uptake of benefits under both schemes would benefit from greater harmonisation, with promotional activities for one scheme benefiting the other.

The low coverage of uterine prolapse (10 percent of need) appears to be due to a budget that is sufficient to cover only a small proportion of the need.

The KA and MDR TB schemes both have substantial penetration into relatively small target groups.

Figure 5: Percentage of service coverage and non-coverage of DSF schemes



Based on the available coverage information, it is possible to extrapolate the costs of covering all those in the target groups. Currently it is estimated that, in total, all the DSF schemes cost around NRs.953 million for service provision and NRs.313 million for incentives to patients (Tables 2 and 3). Scaling up these schemes to full coverage (60 percent for institutional delivery) would potentially increase costs to NRs.4.4 billion on service provision and NRs.706 million on incentives. It should be noted, however, that this may be an underestimate, since the marginal costs of reaching individuals who are not covered is invariably higher than the average cost, since more effort is required to find and motivate them to use services.

Table 2: Annual estimated cost for covered and non-covered targeted population (in NRs millions)

Scheme	For covered	For non-covered	Total cost
Aama Programme	658	729	1,387
4th ANC visit	150	92	242

UP	134	2,665	2,800
Kala-azar	2.57	0.51	3.08
MDR TB	8.15	25.28	33.43
Grand total	**953**	**3,513**	**4,465**

Source: DoHS, 2011 and estimated

Table 3: Estimated cost of incentives to services users (in NRs millions)

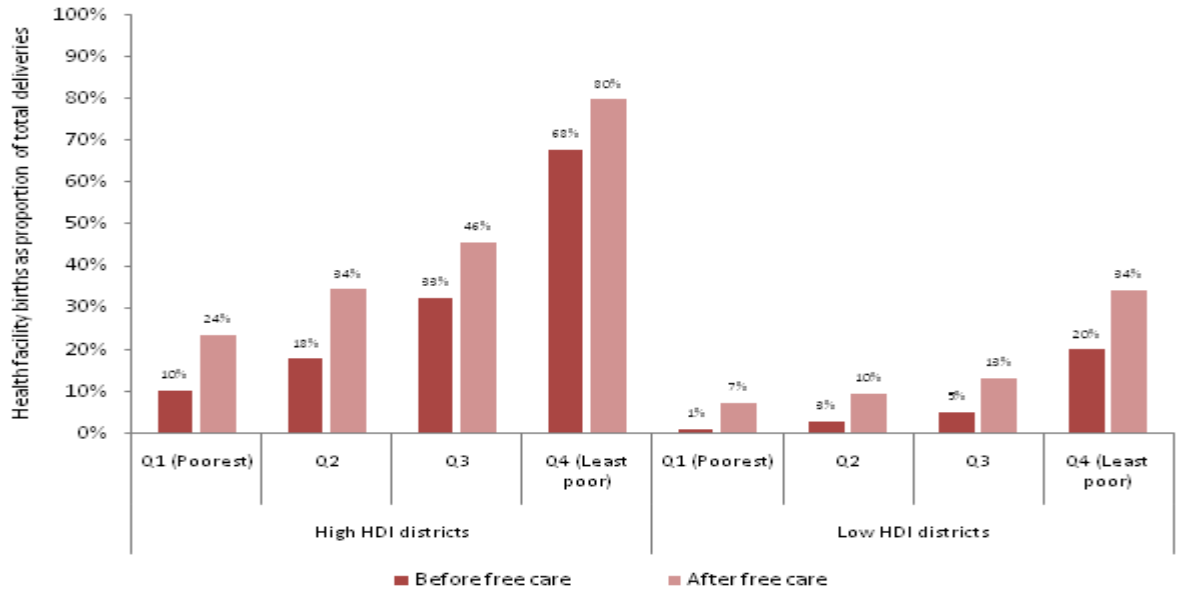
Scheme	For covered	For non-covered	Total cost
Aama Programme	150.92	167.31	318.23
4th ANC visit	150.45	92.01	242.46
UP	6.72	133.28	140.00
Kala Azar	0.79	0.16	0.95
MDR TB	4.58	0.33	4.91
Grand total	**313.46**	**393.09**	**706.55**

Source: DoHS, 2011 and estimated

3.2 Equity in Health Care Delivery

Detailed information on the distribution of benefits is only available for the Aama programme, from a dedicated household survey that collected information on the uptake of benefits in low and high Human Development Index (HDI) districts. This found that 87 percent of facility births were free of charge in low HDI districts while only 58 percent of facility births were free of charge in high HDI districts (Figure 6). Over the past five years there has been a substantial increase in the proportion of women giving birth in health facilities. In the high HDI districts, the rate of institutional delivery care increased 21 percent, from 33 to 54 percent, while in the low HDI districts, the rate increased by 15 percent, from 6 to 21 percent, over the same period. Increases were seen for all wealth quartiles.

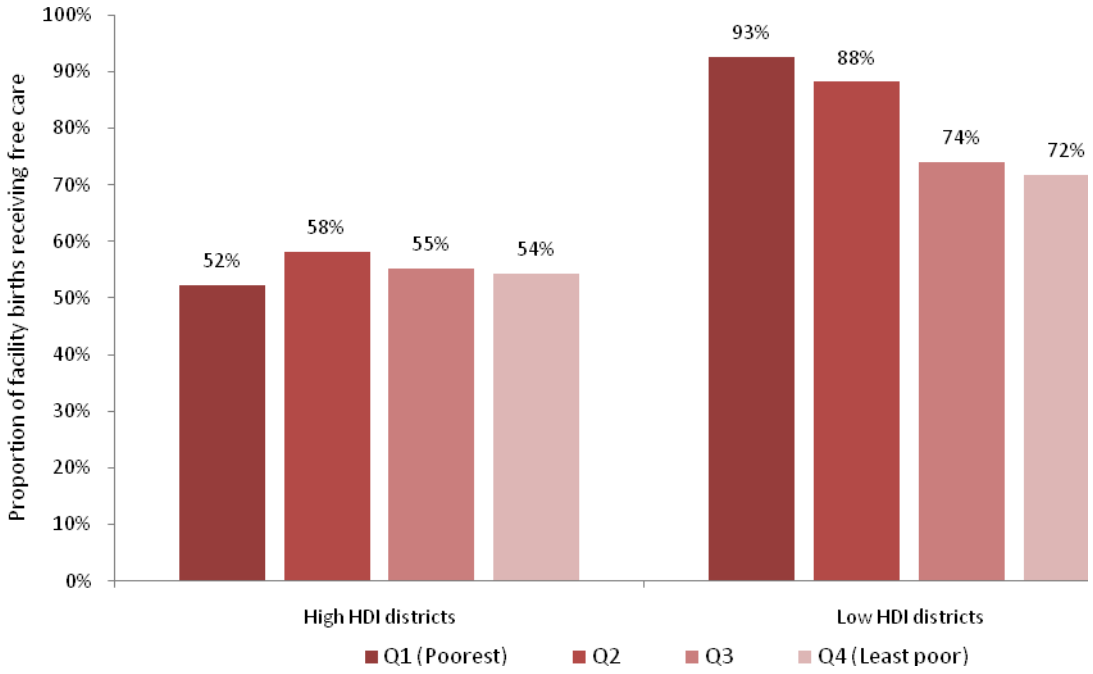
Figure 6: Utilisation of institutional delivery care by wealth group



Source: Powell-Jackson et al, 2010

Within high HDI districts, all wealth groups received the cash incentive almost equally (Figure 7). In the low HDI districts, poorer women were more likely to receive free care when they gave birth. Among the poorest quartile group, 93 percent received the cash incentive, but among better off groups only 72 percent received it. However, even after the introduction of free delivery care women were still paying a significant amount of money as out of pocket payments in order to utilise services, amounting to NRs.2,127 in high HDI districts and NRs.729 in low HDI districts (Powell-Jackson et al, 2010). Some of the equity related issues, such as who pays for delivery care and who benefits from free delivery care, remain unanswered. Thus, while conditional cash transfers have the capacity to reduce poverty, we still do not know the percentage reduction in poverty levels achieved.

Figure 7: Receipt of free delivery care by wealth group



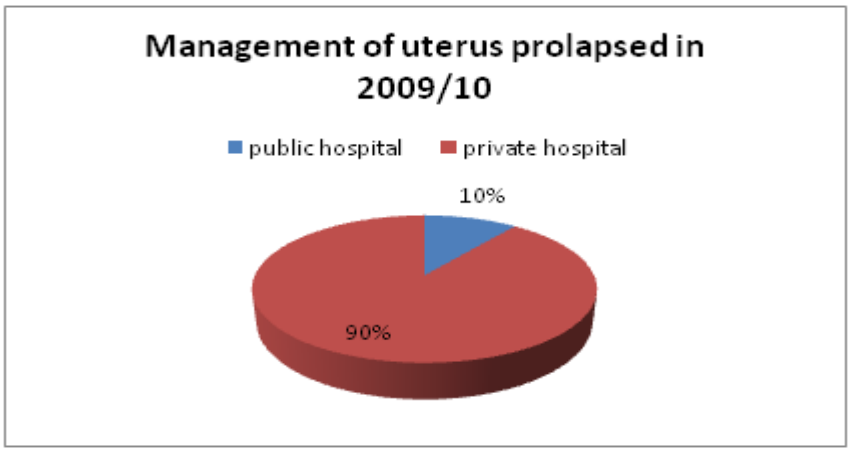
Source: Powell-Jackson et al, 2010

KA, HIV/AIDS and TB are all known as diseases of the poor, which suggests that targeting these diseases also targets the poor. DSF schemes cover the diseases and conditions that have either high spill-over effects in society or higher financial barriers for those seeking care. DSF schemes are intended not only to change the behaviour of consumers and providers, but also to reduce the catastrophic and impoverishing impacts of these diseases. In this regard, Nepal's DSF schemes in health may have improved equity in health care payments and contributed to reducing income inequality in the country.

3.3 Public Private Partnerships

In principle, DSF mechanisms can be used to encourage engagement of the private sector in provision of priority health services. Facilitating a competitive environment between public and private facilities may help to improve service quality and choice, and most DSF schemes aspire to encourage Public Private Partnership (PPP). Under the Aama Programme, for example, a woman can go for delivery to a certified for-profit, not-for-profit or public provider, any of which is able to receive reimbursement of costs through an incentive. The government has also adopted a PPP model for UP treatment, as women who need surgical treatment can choose a public or certified private service provider. Of the 10,645 women who underwent UP surgery in 2009/10, 90 percent went to non-government for-profit or not-for-profit providers (Figure 8). Such a choice is also available for other DSF schemes including HIV/AIDS and MDR TB. However, the choice is limited to public providers only for KA patients.

Figure 8: the contribution of surgical treatment of UP



Source: FHD, 2010

One of the greatest challenges facing government in the development of public private partnerships is regulation of the quality and quantity of services provided. Historically, private sector regulation has been weak and restricted to licensing of facilities - a process that is difficult to oversee and vulnerable to corruption. On the other hand, contracting private sector providers creates an opportunity to influence the private sector more directly, but it also requires the public sector to develop the ability to accredit providers, draft contracts and monitor performance, including ensuring that patients are treated appropriately. An example of this is moderation of the rate of caesarean sections. National data on the total number of deliveries conducted by public and private facilities are not available but Aama Programme data from Mechi zone indicates that the proportion of c-sections in non-state hospitals is substantially higher than in public facilities (Table 4). The cause of this difference is unclear and requires further investigation. It could reflect a genuine difference in case mix (women with complications may be more likely to select private providers) or it could reflect higher levels of unnecessary surgical intervention. Such concerns illustrate the importance of strong regulation and the need for appropriate skill sets in the public sector to undertake this function.

Table 4: Performance of delivery related services by public and private facilities in Mechi Zone

Hospital	Total deliveries	Total C-section	C-sections as % of total

Public: Mechi Zonal Hospital	1393	298	21.39
Private: Amda Hospital	3089	1039	33.64
Om International Mechi Hospital	4728	1461	30.90
Life Line Hospital	1139	468	41.09

Source: Field survey

4. Transaction Costs

In this section we estimate the costs of funding each DSF scheme at provider level, with the aim of understanding the cost burden to indivdual facilities. These costs do not include programme expenditure at the DoHS or MoHP levels.

Each DSF scheme has its own guidelines, which differ substantially in their complexity. The Aama Programme requires completion of at least four forms (Annexes 3, 5, 6 and 10 of the Aama guidelines) before payment of the incentives to consumers and providers. Complicated procedures consume more resources in terms of time and money, and each new scheme adds a further level of complexity to the procedures that providers are required to undertake. Koshi Zonal Hospital, for example, discharges 20 women a day on average, requiring hospital staff to complete at least 80 forms a day. Similar forms must also be completed for the DSF scheme for four ANC visits (ANC cards, claim and receipt forms). Staff nurses at the hospital said "*We don't find any logical reason to fill up two sets of forms for a single woman and two of us have been engaged to fill up the forms (details of clients) and complete reporting and recording work*". Similarly, a staff nurse from Mangalbare Primary Health care Centre (PHCC) asked "*Why do we fill up two set of forms if payment is made to the same woman*?" As there is no provision for a separate person in the health facility to prepare the records related to DSF schemes the staff nurses must do this work, thus limiting their availability for technical duties. Koshi Zonal Hospital handles more than 5,000 delivery cases in six months and an equal number of women receiving four ANC check-ups.

We estimated the transaction costs of reporting and recording for the various schemes by extrapolating 2009 information and assuming a growth in the workload of 25 to 30 percent.

Table 5: Summary of Transaction Costs of DSF Schemes (NRs)

DSF Scheme	Total cost	Transaction costs		Share of transaction costs	
		High growth scenario	Low Growth Scenario	High growth scenario	Low growth scenario
Aama	700,000,000	63,330,024	58,923,436	9.05	8.42

Uterine Prolapse	204,384,000	17,303,018	17,209,209	8.47	8.42
Kala Azar	63,219,000	2,916,385	2,836,121	4.61	4.49
MDR TB	81,520,000	4,386,045	4,299,207	5.38	5.27

The results of the Aama programme suggest that under a high caseload scenario (30% growth) the transaction costs of recording and filling in forms will be NRs.63 million, and for a low case scenario (25% growth) NRs.59 million will be needed (Table 5). This amounts to almost 9 percent of total expenditure on the Aama Programme. Management and administration and other possible hidden costs, such as those of the MoHP and External Development Partners (EDP) are not included in these calculations. Full details are given in Table 5 of Annex A.

The ANC4 scheme is relatively new and has yet to be evaluated. A preliminary estimate of the transaction costs suggests that once fully operational, they will be almost as much, as a proportion of total budget, as those for the Aama Programme.

Transaction costs for UP are also likely to be similar. Documentation required includes client details, transport receipts, copies of citizenship certificates and recommendations from VDCs. These documents are mandatory but as data are not computerised, storage of records will incur additional costs. See Table 6 of Annex A for details.

The KA programme is relatively simple to monitor and large numbers of records and reports for cross verification and monitoring are not required. Transaction costs are estimated at around 4.5 percent of allocated benefits. A single receipt has been prepared for Long Lasting Insecticidal Nets (LLIN) and transport incentives. Recommendations of VDCs or evidence of citizenship are enough to claim the transport incentive and commodity support (LLIN). Because the total number of KA cases is only about 600 to 700 across the whole country, there is limited scope for substantial savings from reducing transaction costs and any misuse of funds. Strong efforts are being made to eliminate KA and it is likely, therefore, that the cost of this programme will shrink over time. See Table 7 of Annex A for details.

MDR Tuberculosis and HIV/AIDS

Transaction costs of the MDR TB scheme are estimated to be around 5.3 percent of total spend. The small scope of the scheme (around 300 cases across the whole country) means that substantial savings from transaction efficiencies are unlikely. It may however be interesting to consider whether schemes aimed at similar high risk groups (HIV patients are particularly vulnerable to TB and other infections) might be combined in the future. See Table 8 in Annex A for details.

This section suggests that the day to day transaction costs of the DSF programmes, excluding overheads required for overall supervision at the national level, account for between 5 and 10 percent of funding.

In principle there may be scope to reduce these costs through appropriate rationalisation and harmonisation. This issue will be taken up in the final section.

5. Operational Issues in the Implementation of DSF Mechanisms

The data presented in Section 3 suggest a substantial gap between knowledge of a scheme and the uptake of benefits, particularly for the Aama programme. In this section we examine a number of problems related to the implementation of schemes that are likely to account for this persistent difference between awareness and utilisation. Our focus is predominantly on the supply side, including the running of facilities and scheme management. It is recognised, however, that existing demand side issues, such as reluctance to use a facility for delivery, will also need to be considered.

5.1 Problems of Acceptability and By-Passing of Lower Level Facilities

Results from various sources suggest an increasing trend of institutional delivery. The facility based data from the Health Management Information System (HMIS), for example, indicate a rise in institutional delivery rate from 14 percent in 2005 to 29 percent in 2010 (Annex A, Table 1). Similarly, household data suggest an increase from 16 percent to 23 percent since the introduction of the Aama Programme. Institutional delivery includes delivery in birthing centres, hospitals and referral hospitals. The government established birthing centres in rural communities to improve access to maternal health services. Being close to people's homes, they are expected to be the first choice of rural people. The results, however, are extremely variable. In the Terai districts, for example, GoN anticipates that around 150 deliveries will be undertaken per year at birthing centres (NHTC, 2007). However, in Morang district, birthing centres conducted only two or three deliveries per month (Table 6), amounting to between 12 and 36 per year.

Table 6: Utilisation of birthing centres

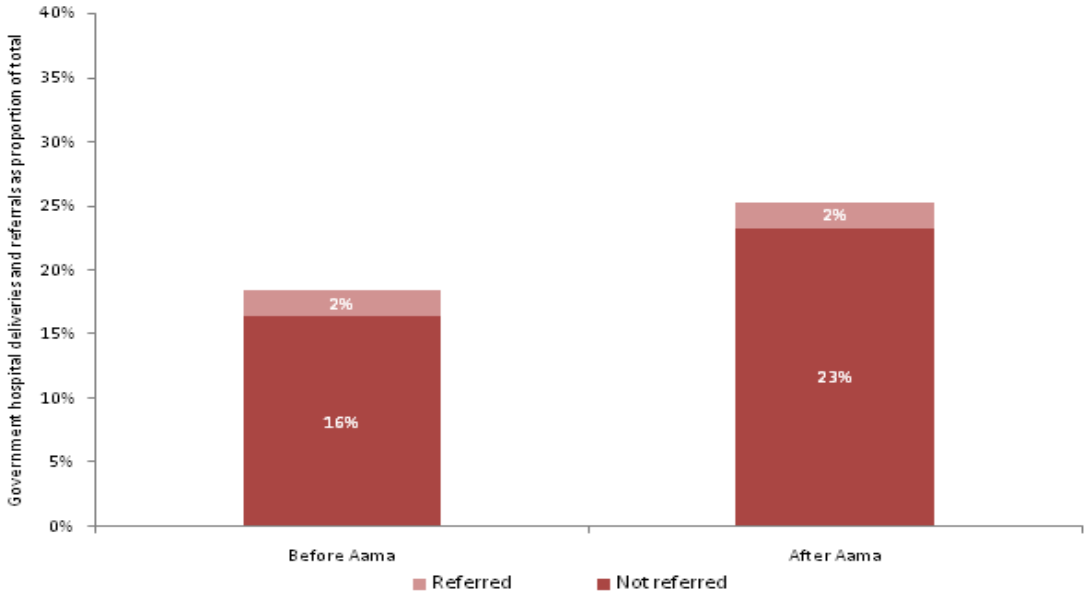
	Aug 2010	Sept 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Total
Madhumalla HP birthing centre Morang District (Normal Delivery)	1	2	0	1	1	1	6
Ranjani HP birthing centre Morang District (Normal Delivery)	2	3	2	3	3	3	16
Dhodhari Bardia Birthing centre Bardiya district (Normal Delivery)	30	13	25	24	25	18	135

Source: Field survey

This is not the case for all districts, as, by contrast in Bardia district (mid-western region), birthing centres are conducting a relatively large number of deliveries - 135 in the last 6 months.

One possible reason for the low use of birthing centres is that the Aama Programme acts to encourage women to directly seek care at higher level facilities, where free delivery also applies and transport incentives are provided. There is little evidence that Aama has increased referrals, as survey data show that referrals as a proportion of deliveries have remained stable since the introduction of Aama, compared with before (Figure 9). This implies that the referral rate (the number of referrals as a proportion of total facility births) has actually declined. It seems likely therefore, that the low utilisation of some birthing centres is likely to be due to by-passing, which is made easier by the cash incentive and the expectation of improved quality of care at higher level facilities.

Figure 9: Utilisation of delivery care in government hospitals and referrals from other health providers



Source: Powell-Jackson et al, 2010

5.2 Non-Availability of Staff

A key problem with lower level facilities is the lack of availability of services, or their unreliability. There are a number of reasons for this, including staff working hours and security concerns (for example when working at night with no electricity). We found from group discussions with staff and local people that services are not available around the clock (24/7) at peripheral facilities although there are provisions for this in the guidelines. Providers are often out of station due to training and leave. As a consequence, women may not be sure of getting services when they reach a birthing centre. In Morang, most of the Auxiliary Nurse Midwives (ANMs) are local and usually work from their homes between 10:00am and 1:30pm, as do other paramedical staff. ANMs in Jhorahat, Kerabari, and Hasandaha Health Posts go to the health facility in the morning and come back home in the afternoon. A few nurses do not like to stay in the staff quarters because of security concerns.

5.3 Lack of Budget to Pay Incentives to Women

Transfer of the government budget from district headquarters to peripheral facilities, such as birthing centres, takes longer than for higher level facilities. Peripheral facilities are also unlikely to have any alternative sources of funding that would allow them some flexibility in cash flow while awaiting the arrival of government money. For this reason, birthing centres may not always have the funds available for providing incentives to women. On the other hand, zonal and district hospitals and a few PHCCs often have additional funds (primarily generated from user fees for other services) enabling them to provide incentives at the time of discharge, even if the cash earmarked for incentives is delayed.

5.4 Risks Associated with Delivery at Peripheral Facilities

Care providers at peripheral levels do not like to take risks because of their limited knowledge, equipment, human resources and other issues. Clients and their relatives want to be sure the delivery service can cater for all problems that might arise, which cannot be guaranteed at birthing centres, where support at the level provided by hospitals is not available. They are also less willing to trust ANMs than doctors and therefore tend to go directly to hospitals.

5.5 Overcrowding

The Aama Programme appears to be associated with a substantial increase in the number of institutional deliveries. As a result, resources such as beds, staff, equipment and space allocated to maternity wards are insufficient to meet the demand for services. In Nepalganj, for example, the shortage of beds for deliveries means women have to sleep on the floor or share a bed (Figure 10).

Figure 10: Resource pressure in the hospital for delivery (Source: Field survey)

Women are kept on floor in the corridor at Bheri Zonal Hospital

During the field visits to Koshi and Seti Zonal Hospitals, data suggested that over one third of hospital beds were occupied by delivery cases, making it difficult to accommodate other clients requiring urgent in-patient services. Maternal care often took up a disproportionate number of hospital beds, pathological services, and operating theatre time. Large numbers of C-section deliveries were reported to limit OT availability for other surgery. The government targets for referral hospitals in management of UP is proving hard to meet due to the limited availability of OT services. This situation calls for joint planning and programming to maximise the appropriate utilisation of hospital capacity.

5.6 Problems with Timely Payment

The reports produced from various rounds of the Aama Programme rapid assessments showed that the proportion of women receiving the incentive immediately after delivery has increased significantly, from 45 percent in Round II to 71 percent in Round IV. However, private hospitals are facing funding constraints for providing incentives to women. A few private hospitals used their own funds and subsequently requested reimbursement, but were not able to get these on time. As a result, some private hospitals, for example Life Line Hospital and Aamda Hospital in Jhapa, have temporarily stopped the free delivery and incentive programmes and begun charging for delivery care. This problem is also evident in the UP programme. Regional Health Directorates only provide reimbursement, and not advances, to hospitals for the management of UP. Hospitals, therefore, must pre-finance services. This has a smaller impact on institutions that are financially strong, such as Binayak Hospital and Birat Nursing Home in Biratnagar, but some of the smaller hospitals have faced problems as a result of the delayed reimbursement of funds for services already provided.

5.7 Allocation of Budget

As noted, many districts have insufficient funds to provide the incentives claimed by women. Current data from thirty districts suggests that, on average, an additional 98 percent (standard deviation 126%) is needed. While

these thirty districts faced acute shortages of funds, a few others such as Kanchanpur, Morang, Bhaktapur and Dang had surplus funds. This suggests that modalities for the allocation of budgets at the centre are not fully demand responsive. A study on demand analysis and forecasting of institutional deliveries is therefore needed.

5.8 Claims for Institutional Deliveries

Various rounds of rapid assessment carried out by the Centre for Research on Environment Health and Population Activities (CREHPA) revealed some false institutional delivery claims by both institutions and individual staff members, based on cross verification of data. False claims have fluctuated over time and it is hard to understand the primary reason or detect a trend in these claims. Recently, an independent study demonstrated that false claims had decreased threefold compared to previous assessments (BC et al, 2010).

6. Discussion: Developing DSF Policy

DSF schemes have been introduced in Nepal as a way of transferring purchasing power to poor and vulnerable groups and providing direct funding to priority services in an output based manner. Initial schemes to support institutional deliveries were followed by schemes to encourage ANC visits, treatment for uterine prolapse and HIV services. This review suggests that while there remains a substantial gap between need for and use of services, where data have been collected, utilisation of targeted services has increased. This evidence is strongest for the Aama programme which is the most established and well funded scheme.

This review underlines the importance of the supply side in ensuring that if clients receive incentives for using services, then these services should be available at local level. A number of problems, as highlighted in section 5, remain at facility level, particularly in birthing centres and other peripheral facilities. The Aama programme suffers particularly in this regard, with staff often unavailable at local facilities, leading to women by-passing them and going directly to higher level facilities or delivering at home. It remains a policy priority to decide how to provide services at this level where 24/7 care plus a rapid referral chain is essential.

A related issue is the need to ensure that adequate resources, including the cash needed to pay incentives, are available at local level. Facilities do not receive an advance budget and thus, although larger facilities can often accommodate cash flow delays, smaller facilities cannot. Indeed, one of the consequences of eliminating user charges in the public health system may be a worsening of cash flow status in facilities, thereby further reducing the ability to mitigate delays in budget transfer. This underlines a wider problem and the importance of improving expenditure allocations and budget reporting in order to improve health system effectiveness.

This review relies primarily on secondary information, augmented by limited interviews with key informants. For many of the DSF schemes, the availability of monitoring and evaluation data is patchy. All schemes have their own implementation and monitoring arrangements, even where services provided are closely linked to those of other schemes. The duplication of effort involved in running parallel schemes suggests substantial scope for improving efficiencies. This includes possibilities for: a) streamlining reporting procedures within schemes; b) harmonising support functions across schemes, and c) integrating similar schemes.

a) Streamlining procedures

All the schemes described have developed their own reporting formats and monitoring systems to verify claims. These procedures are often burdensome and could be streamlined. Each Aama claim, for example, requires the completion of four forms, and a similar number is required for ANC4. The administrative cost is estimated to be between eight and nine percent of spending for both schemes – a figure which can be reduced. A similar proportion is spent on monitoring the uterine prolapse scheme.

b) Harmonising support functions

Since monitoring systems used to track schemes are often similar, there is potential to merge support functions across schemes. This is particularly the case where each programme maintains its own system to record numbers of beneficiaries and financial allocations to providers. Ultimately the merger of these systems within the routine HMIS is desirable. Until then, development of a unified database for collecting information and providing supervision of the sub-programmes could be considered.

Another function that could be merged is budgeting. At the moment prospective budgets are forecast for each district. A central forecasting and budgeting facility that also permits virement between schemes in a district could help to ensure a more flexible and accurate allocation of resources for each

DSF programme. The issue of disproportionate resource use and crowding described in section 5.5, highlights the current lack of planning between programmes. Greater coordination in both the planning of budgets and use of resources will potentially help to alleviate these pressures.

One of the impediments to this merger is that schemes are based in different departments and divisions within DoHS. Concerted action is needed at senior levels to enable mergers.

c) Merger of schemes

The first candidates for merger are the Aama and ANC4 schemes (Table 11) which target the same client group (pregnant women) and share a similar objective of increasing the level of skilled care for mother and baby during pregnancy and delivery. Both are administered by the same health institutions, which are coordinated by FHD. Recording and reporting formats are similar and the same person arranges the payments at facility level. Management of the UP scheme is also similar in many respects to the Aama Programme, but the implementation mechanisms are different. One of the major benefits of the ANC4 incentive is that it can help to direct women to a skilled provider for delivery. In other countries, for example the maternal voucher scheme in Bangladesh, these benefits are combined.

Table 7: Possibilities of merging the schemes

Name of the scheme	Type of Incentive	Nature of Incentive	Beneficiaries	Incentives	Managing Institution	Providers	Payment	Recommendation
Aama Programme	Cash	Conditional cash transfer	Women of child bearing age	NRs.500 – 1500	FHD	Public/ Private	At the time of discharge	Easiest to merge
Four ANC Visits	Cash	Conditional cash transfer	Women of child bearing age	NRs.400	FHD	Public	At the time of discharge	
Uterine Prolapse	Cash	Conditional cash transfer	Women	NRs.500 - 1500	FHD	Mostly private	At the time of discharge	Integrated Planning monitoring and supervision with Aama
FCHVs on CN NCP	Cash	Performance based incentives	FCHVs	Ranges NRs.200 - 400 per newborn	CHD	Public	Trimester	Separate scheme
MDR TB transport and food allowance	Cash	Conditional cash transfer	TB cases	NRs.1,500 per case, per month	NTC	Public/ Private	Monthly	Coordinate with food supplementation to HIV/AIDS
AIDS food allowance	Food package	-	Cases who are PMTCT and ARV	One packet per client per month	NCASC	Public/ Private	Monthly	
Kala Azar transport incentive	Cash	Conditional cash transfer	Kala Azar cases	NRs.1,000 per case	EDCD	Public	At the time of discharge	Separate scheme

Combining other schemes remains problematic since, while the client groups overlap, they are not identical. Many women with uterine prolapse may have given birth in a facility, but others have not. It may however be useful to use the Aama Programme as a way to identify women with potential for uterine prolapse and inform them about the scheme.

Developing a Public Purchaser Function

The public purchasing of health services is a function of government, an insurance agency or a private insurance company that identifies need, develops a package of services to meet the need and contracts suitable service providers. However, this function is not well developed in most public health ministries, which tend to adhere to traditional line item, supply side, budgets. Increasingly, purchasing capability is seen as an important way of improving the effectiveness and responsiveness of health systems. Purchasing can remain a function within a Ministry of Health or can be developed separately within an autonomous purchasing agency. Both models have costs and benefits that are beyond the scope of this review.

The implementation of various DSF schemes has enabled experimentation with some new financing mechanisms requiring news skills in areas such as budget estimation and allocation, the targeting of beneficiaries and payments to providers. In the case of the Aama Programme, it has also involved the development of accreditation capability in order to determine whether non-state suppliers are able to provide effective services.

While this review has demonstrated weaknesses in most areas, it is apparent that experience in running DSF schemes has enhanced government's ability to purchase services. A more radical development of this capability would be to combine the contracting and payment of all schemes within one purchasing department of DoHS. This department would be mandated to purchase the services specified by the programmes from different state and non-state providers. Cross programme functions discussed earlier could be unified and schemes merged where necessary. In the future, experience gained in implementing and monitoring DSF schemes could be used to expand the range of services purchased and types of payment systems utilised.

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Annex A: Data from Different Sources

Table 1: Access, coverage and utilization various services (in percent)

SN	Indicators	Achievements		Sources
		2005	2010	
1	Total % of expected pregnancy	100	100	Assumed
2	Targeted percentage of delivery by SBA (NHSP II) (% of total pregnancy)	60	60	MoHP, 2010 NHSP II (page 105)
3	Awareness of the cash incentive during pregnancy (% of total pregnancy)	14	64	Powell-Jackson et al, 2010 (page 17)
4	Utilisation of delivery care services (% of total pregnancy)	27	47	Powell-Jackson et al, 2010 (page 17)
5	Women received cash incentive (out of health facility delivery)	20	67	Powell-Jackson et al, 2010 (page 20)
6	Receipt of free delivery in Low HDI (out of health facility delivery)	9	87	Powell-Jackson et al, 2010 (page 21)
7	Receipt of free delivery in high HDI (out of health facility delivery)	5	58	Powell-Jackson et al, 2010 (page 21)
8	Utilisation of delivery care services (% of total pregnancy)	27	47	Powell-Jackson et al, 2010 (page 24)
9	Institutional delivery	14	29	HMIS 2006 and 2010
10	Potential service coverage (Delivery conducted by all health workers)	33	42	HMIS 2006 and 2010
11	Women received cash incentive (% of total pregnancy)	3	19	Estimated
12	Received free delivery (average) (% of total health facility delivery)	7	73	Estimated
13	Received free delivery (average) (% of total pregnancy)	1	21	Estimated
14	ANC first Visits as % of expected pregnancy	73	88	DoHS 2006 and 2010 (HMIS)
15	ANC fourth Visits as % of expected pregnancy	48	51	DoHS 2006 and 2010 (HMIS)

Table 2: Information on Uterine Prolapse

SN	Indicator	Number or %	Source
1	Total UP cases	600,000	Shah, 2010
2	Need of immediate surgical treatment	200,000	Shah, 2010
3	Per year plan for surgical treatment	10,000-12,000	Shah, 2010
4	Last year treatment	10,645	DoHS 2010, HMIS
5	UP case	100%	Messerschmidt l 2009
6	Cases referred to surgery	52.8% out of UP case	Messerschmidt l 2009
7	Cases appearing for surgery	58% of referrals	Messerschmidt l 2009
8	Cases dropping out of surgery	42% of referrals	Messerschmidt l 2009

Table 3: Kala-azar (KA) Care

SN	Indicator	Percentage	Source
1	Public hospitals for KA care (first choice)	16	Adhikari et al (2011)
2	Public clinic for KA care (first choice)	19	Adhikari et al (2011)
3	Private providers for KA care (first choice)	20	Adhikari et al (2011)
4	Drug stores for KA care (first choice)	22	Adhikari et al (2011)
5	Self /home care for KA care (first choice)	23	Adhikari et al (2011)
6	Awareness of free KA care (basic information)	55	Adhikari et al (2011)
7	Potential service coverage of information	100	Assumed
8	Utilisation of public hospital by KA patients	100	Assumed

Table 4: Staff posts related to deliveries in PHCCs and HPs, 2007-9

Jogbudha PHC				
Staff	2007	2008	2009	Present
ANMs			3	3
Support staff involved in delivery care			4	3
CMA			4	3
HA			1	
Total			12	9

Kalikakhetu PHC				
Staff	2007	2008	2009	Present
ANMs		1	1	1
Support staff involved in delivery care			1	1
Total	-	1	2	2

Beltar PHC				
Staff	2007	2008	2009	Present
ANMs	2	3	3	1
Staff nurse				
Doctor		1	2	
Support staff involved in delivery care				3
Total	2	4	5	4

Lalibani PHC				
Staff	2007	2008	2009	Present
ANMs	3	3	3	3
Staff nurse	1	1	1	1
Doctor	1	1	1	0
Support staff involved in delivery care	5	5	5	4
Total	10	10	10	8

Depalgau HP				
Staff	2007	2008	2009	Present
ANMs		1	1	1
Support staff involved in delivery care	1	1	1	1
VHW				1
HA	1	1	1	
Total	2	3	3	3

Rampur HP				
Staff	2007	2008	2009	Present
ANMs	1	1	2	1
Support staff involved in delivery care	1	1	1	1
Total	2	2	3	2

Sasapur HP				
Staff	2007	2008	2009	Present
ANMs	1	2	2	1
Support staff involved in delivery care	2	2	3	1
Paramedics	3	3	3	2
Total	6	7	8	4

Navdurga HP				
Staff	2007	2008	2009	Present
ANMs	1	2	2	1
Support staff involved in delivery care		1	1	1
Total	1	3	3	2

Source: Khadka, et al (2010)

Table 5: Estimated transaction costs of the "Aama" Programme (NPR)

Cost components	2009/10	2010/11	
		25% growth	30% growth
Total Institutional deliveries	215,599	269,499	280,279
Facility level costs			
Average time for recording and completing forms (mins)		15	15
Total time for completing forms (hours)		67,375	70,070
Total person days for recording and reporting		8,422	8,759
Per day wage of nurse		1,875	1,875
Subtotal of wage		15,790,942	16,422,580
Cost for photocopying		5	5
Subtotal of photocopying		1,347,494	1,401,394
Monitoring costs			
District level			
PHN @ NRs.15,000*13 months*75 districts		14,625,000	16,087,500
Accountant @ NRs.15,000*.2 *13 months*75 districts		2,925,000	3,217,500
Statistical assistant @ NRs.15,000*.2*13 months*75 districts		2,925,000	3,217,500
Regional level Coordinator @ NRs.45,000*13 months*5		2,925,000	3,217,500
Zonal level			
Account officer @ NRs.15,000*.2*13		468,000	514,800
Medical recorder @ NRs.15,000*.2*14		468,000	514,800
DSA + travel expenses : 4 visits *NRs.12,000*3 persons*75 districts		10,800,000	11,880,000
Central level			
Monitoring officer @NRs.15,000*13 months		195,000	204,750
Accountant officer @ NRs.18,000*.5 *13 months		234,000	245,700
Forms and formats, files @ 100*12 times* 31000		3,720,000	3,906,000
Rapid assessment		2,500,000	2,500,000
Total monitoring		41,785,000	45,506,050
Total transaction cost		58,923,436	63,330,024
Total expenditure of Aama		700,000,000	700,000,000
Transaction cost as a percentage of total expenditure		8.42	9.05

Table 6: Total transaction costs for management of UP

Cost components (NRs)	2010/11	
	20% growth	30% growth
Total cases: 10,645	12,774	13,839
Facility level costs		
Average time for recording and filling in all forms (minutes)	20	20
Total time for filling in forms (hours)	4,258	4,613
Total person days for recording and reporting	532	577
Per day wage of nurse	1,875	1,875
Sub-total of wage	997,969	1,081,133
Cost for photocopying	5	5
Sub-total of photocopying	127,740	138,385
Monitoring costs		
District level		
Coordination meeting at district level 30	90,000	90,000
Nurses @ NRs,15,000* 13 months*75 districts (screening)	2,925,000	2,925,000
Accountant @ NRs.15,000*.25 * 13 months*75 districts	3,656,250	3,656,250
Statistical assistant @NRs.15,000*.2*13 months*75 districts	3,656,250	3,656,250
Regional level Co-ordinator @ NRs.45,000*.2*13 months *5	2,925,000	2,925,000
Zonal level		
Account officer @ NRs.15,000*.2*13	39,000	39,000
Medical recorder @ NRs.15,000*.2*13	39,000	39,000
DSA + Travel expenses 4 visits*NRs.12,000*5 regions	240,000	240,000
Central level		
Coordinator, UP management @ NRs.20,000 x 13	260,000	260,000
Monitoring officer @NRs.15,000*13 months	195,000	195,000
Accountant officer @ NRs.18,000* 13 months	234,000	234,000
Forms and formats, files @100*12 times* 20 providers	24,000	24,000
Computing of data@ NRs.35,000*13	455,000	455,000
Follow for payment (23 parties*5000*3)	345,000	345,000
Rapid assessment	1,000,000	1,000,000
Total monitoring	16,083,500	16,083,500
Total transaction cost	17,209,209	17,303,018
Total expenditure of UP programme	204,384,000	204,384,000
Transaction costs as a percent of total expenditure	8.42	8.47

Source: estimated

Table 7: Total transaction costs for Kala Azar

Cost components	2010/11	
	25% growth	30% growth
Total cases: 900	1,125	1,170
Facility level costs (NRs)		
Average time for recording and filling in all forms (minutes)	5	5
Total time for filling in forms in hours	93.75	97.50
Total person days for recording and reporting at first enrolment	11.7	12.2
Recording and reporting at each contact @5 minutes*900*12 months	67,500	70,200
Total hour for filling in forms and reporting	8,438	8,775
Total person days for recording and reporting	1,055	1,097
Total person days (enrolment + treatment)	1,066	1,109
Per day wage of care provider	1,875	1,875
Sub-total of wage	1,999,477	2,079,516
Cost for photocopying	5	5
Sub-total of photocopying	5,625	5,850
Monitoring costs		
District level		
Accountant officer @ NRs.18,000.00*.2 * 13 months*12	280,800	280,800
Regional @NRs.15,000*.25*13*2	97,500	97,500
Monitoring cost @NRs.8,000* 12 centres*2	192,000	192,000
Central level		
Coordinator, KA management @ NRs.20,000 x 13	260,000	260,000
Forms and formats, files @5*12 times* 12 providers	720	720
Total monitoring	831,020	831,020
Total transaction cost	2,836,122	2,916,386
Total expenditure of KA Intervention	63,219,000	63,219,000
TC as a percent of total expenditure	4.49	4.61

Source: estimated

Table 8: Total transaction cost for MDR TB (NRs)

Cost components	2010/11	
	25% growth	30% growth
Total cases: 229	286	298
Wages (facility level)		
Average time for recording and fill all forms (minutes)	50	50
Total time for filling forms in hours	238	248
Total person days for recording and reporting at first enrolment	29.8	31.0
Recording and reporting at each contact @20 minutes*229*12 months	68,640	71,520
Total hour for filling forms and reporting	8,580	8,940
Total person days for recording and reporting	1,073	1,118
Total person days (enrolment + treatment)	1,102	1,149
Per day wage of care provider	1,875	1,875
Sub- total of wage	2,066,797	2,153,516
Cost for photocopying	5	5
Sub- total of photocopying	2,860	2,980
Monitoring cost		
District level		
Accountant officer @ NRs.18,000*.2 * 13 months*12	280,800	280,800
DTLA @ NRs.15,000*.25* 13 months*75 districts	585,000	585,000
Regional @NRs.15,000*.25*13*5	243,750	243,750
Monitoring cost @NRs.8,000* 12 centres*6	576,000	576,000
Central level		
Coordinator, MDR TB management @ NRs.40,000 x 13	260,000	260,000
Monitoring cost @8000* 12 centres*6	260,000	260,000
Forms and formats, files @100*12 times* 20 providers	24,000	24,000
Total monitoring	2,229,550	2,229,550
Total transaction cost	4,299,207	4,386,046
Total expenditure of MDR programme	81,520,000	81,520,000
TC as a percent of total expenditure	5.27	5.37

Source: estimated

Annex B: Discussion with Officials

1. Dr BK Suvedi, Deputy Director General, Department of Health Services (DoHS), Teku
2. Dr Naresh Pratap KC, Director, Family Health Division, DoHS, Teku
3. Dr Syam Raj Upreti, Director, Child Health Division, DoHS, Teku
4. Dr Silu Aryal, Coordinator, Safe Motherhood, Family Health Division, DoHS, Teku
5. Dr Ramesh Kharel, Acting Director, National Centre for AIDs and HIV/AIDs Control, Teku
6. Mr. Parasuram Shrestha, Senior Public Health Administrator, Child Health Division, DoHS, Teku
7. Mr. Rakesh Thakur, Senior Public Health Administrator, Epidemiology and Diseases Control Division, DoHS, Teku
8. Mr. Badri Khadaka, Senior Health Education Administrator, National Health Information Education Communication Centre
9. Mr. Krishna Prasad Paudel, Chief, Finance Section, DoHS, Teku

Annex C: Terms of Reference

Technical Assistance to Nepal National Health Sector Programme Phase 2

(NHSP-2)

Terms of Reference for review of Demand Side Financing Mechanisms

Background

In July 2010, a consortia, led by Options, was awarded a contract to manage Technical Assistance (TA) to support the Ministry of Health and Population (MOHP) in achieving the National Health Sector Programme 2 (NHSP2) Results Framework (RF) in Nepal. This is a 3-year contract with a possibility of a further 2-year extension. The contract was signed in August 2010 and there will be an inception period of 4 months ending 31st December, 2010.

The first National Health Sector Programme (NHSP1) was the first health SWAP in Nepal and ran from July 2004 to June 2010. DFID and the World Bank provided sector budget support (SBS) from the outset of NHSP1, and the Australian Agency for International Development (AusAID) joined in 2009. Technical support was provided to NSHP1 through two DFID funded TA programmes: The Health Sector Reform Support Programme (HSRP) delivered by Research Triangle International (RTI) and Support to Safe Motherhood Programme (SSMP) delivered by Options.

NHSP2 started in July 2010 and will run for 5 years. Currently, the same development partners (DPs) are participating in its funding. Although DPs have all signed the Paris Declaration, vertical funding streams and separate management structures exist. Therefore, as a step towards more harmonization, it was agreed that DFID would provide TA on behalf of the pooled donors. Under NHSP2, just one TA programme, supporting the breadth of its implementation will be undertaken.

Objective of technical assistance

A number of Demand Side Financing (DSF) schemes are now operating in Nepal. These include Aama (former SDIP), Free-care, 4ANC, Vasectomy, MDR TB, and Uterine Prolapse. These schemes provide patients/households varying incentives to obtain services and sometimes also include a supply side element. Each of these schemes are organized and operated separately. There is a need for a review that:

1. Describes each scheme in detail;
2. References (but not assessing in detail) research undertaken on the impact of each scheme;
3. Examines potential problems resulting such as incentives to bypass lower level services and impact on over-crowding of facilities and their ability to provide other services;

4. Assesses the fund management; and
5. Explores the possibilities of remerging or scope of integration of the schemes.

Specific activities

1. Document collection and review on existing schemes.
2. Interviews with managers and implementers of each scheme – these are expected to be largely 'head office' interviews. Field visits to schemes are not anticipated.
3. Document analysis.
4. Report writing