

Report

Identification of scaling up strategies for free health services leading to universal health care” Kathmandu, 2009

Case studies of Selected District Hospitals on Service Availability, Affordability and Analysis on Use of Free Medicine

Strategies for Scaling up Free Health Services at District Hospitals

Situation Analysis of Free Health Care Policy at Public Referral Hospitals and Cooperative Hospitals

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Study Team

Acronyms

BPKIHS	BP Koirala Institute Of Health Science
CS	Caesarian Section
DAG	Disadvantaged group
DoHS	Department of Health Service
ECG	Electrocardiogram
ENT,	Ear, Nose and Throat
ESR	Erythrocyte sedimentation rate
FCHV	Female Community Health Volunteer
GoN	Government of Nepal
Hb	Hemoglobin
HMIS	Health Management Information System
HP	Health Post
ID	Incision and Drainage
IP	In Patient
JAR	Joint Annual Review
LZH	Lumbini Zonal Hospital
MDGP	MD General Practice
MoHP	Ministry of Health and Population
MS	Medical Superintendents
N	Number
NA	Not available
NAMS	National Academy if Medical Sciences
NHEA	Nepal Health Economics Association
OOPE	Out of Pocket expenditure
OPD,	Out Patient Department
OP	Out Patient
PAC	Post abortion care
PH	Public Health
PHCC	Primary Health Care Centre.
RE/ME	Routine Examination/ Microscopic examination
RTI	Research Triangle Institute
SAS	Safe Abortion care
SBA	Skill Birth Attendant
SHP	Sub Health Post
USG	Ultra-sonography
VDC/NP	Village Development Committee/ Nagar Palika

Executive Summary

1. Introduction

Health policy of social inclusion: The Nepal Health Sector Programme (2004-2010)- is basically aimed at providing priority access to poor and vulnerable groups on a continued and sustainable fashion. The three year interim plan specifies the strategies for social inclusion. It also stresses the need for developing necessary policies and status to operationalize the concept of providing free basic health services so as to ensure the health rights of people as necessary steps towards extending universal access of basic health services to all people. The , 40- item medicines for PHCC and DH and the 32-item ones for HP/SHP are the chief initiatives taken toward that end as these medications are distributed free of cost upon presentation of prescription by patients. Similarly, the Aama program and the support to the uterine prolapsed patients are basically to reinforce the policy of ensuring the reproductive health right of women. Available health services at district hospitals for target groups (Poor, ultra poor, destitute, elderly, disabled, FCHV), include provisions for safety nets for referral and poor patients, in catastrophic illnesses- Cash Support (Rs.50000), and treatment support under social security program at referral hospitals. Additionally, some package policy exists for remote and isolated zones, districts, and for the terai regions.

Rationale: Access to easy health services at district level hospitals for all citizens and secondary and tertiary levels of treatment is still related to the paying capacity of the service users. As the health service costs in these hospitals are still considerably higher than primary health care, service users are therefore forced to make a larger out of pocket payments(OOPE).. Because of this higher level of OOPE, the poor and vulnerable people are not able to access the health services at this level. Thus, capacity to pay has remained a major barrier to those seeking to utilise the existing health care facilities at an affordable cost. At the district hospitals, only some targeted groups can access the free health care services. In the light of these prevailing scenario, it is now absolutely necessary to scale up the current free health care services so as to ensure and expand the accessibility and affordability of these services for the poor and the vulnerable groups . This study is, therefore, aimed at identifying the strategies and on the basis of which to make suitable recommendations with the hope that these would help the planners at the central level to scale up the free health care services at district level hospitals and also at the same time help them undertake the time-suited situation analysis of the possible referral hospitals. *Objectives:* The overall objective of the proposed activity is to develop options and strategies for effective scaling up of the FHC program at various levels of health service institutions.

Specific Objectives: 1) To identify the scaling up strategies for free health services in District Hospitals., 2) To explore the key issues for the management process of free health care service facilities in three selected referral hospitals (central and zonal hospital) and 3) to conduct situation analysis on the cooperative- based health facilities/hospitals and policy and mechanisms for free health service delivery.

Methodology: The study was conducted in three designs 1) Study and cost analysis of district-level hospitals 2) study of referral hospitals on free health care and 3) Study of cooperative- based hospitals on health finance policy and its actual implementation. The study period is between July to October 2009.

The study was conducted in the following District Hospitals:

Rupandehi, Gorkha, Nuwakot, Bardiya, Sunsari, Baitadi, Referral hospitals: Central Hospital: NAMS Bir Hospital, Lumbini and Koshi Zonal Hospital. Cooperative Hospitals which were under study included:

Manamohan Memorial Community Hospital and STUPA Community Hospital in Katmandu.

The findings of the study are limited to exploring the current situation of the service provisions at district level hospitals, (primary data) with the cost analysis based on secondary data. Similarly, information collected and presented here on the referral and cooperative hospitals are limited to providing brief description of the existing provisions for health financing and for free health care.

2. In-depth study of Selected District Hospitals: Availability, Affordability of services and

Analysis on Use of Free Medicine

The objectives of the study at the district level hospitals are;

1) To assess the availability and affordability of health services at District hospitals of different ecological regions 2) to find out the availability and usefulness of 40- item free medicine policy in study districts. 3) To find out the medicine purchasing practices and medicine cost shared out of pockets by the patients 4) to identify the scaling up strategies 5) To estimate the cost of major scaling up alternatives 6) To provide estimation of revenue loss from users fee under the partial free care strategies.

The Plans for Cost analysis are, 1) Costing of universal free care at the services being provided at the DHs under study 2) Costing of free care provided to the children up to 5 years age at the DHs and 3) Costing of free care services by ecological regions, with special focus on mountain regions

Data collection: The key techniques applied for data collection. Method included, among others, review of available literatures, discussion with experts, health policy makers and managers working at MoHP, DoHS and those at district levels. Also, on the spot observation of facilities and services, interviews with key informants, hospital managers and service providers, exit interviews with users and review of available hospital records were the other methods applied for data collection.

Findings of District Hospital study

2.1. Service facilities: Out of the six district hospitals under study, three hospitals including, Runadehi, Sunsari and Bardiya were found to have new buildings with more rooms, with some rooms not being used, currently. The rooms and spaces for OPD, Emergency and Indoor at the Nuwakot (Trisuli), Gorkha and Baitadi hospitals are not

found to be adequate. Except for the Baitadi hospital, which has only 15 beds, all the other five hospitals, have 25-beds, Medical officers and the SBA are key human resources to provide services there. In all the five district hospitals under study at least 3 doctors were found to be working, whereas in Baitadi there was only one medical doctor working at the time of our study.

2. 2. Availability of services: *A. In outpatient departments, medical facilities available include medical and minor surgical procedures, emergency care and referral in emergency department and medical and inpatient services. SAS/PAC, minor surgical care, maternal health services (Delivery Care except Caesarian section service. b. Laboratory services: Routine Blood, Stool and Urine test are available in all the study hospitals, including Routine Radiology services, USG and ECG service except in hospitals at Baitadi and Bardiya .*

2. 3. Affordability of services in six study hospitals: *a. User fees for services: The user fees for safe abortion service are Rs. 1000, as decided by MoHP. This is not matching with reproductive right of women. Hospital in Gorkha is found a little more expensive due to the user fees policy that it has put in practice to cater to emergency cases, however the utilization of such services, even though expensive, is increasing because of the quality of services. It was learnt that the Gorkha District hospital was trying to improve further the quality of service but the government budget was not sufficient, so the hospital management decided to charge a modicum of user fees to meet the cost of additional services. In Baitadi and Bardiya, fewer services are available in comparison to other hospitals. b. User fees of diagnostic services: Charges for diagnostic services, including lab test, X-ray, and USG are varying in six study hospitals. The rates for routine lab test are more or less equal in study districts. There is a user fee policy for HIV test in Rupandehi (Rs 305) and Sunsari (Rs 250), however in the rest of the study districts such services are provided free of cost.*

c. Transport service cost for referral cases: The referral cases are mostly transported using the available ambulance and the public transport service. The poor patients are receiving transportation cost from hospitals, as per the safety net policy (Terai- Rs.1000, Hill- 1500 and Mountain- 2000).

2. 4. Usefulness of 40- item free medicine (Senior Medical Doctors perspectives)

The medical doctors identified the 15 medicines as the most frequently prescribed ones in the OPDs, Emergency and IP wards and the 16 other medicines as less frequently prescribed ones. The injectable medicines used in emergency and inpatient and Inj. Lignocain and Povidine Iodine are being used for dressing in OPDs/IPs and in emergency cases. Rests of the medicines are not prescribed directly to patients because these are used for dressing and inpatients /emergency services. Most of the medical doctors requested to add *new drugs in drug free list such as Amclox (Ampilicillin+ cloxacillin), some third generation antibiotics (Agithromycin) and Anti-hypertensive and anti-diabetic drugs (Rupandehi).*

2. 5. Medicine purchasing practices of service users (patient) as per prescription

During the course of our interactions and interviews it was found the out of the 56 total responses, 28.56 % (N-16) received free medicines, and 66. % (N-37) received partially free and 10.7 % (N-2) did not purchase medicine in hospital pharmacy. The partially free medicine, the percentage of which is found to be the highest indicates that free medicine list is not adequate in meeting the need of the patients as per the prescription. That is why there is dissatisfaction among patients with the free medicine supply; they are buying medicine outside the hospital pharmacy.

OOPE for medicine: Average cost for Outpatient Services (Median) Rs 93 with quartile values at Rs 50 and 200 and emergency average cost (median) at Rs. 183 with quartile values at Rs. 55 and 342. Similarly, inpatient service average cost (median) stood at Rs. 501 with quartile values at Rs. 215 and 1350.

2. 6. Service utilization in study DH

The service utilization in 2008/9 in six study hospital shows that most frequently used hospitals are Sunsari, Bardiya, Gorkha, and Nuwakot, respectively. Rupandehi hospital could provide only 7 months' report so it could not be possible for the team to make a practical comparison with other district hospitals. The flow of patients in remote and hill districts is less in comparison to terai districts.

2. 7. Budget allocation for free health care in six study districts.¹

The budgets for free health care are allocated in all district hospitals for OPD, Indoor, and Emergency and for medicine. The budgets allocated are Rs. 1920000 for Baitadi, Rs. 2354000 for Nuwakot, Rs. 2245000 for Gorkha, Rs. 4740000 for Rupandhi, Rs. 4132000 for Sunsari and Rs. 3160000 for Bardiya . The details are given in table I1.

According to account officers of study district hospitals, most of the budget received for free health care in OPD and IP services are used to purchase medicine for target groups which are not included in free medicine list. In some hospitals the fund were being used to buy reagents for Lab test and chemicals for X- ray services.

3. Cost analysis and estimation for scaling up free health care at district hospitals

- Three scaling up options at district hospitals level, namely, the universal free care, age group targeted free care to children below five years and geographical targeting of all patients in mountain ecological belts have been analyzed to examine the total cost and incremental cost of program to provide scaling up choices to the government.
- The three scaling up options with three demand scenario provide alternatives for scaling up of primary health care at district levels. The demand estimates were developed on the basis of actual data of utilization of health services at district hospitals after implementation of targeted free care in 2008 that covered around 40 percent of the population thus extrapolated to cover cent percent population in case of universal coverage. The medium demand scenario is expected to be a more realistic projection of the demand under all three scaling up strategy.

¹ Operational Guideline for District level program 2065 Management Division/DoHS.

- Demand projections indicate 22 to 37 percent increase in in-patient, 22 to 32 percent increase in OPD service and 47 to 78 percent increase in patient number if universal free care at district hospitals is implemented. These figures are further disaggregated for ecological belts. High increase in OPD visits are attributed to limited (around 3) OPD hours in district hospitals.
- The universal free care at DHs is a relatively resource demanding strategy requiring around Rs.14 million per DHs and a total program cost of Rs. 824 million. For this purpose an additional Rs. 189 million at 2010/11 price above without program scenario will be required under medium demand projection if this scaling up strategy is implemented.
- The other alternative is the free care to children below five years and requires an additional budget of Rs.0.5 million per DH and an additional program cost of Rs. 29 million under medium demand scenario. This cost is 6.5 times lower than the universal free care strategy.
- The third scaling up strategy of providing free care at DHs in the mountain districts requires an additional Rs. 3.4 million per DH and an additional program cost of Rs. 55 million for implementation under medium demand scenario. This cost is less than 2.3 times the cost of the universal free care strategy.
- The government can start up with the lowest cost yet highly beneficial health care strategy of free care to children below five years to start with. This will automatically address the scaling up strategy for all the regions including the mountain region, though partially.

4. Study of Free Health Care Policy in Referral Hospital

Central (NAMS Bir Hospital) and Zonal (Koshi and Lumbini)

Background: The MoHP has allocated additional budget to implement the free health care services as per its operational guideline, 2064 for poor, destitute and other target groups in Central, Regional, Sub- Regional and Zonal Hospitals ".

The main objectives: Situation analysis to explore the management process of free health care service in secondary and tertiary referral hospitals constituted the central objectives of the study.

Methodology: Review of hospital records and annual reports, review of operational guideline of free health care management in referral hospitals (Central, regional, sub-regional and zonal), study on mechanism of safety net to ensure the accessibility of FHS for target groups were the methodology applied.

Findings of study in referral hospitals

4.1. The special policy under safety net scheme in Bir Hospital for Catastrophic Illnesses provides cash assistance up to Rs 50,000.00 for cases of chronic renal failure, cancer, chronic heart problem, Alzheimer's disease & Parkinson's disease and paraplegia

due to spinal injury. The total budget available for this policy scheme is RS 4700000. This was functioning as per the operational guideline, 2064.

4.2. Process of implementation of free health policy in study referral hospitals

The operational Guideline of free health care for referral hospitals clearly mentioned the target groups, process of assessment of economic condition and policy of referral cases for the target groups. In practice, there is still no social service unit established to be able to implement these objectives in an effective way. Therefore, the decision regarding fee for health care is finally approved by MS on the basis of, and as per the assessment and recommendation of, the duty staff (nurse/doctor/paramedical). There is no special provision in practice for referred cases as mentioned in the guideline. The staffs are also not much aware about the operational guidelines.

4.3. Management of free health care policy in referral hospital

The operational Guideline of free health care for referral hospitals

The guideline has clearly outlined the format to be used by users and management in annexes sections, but in practice the proper and systematic recording of the free health care is not maintained as per the guideline in both service users and financial records. It was so difficult to access the exact record of free care users as per the policy. The monitoring/evaluation of the program are not done on a regular basis either.

3.4. Issues and Challenges to implement the policy guideline (manager's perspectives)

The medical superintendents of Zonal Hospitals, the administrative officers (medical record, finance section) are not completely aware of and sensitive about the operational guideline.. The medical superintendents however are found to be concerned about the promotion of free health care policy and of the additional requirement of budget in order to increase further the institutional capacity, such as additional human resource, rooms and beds as per the patient load.

5. Study of User Fee Policy of Cooperative Hospitals in Kathmandu

Stupa Community Hospital (55 bed) and Manamohan Memorial Community Hospital (100 bed) are providing ranges of services including Medical, Surgery, ENT, Eye, Gynae, Maternity, Pediatric and Dermatology, neurology, gynecology Orthopedic, urology ,cancer treatment and Dental OPD departments. The public health services such as DOTS, immunization, health check packages and family planning services are also available in those hospitals. Both the hospitals are conducting bachelor academic programs in allied sciences and technical programs on (CTEVT). Both hospitals are raising funds from shareholders, user fees and also from students. The user fees charged are more expensive than in the public hospitals and the shareholders have ranges of policies for free and subsidies rates to avail of services. Manamohan Memorial Community Hospital also conducted out-reaches services in some districts of Nepal. It has also been running a Manmohan Memorial Saving and Credit Cooperative.

6. Conclusion and Recommendations:

6.1. Ensure infrastructure in District and Referral Hospitals

The scaling up of the free health care services at district hospitals will surely increase the chance for utilization of services and at the same time demand for quality services by people will also increase in the future.. The scaling up of free health care at district hospitals is necessary as a first step toward providing universal access to health care but it should be preceded by sound planning to develop institutional capacity and infrastructures. The timely disbursement of budget and instruction to provide free health service as per the operational guideline do not necessarily ensure the availability of quality health care services. Because the demand of the additional infrastructure, human resource and medicine must be fulfilled concurrently so as to meet the need of the increasing number of service users. The Hospital managers are frustrated due to lack of beds, doctors and nurses, especially in zonal and regional hospitals due to the ever increasing number of service users for free maternity care.

6. 2. Ensure Human Resource at District Hospital

Any free health care policy must be informed of the fact that it does not satisfy the need of the users in the absence of adequate number of skilled and well qualified service providers. Therefore, the government must ensure the availability of permanent medical officers who are well qualified, experienced and skilled professionals. It is realized that at least, one MDGP, one Pediatrician, one gynecologist/ obstetrician and one anesthetist assistant with adequate number of SBA are basic human resources that are required if these hospitals are to cope with the demand of patient for quality services and medical care.

The human resource should be allocated as per sanctioned posts. The human resource should be added as per the demand of the service load. The regularity of service should be ensured with appropriate policy of retention of critical human resources.

6. 3. Availability and Affordability of services at District Hospital relevant to free policy

Medical services such as OPD/Emergency/ Inpatient services, SAS/PAC, minor surgical care, normal and assisted delivery care, CS, blood transfusion, diagnostic services, routine laboratory services, routine radiology services, USG and ECG services could perhaps be, among others, the basic health services required in all the district hospitals. But, as there is no standard definition in Nepal about basic health services, this question of what actually constitutes the basic health services specifically tailored to the needs and requirements for district hospitals, therefore, seriously calls for further discussion.

6.4. Usefulness and share of the out of pocket expenditure by the patient

Out of the 40 free ED medicines, only the 31 were directly prescribed to patients, and among them only the 15 items are most useful. Some medicines are not used at all by some district hospitals. The injectable and antiseptic medicines are only useful for inpatient and emergency wards and for dressing of the wound. In this context, the prescribers do not perceive that list because the patients demand all the medicines for free, as per prescription.

During the course of our study it came to be known that only about 29% of patients received free medication, and out of the 40- item free medicines only the 31 were directly prescribed to patients and among them only the 15 items are most useful. Some medicines are not used at all by some district hospitals.

The **OOPE** for medicine: Average cost for OPD (Median) was at Rs 93 with quartile values being Rs 50 and 200 and emergency average cost (median) Rs. 183 with quartile

values at Rs. 55 and 342. Similarly, inpatient service average cost (median) was at Rs. 501 with quartile values being at Rs. 215 and 1350.

Thus, it is recommended that the existing list of free medicine must be reviewed and updated from time to time to reduce the cost of OOPE.

6. 5. Service utilization in study DHs and management of free health budget

The flow of patients in remote and hill districts is less in comparison to terai districts. The variation of patient flow and service utilization also differ from the location of hospitals, and so do the initiatives taken to develop awareness programs to increase access to health care services. Each hospital is receiving additional budget for reimbursement of free care services, as per the increased size of the service users.

6.6. Strategies for scaling up of free health services at District Hospitals

This study provides various scaling up options to the government at the district level. It is suggested that free care to children up to 5 years age group and also to patients in mountain district hospitals need to be provided immediately as an affordable scaling up options, because these options do not impose excess burden on the existing human resources and physical infrastructures. The universal free care at the district hospitals as well need to be reconsidered in view of the available physical infrastructure and human resources as these requirements cannot be increased in a short period of time.

6.7. Establishment of Social Security Unit to ensure accountability for free health service deliveries as per “Free Health Care Operational Guideline” in district and referral hospitals.

Orientation program should be conducted to key managers of the referral hospitals about the proper and effective use of the operational guideline. Specific policy and mechanisms should be formulated and implemented to establish social security programs in each referral and district hospitals to facilitate the access in a transparent manner.

6. 8. Cooperative Hospital

The cooperative hospitals are providing general and special health services, emergency and diagnostic services through OPDs and the IPs,. The share holders seem to be benefiting more from the free and subsidized policy than the poor patients, although the policy for poor patients seems to be available but it is not quite effective . The user fees charged are more expensive than in the public sector hospitals. So, people are using services in these hospitals at private hospitals rates.

6. 9. Strengthen the Management of National Free Health Program

At present, the national free health care program is being managed by free health section of Management Division of the Department of Health Service. Only three staff are responsible for monitoring and coordinating the programs in all the districts. The free health section is facing many challenges regarding medicine supply, human resource crunch and service availability etc. At the same time, the regular monitoring of free care policy and program over- burdens the free health section due to the insufficient staff. In this context, Nepal government has already made a policy decision to establish a new Division under the MoHP to institutionalize the Social Security Program, free health care and urban and environment health programs in a focused manner.. But this Division has not been established as yet. If the government really wants to implement and scale up free health care effectively, then the new Division and section of free

health care under social security program must be established and operationize without further delay.

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Chapter 1

Introduction

Background

The Interim Constitution of Nepal, 2063 (2007) has declared that every citizen shall have the right to get basic health service free of cost from the State as provided for in the law" (Basic health right of all citizens), that. women, laborers, the aged, disabled as well as incapacitated and helpless citizens shall have the right to social security as provided for in the law (Right regarding Social Security), and that every woman shall have the right to reproductive health and other reproductive matters and every child shall have the right to get nurtured, basic health and social security (Right to health of Woman and child). Thus, the Constitution envisions of an inclusive society, where people of all race and ethnic group, gender, caste, religion, political belief, social and economic status live in peace and harmony, and enjoy equal rights without discrimination.

Regarding the policy context, the interim constitution clearly requires to make special provision for the promotion of womens' education, health, employment, social security for the protection and welfare of single women, orphans, children, helpless, the aged, disabled, incapacitated persons and the disguising tribes. It also requires that appropriate policies be pursued which will help to promote the interest of the marginalized communities and the peasants and laborers living below poverty line, including economically and socially backward indigenous tribes, Madhesis, Dalits, by making reservation for a certain period of time with regard to education, health, housing, food sovereignty and employment.

Nepal Health Sector Programme (2004-2010) – This program gave priority access to the r poor and vulnerable groups. The key actions outlined are criteria to identify the poor , expansion of EHCS in underserved areas, distribution of subsidized drugs and services and safety nets: For this purpose, appropriate mechanisms will be developed and tested for public sector financing for a safety net for the poor accessing these services and for catastrophic illnesses.

To meet the first objective of Three -year Interim Plan on -social inclusion, necessary strategies, policies and statutes have been already developed to operationalize the concept of providing free Basic Health Service to all as per the provision in the Interim Constitution 2063. Further expansion continues of the ongoing free health care services targeted to poor, socially disadvantaged women and indigenous people by making provision of the matching funds for improvement in services and physical conditions of the community hospitals and co-operative hospitals run on the not for profit basis. In the current context, GoN policy actions focus on social protection & social inclusion, formulation of necessary legal frameworks and policies to put the "defined" provision into practice.

Rationale

Cost sharing policies of past had silently pushed away the poor, helpless, disable, vulnerable and aged people from essential health care services which was comprised of specific health programs, such as safe motherhood and family planning, child health, control of communicable diseases and strengthened outpatient services etc. For universal access to health care in community level, the policy of free health care for essential health care has recently been introduced in Sub Health Post, Health Post and Primary Health Care Centre. (SHP, HP, PHCC), District Hospitals (DH) and to the free target groups. Implementation of Ama Program which has two components ; one free of charge delivery care and the other for incentives for institutional delivery are also put in place.. These are some important initiatives under taken by GON in recent years to ensure the health right of people. However, free health care policy for poor or disadvantaged community in Zonal, Sub-Regional, Regional and Central level hospitals are still considered to be limited and inadequate to be able to cater to the increased demands for such services. Table 1 summarises the category of population covered by the free health care policy.

Table 1: Category of population covered by free health care policy

Category of population	Free health Policy
Gender	Women health right : Free Ama program and Support for repair of uterine prolapsed
Age elderly	Elderly are included target group
Children	no specific policy for children curative service at DH level, except Preventive services (Deworming, Vit A, EPI) and IMCI.
Geography	some exist for remote and isolate zone, districts
All population	Essential health services of SHP/HP/PHC
Poor, ultra poor, destitute, elderly, disabled, FCHV	FHCS for Target group at DH
Social security program at referral hospital	Safety Net for referral and poor patients
	Safety Net in Catastrophic Illnesses- Cash Support (Rs. 50000)
	Safety Net in Catastrophic Illnesses- Treatment Support

Source: MoHP/GoN, JAR meeting, 2009

Access to district level hospitals (primary level) for secondary and tertiary levels of treatment is still related to the paying capacity of the service users, thus resulting into a larger out of pocket expenses, as the health service costs at these levels are considerably higher than for the primary health care. Because of this higher level of OOPE, the poor and vulnerable people are not able to access the health services at this level. At the district level hospitals, only some targeted groups can access the free health care services. In this regard the government is trying to explore the possibility of scaling up the free health care services to the poor, vulnerable and specific target groups at district level hospitals and for secondary and tertiary care services as well. Most of the

public health facilities at these levels are managed by autonomous development board which is based on cost recovery policy.

Such hospital development boards do have some small funds available to subsidise the treatment cost of the people who cannot pay but the access, adequacy, and availability of this provision to the most needy people has always come under question. Therefore, the MoHP have felt urgent need to scale up the free health care policy into universal health care at all levels of public hospitals. This required a study to review and analyse health financing models to scale up and sustain the free health care program in public health facility. The process of the study includes review of the "*Operational Guidelines for Free Health Service targeted to poor, destitute and other target groups at District, Central, Zonal, Regional, Sub-Regional Hospitals 2064*" in national context, for identification of sources of fund, mobilization of fund for social security program and formulation of the strategies to scale up the free health care towards universal access to health care at district and above health institutions.

Objectives of the Activity

The overall objective of the proposed activity is to develop options and strategies for effective scaling up of the FHC program of the government at various levels of health service institutions.

Specific Objectives

1. To identify the scaling up strategies of free health services in District Hospitals.
2. To explore the key issues of management on free health care service in three selected referral hospitals (central and zonal hospital).
3. Situation analysis on the cooperatives based health facilities/ hospitals and policy and mechanisms of free health service delivery.

Study Period: July to October 2009

Data collection: August to September 2009

Study Health Facilities:

- District Hospitals: Rupandehi, Gorkha, Nuwakot, Bardiya, Sunsari, Baitadi
- Central Hospital: Bir Hospital, Kahmandu
- Zonal Hospital: Lumbini and Koshi
- Cooperative Hospital: Manamohan Memorial Hospital and STUPA Community Hospital

Limitations of study

- This is the case study of selected district hospitals of hill, mountain and terai ecology and the information is limited to policy analysis to define the basic health care package at district level hospitals for cost analysis
- Central and Zonal referral hospital study is only limited to explore the current status of the free health service delivery at specific facility, this does not represent all other hospital system

- Cooperative study is also limited to explore the present situation to generation information on cooperative system.

Organization of chapter

As per the objectives of the study there are five main chapters.

- Chapter one contains the introduction background of the study activities including main objectives and limitation of the study.
- Chapter two contains the detail study of District Hospitals including introduction, rationale, specific objectives, methodology and findings and analysis.
- Chapter three contains the detail study of cost analysis and scaling up strategies of free health services at District Hospitals including literature review abolition of free health care, methodology and cost estimation for free health care.
- Chapter four contains detail study on central (Bir Hospital) and zonal hospitals (Koshi and Lumbini) including the introductions rationale, specific objectives, methodology and summary of the findings and conclusion.
- Chapter five contains the details on situation analysis of selected cooperative hospitals including introduction, methods, findings and conclusions.
- Chapter six deals with conclusion and recommendations of all study activities in district, referral and cooperative hospitals.

Chapter 2

In-depth Study of Selected District Hospitals

Availability, Affordability of Services and Analysis on Use of Free Medicine

Introduction

This chapter deals with the in-depth study of selected district hospitals to describe the availability of services (curative/diagnostic) and cost analysis in various models. The chapter has covered the objectives, methodology and findings, based on the information collected from field work in six district hospitals and on the literature review about cost analysis (HMIS and on the RTI reports of MoHP). The method, process, and analysis and findings are focused to identify the scaling up strategies of free health services in District Hospitals

Objective of the study

1. To assess the availability of health services at District hospitals of different ecological regions.
2. To find out the availability and usefulness of 40 items free medicine policy in study district.
3. To find out the medicine purchasing practice and medicine cost shared out of the pocket of patient.
4. Identification of scaling up strategies
5. Estimate of the cost of major scaling up alternatives
6. Estimation of revenue loss from user fee under partial free care strategies

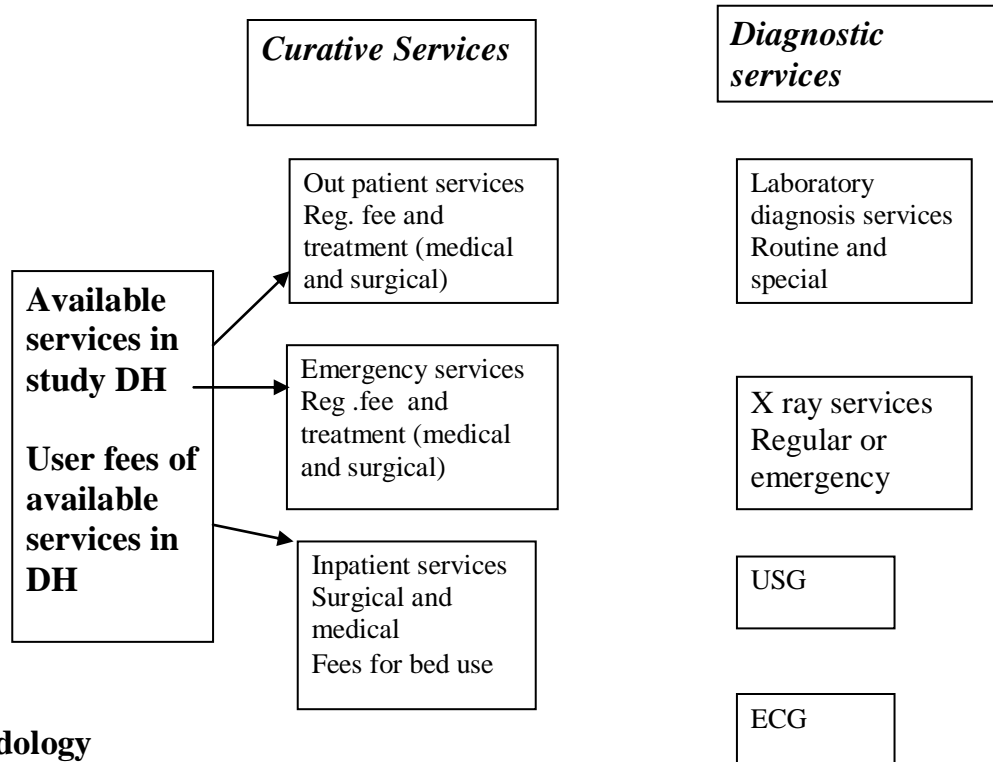
Research questions

1. Which types of health service are available at district hospitals?
2. What is the use and availability of free medicine policy?
3. How much does the patient invest for medicine under the OOPE, as per prescription of the patient?
4. What are the alternative scaling up strategies?
5. What are the costs of major scaling up strategies?
6. What are the costs of partial free care strategies (free diagnostic service, free drugs)

Plan for Cost analysis

- Costing of universal free care at DH
- Costing of free care to children up to 5 years of age at DHs
- Costing of free care by ecological region (with focus on mountain regions)

Conceptual framework of study on Available and accessibility of health services in Study District Hospital



Methodology

Selection of district hospital

The district hospitals are selected to conduct case study to see the variation as per the geographical ecology. One district from hill+ mountain (Baitadi), 2 districts from hill (Nuwakot and Gorkha) and 3 terai (Sunsari, Rupandehi and Bardiya) were selected for the study.

Data collection technique and tools

1. Literature review: Secondary data from cost studies in Nepal and HMIS data sheet (MOHP, GON), reports of RTI International, 2009.
2. Discussion with experts and health policy makers and managers at the Ministry, DoHS and district level.
3. Observation of facilities and services at selected DHs.: including outpatient department (OPD), inpatient department, emergency ward, dispensary and diagnostic units to assess the condition of the existing physical infrastructure and availability of basic health services as per the policy of district hospitals. (Tool 1 in annex 1)

4. Key informant interviews with hospital chiefs, administrative staff and service providers (see name list in annex 2) to explore the provision, process, and the comment on availability of services, as well as to explore the process of health service delivery, user fees policy, free drug policy and fund mobilization to manage the curative and diagnostic services. (Tool 3 in annex 1)
5. Key informant interview with prescribers working in OPD, IP, emergency to explore the provision, process and to hear the comment on the use, availability, distribution and affordability of free drugs.
6. Exit interview with users of OPD, Emergency and inpatient services to find out the drug purchasing practices and cost incurred by the users on drugs as per the prescription. (See *Tool 6 Questionnaire* in annex 1).
7. Review of record and reports available at the selected District Hospitals of HMIS to find out the service type and user fees, service users /expenses and collections of revenue from the user fees in OPD, Indoor, Emergency and Diagnostic services, expenses for free service delivery (account record), availability and use of free drugs (40 items), fund available and use for free health services. (*Tool 2, 4 and 5* in annex 1)
8. Literature review on user fee abolition
9. Analysis of user fee data from sampled district and literature review.

Process of data collection at district hospital

Initial meeting was conducted in each study district hospital with staff of district hospitals to introduce the objective and the activities to be conducted in the hospital. The meeting facilitated to identify records, registers and the key person to provide the reports on the service utilization and the other administrative information as per the objective of the study.

Findings and Analysis of District Hospital Study

The findings are based on the observations and key informant interviews with the managers and the service providers of the hospitals. The outline of analysis attempts to describe the availability of services and the key human resources as per the policy of service provisions.

2.1. Infrastructure

Out of six study district hospitals, three were new hospitals, including Runadehi, Sunsari. Bardiya hospital has a new building with more rooms, which are sadly not being used. The rooms and spaces for OPD, emergency and indoor services in Nuwakot (Trisuli), Gorkha and Baitadi hospitals are not adequate in view of the patient load. All the five hospitals have 25 beds. Only the hospital in Baitadi has 15 beds.

2.2. Human resource

Medical officers and the SBA are key human resources to provide services in district hospitals. The table 2 describes the availability of key health service providers in the study hospitals.

Table 2: Distribution of availability of key human resource in study districts

Key Human resource	Baitadi	Nuwakot	Gorkha	Sunsari	Rupandhi	Bardiya
Contractual Medical officer	1	3	4	4	4	4
Medical superintendent	0	1	1 (MDGP)	1 (3 days in a week specialized service from BPKIHS)	1 Gynecologist	1
SBA	0	2	2	2	3	2

2.3. Availability of services

Medical services

- OPD/Emergency/ Inpatient services are available in all the study district hospitals.

SAS/PAC

- Safe abortion service is available only in Baitadi, Nuwakot and Rupandehi, out of six study hospitals.

Minor surgical care

- Minor surgical services for injury, infection, hernia are available in all the study district hospitals, and in Gorkha, major surgery, such as laprotomy for appendicitis is also available.

Maternal health services (Delivery Care)

- All six study hospitals provide normal delivery and assisted delivery services. Caesarian section service could be provided in Rupandehi but the there are no pediatrician and anesthetist as mentioned by hospital manager. In Gorkha Hospital, CS service is going to be started very soon.

Laboratory services

- Routine Blood, Stool, Urine test are available in all study hospitals. Regarding basic test of biochemistry, pathology, microbiology (*Culture sensitivity test is not available in most of the study district hospital*), phraseology test are included routine tests.

Radiology services

- The *radiology services, routine X-ray* services are available in all study district hospitals. In Sunsari, this service is being provided from the last 3 months, it was discontinued for 6 years due to the problem in x-ray machine. The newly received X-ray machine is still not functioning. Now, the service is being provided with the old machine received from BPKIHS.
- *Ultra-sonography (USG)* service is available in five hospitals recently. In Baitadi this service is not available.
- *ECG service* is also available in all study hospitals regularly, except in Baitadi.

Table 3: Distribution of service availability in study districts

Services	Sunsari	Nuwakot	Gorkha	Rupandehi	Bardia	Baitadi
Medical Services (OPD/Em/IP)	√	√	√	√	√	√
Delivery Care (normal and assisted)	√	√	√	√	√	√
Safe Abortion care	X	√	√	√	X	X
Post abortion care	√	√	√	√	√	√
Minor Surgery	√	√	√	√	√	√
Laboratory services	√	√	√	√	√	√
X Ray	√	√	√	√	√	√
USG	√	√	√	√	√	X
ECG	√	√	√	√	√	X
Public Health services	√	√	√	√	√	√

2.4. Affordability of services in six study hospitals

i. User fees of the curative services

The user fees to access the services are mostly decided by the hospital development committee. The Hospital Development Committee regularly conducts meeting to review the fee policy and analyze the balance sheet and then only it decides or makes revision on fee policy for cost recovery. Previously, the registration fees was also decided by Hospital development committee as per the purchasing capacity of the people. When the free health policy was implemented, the free health policy guideline of MoHP standardized the registration fee for OPD. As the fee policy for specific services are decided by concerned hospital development committee as per local context there is variation in the service user fees. The variation in the user fees as per the type of services is presented in table 4. This table also reveals the availability of varieties of services in the hospital. The user fees for safe abortion service are Rs. 1000 as decided by the

MoHP. This is against the sexual and reproductive right of women. The poor women can not access the safe abortion service as the cost barrier is too high for them.

Most expensive hospital service is available in Gorkha due to user fees policy in procedures and emergency. However, the utilization of services is increasing because the patients are very positive about the quality of services. In Baitadi and Bardiya fewer services are available in comparison to other hospitals. In Sunsari most of the services are free due to the impact of Koshi flood victims.

Table 4: Distribution of User fees of the curative services in District Hospital

Type of services	Baitadi	Nuwakot	Gorkha	Rupandhi	Sunsari	Bardiya
OPD reg. fee	3	3	free	3	free	free
Emergency reg. fee	3	50	25	10	free	free
Admission rate	30	0	0	0	0	0
Rate of general bed	10	10	15	free	free	15
oxygen service rate/hour	free	30	free	free	free	NA
suturing/dressing/ID	free	20	50	free	free	free
plaster/cast	free	75	50	free	free	free
anesthesia (ketamin) plaster	NA	NA	300	NA	NA	NA
Safe abortion service	1000	100	999	800	NA	NA
PAC	Service NA	100	400	Data NA	Data NA	500

NA= Not available

ii. User fees of diagnostic services

The rates for diagnostic services, including lab test, X-ray, and USG vary in six study hospitals. The details on rates and type of these services with name of districts are given in table 5. The rates for routine lab test are more or less equal in study districts.

Table 5: Distribution of Rates of User Fees in Study districts

Diagnostic services	User fee rate and availability in Rs.						Mean (SD)
	Baitadi	Nuwakot	Gorkha	Sunsari	Rupandhi	Bardiya	
Laboratory diagnosis services							
Blood test							
Widel test	50	120	125	75	55	40	77.5 (36.71)
RA factor	60	120	125	100	55	50	85.0 (34.06)
Blood Grouping	30	50	75	50	35	35	45.8(16.56)
urea	NA	75	80	80	55	80	74.0

Diagnostic services	User fee rate and availability in Rs.						
Laboratory diagnosis services							
Blood test	Baitadi	Nuwakot	Gorkha	Sunsari	Rupandhi	Bardiya	Mean (SD)
							(10.84)
Uric acid	40	120	100	80	80	80	83.3(26.58)
Creatinin	NA	100	120	80	80	100	96.0 (16.7)
Blood total count	10	20	20	20	15	10	15.8 (4.91)
Diff count	10	20	20	20	15	10	15.8 (4.91)
ESR	10	20	20	20	15	10	15.8 (4.91)
Hb	10	20	20	20	15	10	15.8 (4.91)
VDRL	60	75	100	60	55	35	64.2 (21.78)
HIV	Free	free	free	250	305	Free	277.5(38.9)
HBS Ag	100	200	NA	175	295	100	174 (81.04)
bilirubin	40	120	120	80	80	80	86.7 (30.11)
Blood sugar	20	50	60	50	55	40	45.8 (14.3)
Malaria	Free	free	free	Free	free	Free	
aldehyde test	Free	NA	NA	NA	NA	Free	
ASO titre	NA	NA	150	NA	NA	NA	
BT/CT	NA	NA	30	NA	NA	NA	
Stool test							
RE/ME	15	20	20	20	10	10	15.8 (4.9)
Occult blood	NA	50	15	30	25	15	27 (14.4)
Urine							
RE/ME	15	20	20	20	10	15	16.7 (4.1)
Bili. pigment				20	30		
Pregnancy test,	50	120	100	50	125	75	86.7 (33.42)
Others lab test							
Semen analysis	40	25	60	100	60	Free	57.0 (28.2)
AFB stain	free	free	free	Free	free	Free	
Mantoux test	free	75	100	NA	NA	50	75 (25)
X ray	70-90	100 -120	110-130	X-ray **		100	
USG *	NA	400	400	300	350	NA	362.5 (47.88)
ECG	service NA	rate NA	rate NA	rate NA	free (started recently)	service NA	

**USG started 3 months back in all four hospitals*

** X ray started 4 month back after 6 years in Sunsari

Source: District hospital records

iii. Price of transport service for referral cases

The referral cases are mostly transported using the available ambulance and the public transport service. The poor patients are receiving transport cost from hospital as per the safety net policy (Terai- Rs.1000, Hill- 1500 and Mountain- 2000).

Table 6: Distribution of Rates of Ambulance in Study Districts

Ambulance rate hospital	Baitadi	Nuwakot	Gorkha	Rupandehi	Sunsari	Bardiya
Hospital Ambulance rate	NA	3000 to Kathmandu	4000 to KTM	NA	900 to Dharan and BRT	500 to Nepalgunj
Microbus/bus	650 mostly use public transport	4000 to Kathmandu	--	1000 to Butwal private ambulance	--	--

Source: District Hospital records

2.5. Service delivery system at District Hospital

i. Out Patient Department (OPD) service

The service users with general health problems (medical/ surgical/ reproductive etc) are receiving services from OPD from the on-duty medical officer with the payment of registration fee, which is Rs. 3 (free in Gorkha) in study hospitals. The working hour of OPD is between 10-2pm. The service provider makes diagnosis, based on diagnostic test (Lab/radiology as per availability). Most of the prescribers use the free drug list. The OPD services also include the safe abortion care, post abortion care and dressing of injury and infections.

ii. Emergency services

There are 24 hour emergency services available in all six study hospitals. Injury accidents and emergency obstetric care are mostly attended by emergency sections. They provide services as per the expertise.

iii. Inpatient services

The inpatient department is mostly used by the child (acute and chronic problems), elderly acute and chronic illness) and mothers for delivery care. At present, about 80% of beds are occupied by mothers for delivery care in all study hospitals due to free care delivery policy. The general beds are mostly free and they are also provided food free of charge.

iv. Dispensing of free medicines

The hospital dispensary is dispensing the medicine to patients as per their prescriptions during OPD hour. Most of the patients, inpatient and emergency ones, should buy the medicine during off time of OPD. The stocks are well maintained in five study hospitals, except in Nuwakot.

2.6. Free Health Care services for target group

The target group is using free services following the instruction of policy guideline. The medicine not included in free list are also provided free as per the prescription using the near by medical shop. The private medical stores will get reimbursement later as per their credit with record of prescription of free patients.

2.7. Analysis on Usefulness of 40- item free medicine (Senior Medical Doctors perspectives)

The information regarding free medicine is based on the key informant interviews with prescribers working in OPD, emergency and inpatient departments. The prescribers analyzed the the free medicine list giving the categories of *most used*, *less used* and *use for various purposes in OPD, IP and emergency*. They also gave suggestions to improve the free list so that most of the patients can get support for cost of the medicines.

Usefulness of 40 -item free medicines

The medical doctors identified 15 medicines as mostly used in prescription in OPD, Emergency and IP, and the 16 medicines as less prescribed. The Injectable medicines were used in emergency and inpatient and Inj. Lignocain and Povidine Iodine for dressing in OPD/IP and emergency. Rest medicines are not prescribed directly to patients because this is used for dressing and inpatients /emergency services.

The name of medicine is given in table 7 (a, b, c, d).

Table 7: Summary on use of 40 Free Medicines in six study District Hospitals

a. Items most prescribed	Used in	b. Items less prescribed	Used in
1. Albendazol	OPD	1. Chloramphenicol eye ointment	OPD
2. Alprazolam	OPD	2. Clove oil	OPD
3. Aluminium hydroxide + Magnesium hydroxide	OPD	3. Cap Chloramphenicol	Emergency/ OPD/ IP
4. Amoxicillin	Emergency/ OPD/ IP	4. Benzoic acid+Salicylic acid	OPD
5. Ciprofloxacin cap	Emergency/ OPD/ IP	5. Calamine Lotion	OPD
6. Ciprofloxacin liq	Emergency/	6. Charcol activated	Emergency

	OPD/ IP		y
7. Ciprofloxacin eye oint	OPD	7. Aspirin	Emergency/ OPD/ IP
8. Hyoscine butylbromide	OPD	8. Atenolol	OPD
9. Metronidazole	OPD	9. Chlorpheniramine	OPD
10. Paracetamol	Emergency/ OPD/ IP	10. Metoclorpropamide	OPD
11. Salbutamol	OPD	11. Gamma benzene hexachloride	OPD
12. Sulfamethoxazole+ Trimethoprim	Emergency/ OPD/ IP	12. Frusemide	OPD
13. Vitamin B complex	Emergency/ OPD/ IP	13. Phenobarbitone	OPD
14. Oral Rehydration Solution (ORS) (free supply under PH program)	OPD	14. Promethazine	OPD
15. Ferrous salt + Folic acid (free supply under PH program))	OPD	15. Pheniramine	OPD
		16. Magnesium Sulphate	OPD for dressing / IP

c. List of free drugs not prescribed directly to patient and mostly used in

<i>Used for dressing in Emergency/ OPD/ IP</i> 1. Povidine Iodine 2. Inj. Lignocaine	<i>Medicines use only IP and emergency</i> 1. Sodium chloride 2. Oxytocin 3. Gentamycin Inj. 4. Compound solution of Sodium lactate (Ringers' Lactate) 5. Dexamethasone inj 6. Dextrose Solution 7. Atropine
--	--

Inj. Magnesium Sulphate used only in IP service

The Providine and Inj Lignocain are mainly used for dressing the wound in OPD/emergency and general wards. Likewise, the Injections and IV drips are also used in emergency and indoor services for patient care, delivery care and .maternity care. Therefore, the patients do not realize that they were using these drugs free of cost.

d. Free medicine not in use (not purchased/prescribed)

Name of not used medicines	District hospital
Chloramphenicol	Rupandhi, Sunsari
Benzylbenzoic acid	Rupandehi
Charcoal activated	Rupandehi
Metoclorpropamide	Rupandehi
Phenobarbitone	Rupandehi

Pheniramine	Sunsari
Magnesium Sulphate*	Sunsari

The drugs listed under table D are not purchacable, however they are included in the free medicine list. Regarding Magnesium Sulphate, type product such as injection of powder is not mentioned in list. Therefore, there is confusion as to which product was included in the list . The confusion exists only in Rupandehi and Sunsari DHs. (Note: *Inj Magnesium sulphate is used for PET (Taxaimia of pregnancy) and Powder Magsulf used for would dressing. Therefore the type of product of Magnesium Sulphate should be specified in free drug list.*)

e. Summary of usefulness of 40 items free medicines above table

Free 40 item medicine analysis of use	Total
Items mostly used (prescribed)	15
Items less used (prescribed)	16
Items for Dressing (not prescribed)	3
Items ward/emergency (not prescribed)	7
Total	40

Perception of Medical doctors on free medicine list

The Medical superintendent mentioned that in OPD the service users mostly needed medical services. Among them the most prescribed drugs are antibiotics and analgesics. The antibiotics listed in free drug list are most of the time not available due to high demand. The drugs such as Cotrim, Cipro and Amoxicillin are effective only for about 40% of the cases. Rest of the cases need advanced generation of antibiotics which are not included in free drug list and these medicines are very expensive. This could be due to practices of health workers of SHP, HP, PHCC and private practitioners. Most of the time the OPD service users expressed their frustration because the supply of free drugs cover only about 50% of demand. The users do not trust the prescribers and it is also creating a frustrating environment for service providers. But some prescribers are very positive about the free drug policy.

The service provider mentioned that *"The 40 items medicines are Ok for OPD service if the prescriber use rational prescription system. For emergency and Inpatient service we need to add some third generation antibiotics."* (Sunsari/Gorkha)

Most of the medical doctors requested to add *new drugs in drug free list such as Amclox (Ampilicillin+ cloxacillin), some third generation antibiotics (Agithromycin) and Anti-hypertensive and anti-diabetic drugs (Rupandehi).*

2.8. Medicine purchasing practices of service users (patient) as per prescription

Exit interviews were conducted with 107 service users of four district hospitals including, Trisuli, Gorkha, Sunsari and Repandehi. The distributions of respondent's (service user) are given in table 8 given below. The detail socioeconomic background of the respondent's (service user) is given in table Annex 5.

Table 8: Distribution of respondents of exit interview (percentage in parentheses)

District	OPD	IP	Emergency	Total
Sunsari	20 (25.3)	-	-	20 (18.7)
Nuwakot	7 (8.9)	4 (40.0)	7 (38.9)	18 (16.8)
Rupandehi	22 (27.8)	4 (40.0)	4 (22.2)	30 (28.0)
Gorkha	30 (38.0)	2 (20.0)	7 (38.9)	39 (36.5)

Medicine purchasing practice of users:

Total response 56 out of 107 (no response due to un-diagnosed or no prescription)

- 28.56 % (N-16) received all free medicines
- 66. % (N-37) received partially free
- 10.7 % (N-2) did not purchased medicine

OOPE for medicine: Average cost for OPD (Median) is Rs 93 with quartile values Rs 50 and 200 and Emergency average cost (median) Rs. 183 with quartile values Rs. 55 and 342. Similarly, Inpatient service average cost (median) is Rs. 501 with quartile values Rs. 215 and 1350.

2.9. Service utilization in study DH

The service utilization in 2008/9 in six study hospitals shows that the most used hospitals are Sunsari, Bardiya, Gorkha, and Nuwakot, respectively. Rupandehi hospital could give only 7 months' report, so it could not be compared with those of other districts. The flow of patients in remote and hill district hospitals is less in comparison to terai districts.

Table 9: Distribution of Total Service Utilization in Study Districts

Name of Hospital	Total bed available	IP total	Total OPD	Total emergency	Total Emergency /OPD/IP
Sunsari	25	3002	27021	6413	36436
Nuwakot (Trisuli)	25	2675	14695	3469	20839
Gorkha	25	2514	21196	3990	27700
*Rupandehi (Bhairahawa)	33	2090	9203	6207	17500
Baitadi	15	445	18550	1626	20636
Bardiya	25	1943	21369	2274	25611

Source HMIS working data sheet, DoHS 2009: *Rupandehi (Bhairahawa) 7 months reporting

Table 10: Distribution of Diagnostic Service Utilization in Study Districts

District	X-ray	USG	ECG	Safe motherhood	Lab	Neonatal
Sunsari	87	95	46	79	7805	79
Nuwakot	3510	53	5	624	9869	616
Gorkha	3228	103	36	350	16998	274
Rupandehi	2748	0	43	771	9865	0
Baitadi	1102	0	0	585	5304	173
Bardiya	1304	0	0	2399	9104	346

Source HMIS working data sheet, DoHS 2009: *Rupandehi (Bhairahawa) 7 months reporting

Some expressions on service utilization by managers and health workers:

The service utilization will be increased if there are regular services provided by specialized doctors (Rupandehi)

The inpatients beds are mostly occupied by mothers for delivery care due to free delivery service. (All six hospitals)

2.10. Budget allocation for free health care in six study districts

The budget allocated for district hospitals for free health care as per the patient load and type of services is given in table 11. This is described in the Operational Guideline for District level program, 2065 by the Management Division/DoHS. During the interview with finance officer of the district hospital they mentioned that budget had indeed been sanctioned but the total amount not yet provided. This could be due to modality of budget disbursement system for various purposes in different trimesters.

Table 11: Distribution of Budget Disburse in Study District for Free Health Care

Budget	Baitadi	Nuwakot	Gorkha	Rupandhi	Sunsari	Bardiya
OPD	510000	510000	480000	900000	900000	900000
Indoor and Emergency	450000	400000	550000	1000000	642000	875000
Budget for Medicine	960000	1444000	1215000	2840000	2590000	1385000
total	1920000	2354000	2245000	4740000	4132000	3160000
budget for referral incentive for DAG	125x700	148x600	175x600	227x500	248x500	248x500
VDC/NP	<i>62</i>	<i>61</i>	<i>66</i>	<i>69</i>	<i>49</i>	<i>31</i>

According to account officers of study district hospitals, most of the budget received for free health care in OPD and IP services are used to purchase medicine for target groups, which are not included in free medicine list. In some hospitals, the fund was used for reagents, for Lab test and chemicals for X ray services.

Since the above figures complement to the cost of treatment incurred in free care services, particularly in terms of drugs, reagents etc, they do not cover the full cost borne by the health system on the patients. Unit cost analysis is required for the purpose which is beyond the scope of the present study.

2.11. Management of Free Health Care at National Level

In process of data collection on management of free health care at national level, an interaction program was conducted in Kathmandu with the participation of focal person of free health care, chief of planning of Management division, Ministry of Health (Planning, budgeting division) and officials/staff of NHRC. The name of the participants is given in annex 4. The main objective of the discussion was to share the preliminary findings of the district hospital study and proposal on projections for various strategic models for scaling up of the free health care at district hospital level. *The main outcome of the discussion is analyzed in main four areas*

i. Feedback of study of district hospital preliminary findings

- The findings on availability, analysis of 40 items free medicine and the affordability of the services will give background information on the current situation of district hospitals' service delivery systems. The infrastructure and the availability of key health professionals tried their best to provide the quality services. The cost shared by the patients from their pockets for medicine was very useful information. The meetings were more focused to get detail information of assessment about the use of the free drug and its availability. The interaction also focused on bringing more more clarity on methodology of costing and projection in various models.

ii.. Issues and challenges of management of free health care policy

- Some public health managers offered different views on free health care policy. They mentioned that free health care was only the free medicine care; this does not ensure the quality of care because there are no qualified doctors and nurses as per the sanctioned posts, and the facilities are also not up-graded as per the policy. In response, the focal person of free health care mentioned that *free health care is the policy to increase access to health care along provisions of the Constitution of Nepal, which clearly spells health as a fundamental right. He further said that e alternative decision couldnot be taken but all should be very keen to manage the policy effectively.* He also added that *free health care not only cover the free medicine but also the diagnostic services and free bed and registration in OPD, emergency and IP as per the guideline.*
- The free health care section of management division with three staff is facing lots of problems to manage free health policy. With these three staff, it is not possible to mange effectively the program which includes the regular activities of monitoring and supervision for regular supply of medicine, use of guideline to manage the fund and coordination /communication and advocacy program with concerned stakeholders (district/national) of this team.

iii. Suggestions to make useful recommendations for management of free health care

- The government has already recommended for establishing a separate division for revitalizing primary health care at ministerial level with three sections such as urban health, free health care and environmental health. The managers mentioned that *“the free health service unit under the revitalizing of the PHCC division will ensure the required mangers to conduct effective supervision and mionitoring of activities throughout the country. At present, in view of the fewerstaff in health managemen, the division is*

facing many problems to respond to the people's expectations regarding free health care and the free medicine in health facilities".

- But the new cabinet minister seems not very keen to implement the policy to establish the new division with three sections. If the government really wants to implement and scale up free health care effectively, then the division and section of free health care under social security program must be established without further dillydallying. The participants mentioned that *"this will create environment to ensure the availability of services.*

iv. Suggestions to make effective strategies for scaling up of free health care at district hospitals

Suggestions for Strategy for scaling up free health care

- Rethink about the projection basis- why 20, 25 and 30 percent?
- Formula for cost calculation- it should be inpatient discharge and emergency discharge rather than just number of discharges?
- Need to mention- parameters of cost calculation- what are included in the cost? i.e Unit cost should be splitted
- Estimation of the cost required for scaling up only should be mentioned
- The share of the budget should be divided as services in OPD, IP and Emergency
- The costing also should be projected without inflation rate because this implies automatically as per the national policy.

Suggestions Operational aspects

- The use of medicine should also be divided amongst the OPD, IP and Emergency wards, so that the budget could be allocated as per the projection of patient load.
- The modality could be formulated for disadvantaged population as per the proportion of those group. But this is not possible under this study because at present the basic data set is not available. This can be recommended for future research.

Chapter 3

Study of Cost Analysis and Scaling up Strategies of Free Health Services at District Hospitals

Literature review on user fee abolition

The earlier sections discussed that user fees constitute the most important complementary financing mechanisms besides tax based financing in the public hospitals in Nepal. Analysis of user fee in the six district hospitals also indicate great variation in user fee and are likely to be an important factor in rationing public health services. The findings also indicate that there is a need to review the provision of free drugs in terms of their utilization and effectiveness. Unavailability of several services in the district hospitals has also imposed additional cost to the population. The monitoring of the targeted free care to ensure that deserving patients are not deprived of their right to health care also emerged as an important concern.

Since the Government of Nepal is committed to make primary health care accessible to all population irrespective of ability to pay, there is a need to analyze potential costs of such provisions while ensuring that quality of the services remains at an acceptable level. Thus we first review available literature on the abolition of user fee and then estimate the cost of various user fee abolitions options based on available data.

There are a number of financing mechanisms in the health sector such as the tax based financing, user fee, social insurance, private insurance and community based health insurance financing.

Tax based health financing are the predominant form of health care financing in south Asia and Africa. The benefits of tax based financing are that they provide a minimum protection from the shocks of health care payment to the poor, prevent financial access being a barrier to health care seeking and are based on relatively progressive tax system. User fee is another widely practiced system of health care financing to supplement the tax based financing. Tax based financing constitutes two third of the health budget in the public health system in Nepal (NHEA, 2009) User fees have varying contribution by level of facility with contribution increasing in higher level facilities. User fee which used to make around 9 percent contribution in the incomes of District Hospitals (DH) during 2003 (NHEA, 2004) have increased to about quarter of the hospital expenditures in the DHs in Nepal at present perhaps due to new services being available in the DHs for payment of user fees and imposition of user fee by hospital development committees to ensure that services are not obstructed due to lack of supplies and incentives to providers. Recent data have shown user fees being utilized to pay for staff salaries and incentives,

purchase drugs and medical supplies, pay for utilities and in repair and maintenance (RTI International, 2009).

The abolition of user fee has been a debatable issue. User fee impose a financial burden to access health care services particularly among the low income group. On the other hand, user fee provide resources that are vital to meet the recurrent cost such as staff salaries, drugs and medical supplies and prevent frivolous use of health services. Relative benefits and cost of abolition of user fee depend upon existing practices, share of user fees in health care financing and availability of alternative financing sources. We shall make a brief review of international and national experience of user fee practices.

A study by Pearson (2004) of DFID priority countries has mentioned that imposition of user fee are justified if they are the pragmatic means of getting resources to lower level; people are always willing to pay if the quality of care is reliable; are a means of enhancing accountability and popular support. In contrast, user fee might be a poor means of financing health care as low cost alternative such as tax financing are available (people have already paid taxes for public services as well), and they provide a barrier to access essential health services. The study concludes that there is no evidence of user fee improving efficiency and abolishing user fee raising frivolous use. User fee have imposed a barrier to access and the exemption and waiver schemes designed to protect the poor and the vulnerable have practically remained ineffective.

The example of abolition of user fee in Uganda in 2001 led to increased utilization of public health facilities particularly by the poor. The declaration of the abolition which was done without adequate preparation has emphasized the need for managing resource necessary to prevent quality in terms of health personnel and drugs supply from deteriorating and to make sure that curative care do not crowd out preventive services. The example of Madagascar showed that temporary suspension of user fee led to a 16 percent increase in the number of visits to health centre. Abolition of user fee in Zimbabwe led to increased utilization in the beginning but subsequently led to a fall in utilization due to lack of drugs and essential supplies.

A reversal example of Sri Lanka showed that abolition of user fee took significant time to return back to normal utilization that had declined due to imposition of user fee in the 1970s. A study using simulation model combining evidences on key health interventions in 20 countries in Africa showed that 4-8 percent child deaths could be avoided by eliminating user fees (James et. Al, 2005). The example of Nepal has also shown that abolition of user fee among the target group population alone increased OPD visits by 21 percent during 2007/08 to 2008/09 which was instead declining in the preceding years (author's calculation from DOHS data; DOHS/MOHP/GON, 2007)

User fee are an essential source of health care financing in the higher level health facilities. The NHEA (2004) data showed that it contributed between 32 to 60 percent cost in the central level hospitals in 2003. However there is less controversy on the need for abolition of user fee at primary health care level. Most studies suggest that abolishing user fee improve utilization of health care services by eliminating financial barrier

particularly among people in the lower income strata (Yates, 2006). Most of the studies supporting user fee at primary level health facilities suggest that abolishing user fees should not, however, be looked as a panacea for improving the access and quality of health services. Strengthening alternative sources of financing is essential to ensure the quality of the service in terms of availability of drugs and medical supplies as well as motivation of health staffs. From that perspective, abolishing user fee where utilization can be greatly enhanced with least revenue loss could be the scaling up strategy towards universal basic and primary health care.

Scaling up strategies

Based on available literature and interactions with health policy makers, three scaling up strategies were identified. As the government introduced free care policy to peripheral health facilities (SHPs, HPs and PHCs) and targeted beneficiary free care policies at hospitals (poor, deprived communities and old age patients), it was suggested that the next scaling up strategy should focus on the district hospitals. District hospitals are the highest tier of the primary health care system. Ensuring universal free care at district hospitals would thus ensure universal financial access to primary health care to the population. The three scaling up strategies at the district hospital level were identified as:

- a. Universal free care to district hospitals
- b. Targeted beneficiary service to children under 5 years in district hospitals (based on internationally adopted practice)
- c. Geographical targeting (free care to patients in district hospitals in the mountain region: remote due to terrain and physical access)

The appropriate methodology for demand projections and relevant cost estimates were determined based on available literature, consultation with health professionals, health economists and policy makers etc.

Methodology for Estimating Costs Based on Scaling Up Strategies

Demand Projection for Scaling up Strategies

The change in demand for health care with changes in price of services is explained by the price elasticity of demand for health services which explains by what percentage the number of health care users increase or decrease for a percentage change in price of the service. Removing user fee implies reducing price of service to zero or alternatively providing a 100 percent subsidy for the service. There are no adequate price elasticity data for various health services under different geographical and climatic conditions. A study by Pokharel et al (cited in RTI International, 2008) has estimated health care utilization to increase by 56 percent for child care with 100 percent subsidy for Nepal. Price elasticity of demand for health care estimates by population group and ecological regions would be necessary as morbidity rates and health care seeking among population varies by population group and ecological regions.

In the absence of price elasticity data, experiences of free care introduced in countries with similar socio-economic characteristics might provide an idea of the change in demand for health care utilization for removal of user fee. South African health system experienced 77 percent increase in utilization with abolition of user fee for children under 6 and lactating mothers in 1994. In case of Kenya, for a replacement of a 10 and 20 shillings for all other costs in the health system in 2004, popularly known as the 10/20 policy, utilization went up by around 70 percent compared to the previous 6 months but by the final quarter of the year it sustained at around 30 percent higher only. Likewise scrapping up of user fee in Uganda in 2001 as a declaration during the presidential election raised outpatient attendance by 155 percent (Yates, 2006). One of the reasons for such an upsurge was flow of patients from neighboring countries Rwanda and Congo, a possibility that exists for Nepal too. A few studies have adopted similar projections methodologies for instance RTI International (2008) estimated patient sizes by three scenario (20, 25 and 30 percent growth). Following such methodology may have to be resorted in the absence of more refined methodology.

The above mentioned scenario provides an idea of the possible increase in demand for health services with introduction of free care in Nepal too. There are, however, a few things to be considered before we base our estimates on international experiences. Nepal has already been providing free services in antenatal care, family planning, EPI, Vitamin A, leprosy, tuberculosis etc since a long time. The government recently abolished user fees in primary health facilities at the peripheral level in 2008. The government also introduced free care in the hospitals to targeted group of populations (ultra poor, poor, disabled, senior citizens and FCHVs) which cover around 40 percent of the population of Nepal. In all hospitals, a number of drugs enlisted as essential drugs are being provided free of charge.

As a result of the existing free care provisions as a backdrop and low cost of services at public facilities introduced some time ago, the demand for free care can be expected to increase but not by significantly large amounts as experienced by countries where user fees were abolished at once. The demand for health care services arising from abolition of user fee should be based on Nepalese scenario and utilization data. Data from the Annual Reports published by the Department of Health Services of the Government was used to obtain patient number for various years. Unpublished data for 2008/09 was obtained through personal communication. Since the reports from the districts were not complete, 40 out of 60 districts hospitals for which information was complete was used for estimating the average figures. Since the analysis ahead is based upon average figures, raw data do not impose a serious constraint.

Some data were available on the growth of health care utilization before and after implementation of targeted free care. For instance utilization increased by 15, 54, 104 and 71 percent in mountain, hills, terai and national level in the three months immediately after implementation of the program in 2008 compared to the same three months period one year back (Slide presentation by Dr Ojha, Direct General of DOHS, MOHP, 2008). These are however aggregate figures for primarily level facility such as SHP, HP, PHC as well as secondary and hospital. The primary level facilities are at very close distance and

do not impose travel cost to patients. Thus, expecting visits to DH increasing at the same rate would be impracticable.

In an effort to analyze the trend of utilization of services before targeted free care was implemented, data of the visits to public hospitals during 2004/05 to 2006/07 showed a decline of 4 percent for new OPD. This was perhaps because of almost similar out of pocket expenditure in private and public hospital (NLSS, 2004) and poor quality of services in public health facilities during that time. Several steps were initiated later in the health system including the introduction of free care at the SHP, HP and PHC level along with targeted free care at hospitals in Jan 15, 2008. As a result, the number of IP, OPD and Emergency in the district hospitals increased by 15, 13 and 31 percent in 2007/08 compared to previous year 2006/07. Since this provision was introduced in the mid of a fiscal year without adequate information dissemination mechanism, the actual growth in patient number was experienced only after a year's time lag. During the next year between 2007/08 and 2008/09. The number of IP, OPD and Emergency patients increased by 26, 35 and 39 percent and is a significant rise. In contrast to international experiences, it is quite surprising to note here that instead of increase in the number of patients visiting OPD, the number of patients visiting the emergency care has increased significantly in both the years. This should be understood mainly from the institutional structure of the service being provided in the district hospitals in Nepal. Most of the district hospitals in the country have allocated about 3 hours as OPD visit hours (RTI, 2009). Due to difficult terrain and lack of transportation, most of the patients arrive at the hospital beyond OPD service hours and have to seek service from the emergency care units making emergency service the largest service centre at district hospitals.

Table: Growth in Patient Number Between Two Consecutive Years after Targeted Free Care Programme at District Hospitals

Category	2006/07-2007/08				2007/08-2008/09			
	M	H	T	Nepal	M	H	T	Nepal
In-patient	13.5	17.0	8.7	14.6	28.1	30.6	7.5	25.8
OPD	23.4	8.9	9.4	13.0	33.6	40.1	19.7	34.5
Emergency	22.2	42.2	11.5	31.3	66	29.4	16	38.6

Source: Annual Report (DOHS, 2007; unpublished data for 2008/09)

Though the increase in the patient in the district hospitals during the period 2006/07 to 2007/08 is rather high in a normal situation, it has been considered as a natural growth rate when we take into account several changes taking place in Nepalese society. The Nepalese society has been undergoing significant socio-economic and technological transformation due to rising political consciousness and claim on public services following the election of the constitutional assembly and mechanisms developed to include the demands of the so far neglected population. The movements for the rights of indigenous and deprived populations, acceptance of federalism as a system of governance etc have increased claims and access in all public services. After the end of the armed

conflict and restoration of peace in 2006, besides information revolution brought about by mobile phones that penetrated rural hinterlands, the FM radios that provided access to information to resort to modern medicine, a large number of population sending remittance income from labour abroad etc. have all contributed to raising the number of patients in the public health system. For all these reasons, the growth rate in patients in district hospitals during 2006/07 to 2007/08 has been considered as a normal growth rate and a baseline for further estimation for a few years ahead to 2010/11 for which this analysis has been targeted.

Table Expected Average Number of Patients in District Hospitals in 2067/68 under Normal Growth Scenario by Ecological Belts

Ecological belt	IP discharge	OPD visits	Emergency visits
Hills	2169	22366	4654
Mountains	1158	14522	1819
Terai	6094	37212	13427
Nepal	2552	22611	5339

Source: Authors calculation

Once we establish a baseline growth rate of patients at the district hospitals, what is the expected impact of a free health care policy at the district hospital level in terms of the number of patients in the in-patient care, OPD visits and Emergency services was worked out. Appropriate methodology was developed to work out the demand projection based on earlier experience of targeted free care policy introduced in 2008. The targeted free care policies introduced at DHs covered around 40 percent of the population as shown in the table 12.

Table 12: Coverage of the Targeted Free Care Program (2008) in Percentage of Total Population

Category	Poor and ultra poor	Senior citizen	Disabled	FCHV	Total
Percentage	31	6.5	2.5	Less than 0.5	40 (approx.)

Source: CBS (2005); CBS (2003); Economic survey (2009)

Note: Some overlapping between two categories has not been considered

In contrast to the targeted free care policy, the universal care policy instead aims to cover total population. Accordingly, we make a projection of in-patient, OPD and emergency care by ecological region based on the average growth rate experienced between 2006/07 and 2007/08 to cover cent percent of the population.

Based on the average growth rate of demand for services at district hospitals, the growth rate of patients in mountain, hills and the Terai has been projected with three scenarios. The High demand projection is based on the expectation that with universal free care coverage increasing from present 40 percent level in the targeted free care employed in 2008 to 100 percent coverage. Accordingly the growth rate increases 2.5 times compared to the patient growth rate (2007/08 -2008/09) with 40 percent coverage. The low demand

scenario is projected based on an increase to 60 percent coverage. This is due to the fact that in spite of free care policy, the access to information about the new provision, low possibility of patients at distance seeking health care from DHs, free care already available at SHP, HP and SHPs and inadequacy of service providers and drugs to meet demand of the new provision, availability of private providers in the district headquarters where most district hospitals are located etc will restrict potential patients from obtaining services from the district hospitals. The medium demand scenario base which lies between the upper bound and lower bound projection with a coverage increasing to 80 percent population seems more realistic.

Table 13: Projected growth of utilization in 2010/11 with universal free care under low, medium and high demand scenario

Category	Low Demand				Medium Demand				High Demand			
	M	H	T	Nepal	M	H	T	Nepal	M	H	T	Nepal
In-patient	20.3	25.5	13.1	21.9	27.0	34.0	17.4	29.2	33.8	42.5	21.8	36.5
OPD	35.1	13.4	14.1	19.5	46.8	17.8	18.8	26.0	58.5	22.3	23.5	32.5
Emergency	33.3	63.3	17.3	47.0	44.4	84.4	23.0	62.6	55.5	105.5	28.8	78.3

²Source: Author's calculation

We make a projection based on the demand scenario presented in Table 14 to for users of health services at DHs. These projections are based on data available from the DOHS, MOHP for 40 districts (21 hills, 12 terai and 7 hill districts; the remaining 20 districts could not be used due to incomplete data for FY 2065/66). The expected number of patients in district hospitals along with unit cost of service provides us with estimates of the cost of the various up-scaling options.

Unit Cost Estimation

A number of unit cost analysis have been conducted for health system in Nepal. A Public Health Facility Efficiency Survey (PHFES) study by NHEA (2004) had estimated unit costs for peripheral health facilities (SHP, HP and PHC), district hospital, zonal and regional hospitals and central level hospitals. Though the coverage was significant with 104 health facilities covered, there has been several changes in the health system since then leading to significant changes in the cost components. A unit costs estimate study was conducted recently by GTZ (2009) as a part of the impact of the free health care services in Nepal. However, rather than being based on recent field data, unit costs in this study were imputed based on synthesis of a field assessment of a district hospital by Health Economics and Financing Unit (HEFU) in 2007 and the cost estimates of the PHFES study by NHEA (2004) along with some adjustments based on rules of thumb.

A relatively representative and recent study was conducted by RTI International (2009) covering 7 districts from all three ecological belts using recent primary data collected

² Estimated with 1.5 times, 2.0 times and 2.5 times the actual growth rate of patients between 2006/07 and 2007/08

from DHs. The unit cost estimates, accordingly was NRs 1010, 154 and 346 for inpatient discharge, OPD visits and emergency discharges respectively³.

For the present purpose, the unit cost estimates by RTI International were utilized with adjustments for ecological belts worked out further. These unit costs were adjusted for inflation for 2008/09 which was 9 percent (an average of GDP deflator and inflation rate for medical goods and services (MOF, 2009) and a projection of 10 percent inflation were used for 2009/10 and 2010/11.

The unit cost of in-patient, OPD and emergency care have been used to estimate the total cost of the free care scaling up programme in the district hospitals by ecological belts. The total costs of services with population projection without program and with program have been estimated to provide an estimate of the additional cost of various scaling up strategies.

The total cost for free health care for child less than five years is based on the data of proportion of children less than 5 years from population size by age for average patient for district hospitals which comes to 15.54 percent of total population (CBS, 2003). Likewise, the total cost estimation for free care to population in mountain ecological belts is based on projections from actual utilization in 2008/09 mountain ecological belt adjusted for 2010/11. An estimate is provided for average cost for DHs by ecological regions and total cost of the programme for district hospitals under each of the scaling up options. All estimations in the scaling up-strategies are based on the average unit cost imputations given in table 15.

Table 14: Average Unit Cost Estimation in NRs. For (2010/11)

Service Category	Mountain	Hill	Terai	Nepal
IP	2296	974	727	1327
OP	225	209	175	208
Emergency	806	202	361	411

Source: average unit cost estimate by RTI International (2009) with adjustment for inflation and ecological belt

Findings of Estimations of the Scaling-up Options

This section presents estimates the cost of universal free care for district hospitals in all ecological belts. The three scenarios provide costs of implementing free care under low, medium and high demand projections. The total cost to be incurred by districts hospitals with the assumption of the above mentioned unit cost implies that additional cost on personnel, drugs and other non-personnel items will be maintained at the same quality level they were during 2008.

³ The unit cost for in patient discharge comprised of 75, 12, 14 percent component for personnel cost, drug cost and non-personnel cost respectively. These figures were 63, 17, 20 percent for OPD and; 70, 13 and 17 percent for emergency discharge respectively. These costs included recurrent cost only for covered curative services as well as maternity and reproductive health care services such as CS and SAS. The cost of fixed capital has not been included.

Scaling up options

Option 1: Provision of Universal Free Care at DHs

The medium scenario of the universal free care indicate that 28, 47 and 25 percent of the total cost are incurred on in-patients, out-patients and emergency patients respectively for Nepal with variance on these figures by ecological belts, Table 16.

Table 15: Average cost of universal free care at District Hospitals (Medium Demand Scenario projections for 2010/11)

Service Category	Average costs in Rs. thousand			
	Mountain	Hill	Terai	Nepal
IP	3867	3244	5958	3906
OP	5422	6217	8764	6424
Emergency	2780	2277	7833	3400
Aggregate cost	12069	11738	22555	13730
Program cost	144828	375611	360879	823811

Program cost: refers to the aggregate cost of scale up option of program in all relevant districts (16 mountain, 32 hills and 12 Terai); all other costs are average figures: Original table with Low, medium and high demand figures are provided in Annex tables.

The average cost to be incurred by a district hospitals under medium demand scenario is Rs. 13.7 million at 2010/11 price. The total cost of the programme of universal free care costs at district hospitals comes to Rs. 824 million at 2010/11 price (Table 16).

Table 16: Additional Cost of Universal Free Care at District Hospitals (Low, Medium and High Demand Scenario projections for 2010/11) Rs Thousand

Service Category	Without Programme	Cost of Programme			Additional Cost		
		Low	Medium	High	Low	Medium	High
IP	3073	3699	3906	4115	626	833	1043
OP	5170	6112	6424	6739	942	1254	1569
Emergency	2340	3134	3400	3666	794	1060	1325
Aggregate cost	10583	12944	13730	14520	2362	3148	3937
Program cost	634952	776663	823811	871196	141711	188860	236245

The cost of an average district hospital without programme under normal demand scenario is estimated at Rs. 10.6 million at 2010/11. The cost to be incurred for free care would range between 13 to 14.5 million per district hospital. Accordingly, an additional cost of Rs. 2.4 to 3.9 million need to be provided to the district hospitals on an average. This makes an additional 29 to 35 percent resource needed to be allocated ranging from low to high demand scenario for each district hospital. The additional program cost

ranges between Rs.142 to 236 million at 2010/11 prices depending upon demand scenario.

Option 2: Provision of Free Care at District Hospitals to children under 5 years

A second scaling up option, a practice much emphasized to reduce child mortality rate with several long term advantages on human development (health of the child is directly related to the human development index through life expectancy, literacy and earning potential in the future). The cost estimate provided an estimate of the additional resource that would be necessary to ensure access to health care to all children less than 5 years at DHs in Nepal.

There are no unit cost figures of health care at hospitals for child under 5. Thus the unit costs of average patient have been used. The populations under five years of age constitute around 15.54 of the total population. The estimate shows that district hospitals require around 2.1 million for treatment of patients who are children below 5 years. The total cost of the program is estimated at 128 million at 2010/11 price (Table 18).

Table 17: Average Cost of Free Care for Children under 5 Years (Medium Demand Scenario projections for 2010/11)

Service Category	Average costs in Rs. thousand			
	Mountain	Hill	Terai	Nepal
IP	601	504	926	607
OP	843	966	1362	998
Emergency	432	354	1217	528
Aggregate cost	1876	1824	3505	2134
Program cost	22506	58370	56081	128020

Program cost: refers to the aggregate cost of scale up option program in all relevant districts; all other costs are average figures

More important is the additional cost that needs to be incurred under various demand scenarios. Accordingly, additional 22 to 29 percent additional resources compared to resources being spent on children below five years at district hospitals need to be allocated to achieve this objective.

Table 18: Additional Cost of free care for children<5 at District Hospitals (Low, Medium and High Demand Scenario projections for 2010/11; in Rs. thousand)

Service Category	Cost Without Programme	Cost with Programme			Additional Cost		
		Low	Medium	High	Low	Medium	High
IP	477	575	607	640	97	130	162
OP	803	950	998	1047	146	195	244
Emergency	364	487	528	570	123	165	206

Aggregate cost	1645	2012	2134	2256	367	489	612
Program cost	98672	120693	128020	135384	22022	29349	36712

Program cost: refers to the aggregate cost of scale up option program in all relevant districts; all other costs are average figures

The cost of this scaling up option to the government came between Rs. 2 to 2.3 million per hospital depending upon demand scenario. Accordingly additional resource of 22 to 37 million would have to be earmarked to implement this scaling up option. In consideration with the benefit from this practice, the cost is not very high. The additional cost of this scaling up strategy is around 6.5 times lower than the universal free care strategy.

Option 3: Provision of Free Care to all population at District Hospitals in Mountain Ecological Belt

A third strategy for scaling up identified by the study was ensuring free care at district hospitals in the mountain ecological belt. The mountains are poorly developed due to low economic opportunities and hardships imposed by harsh climatic condition and rugged terrain. The human poverty index is the highest in this ecological belt (43.3 against 35.4 for average Nepal; UNDP, 2009). Significant area of the ecological belt is covered by snow and narrow foot trails are the only means of access to most of these regions. In consideration with the low level of utilization and poor ability to pay, many district hospitals in the mountain regions were reported to be providing almost free care informally in these hospitals (based on interaction with health policy makers). Thus formalizing free care with provision of additional resource would be an important strategy to improve the health status of the population living in these areas.

Estimates of the average cost of the programme and additional costs to be incurred were worked out for 16 district hospitals in the mountain ecological belt.

Table 19: Average additional cost of free care in District Hospitals at mountain ecological belt (Low, Medium and High Demand Scenario projections for 2010/11)

Service Category	Without Programme	With Programme			Additional Cost		
		Low	Medium	High	Low	Medium	High
IP	3045	3663	3867	4075	618	822	1029
OP	3693	4990	5422	5854	1296	1729	2161
Emergency	1925	2560	2780	2993	635	855	1068
Aggregate cost	8664	11213	12069	12922	2550	3405	4258
Program cost	138618	179415	193104	206751	40797	54487	68133

Program cost: refers to the aggregate cost of scale up option program in all relevant districts; all other costs are average figures

The average unit costs in the mountains are quite high due to cost of transportation of drugs and supplies and remote area allowances provided to staffs. The mountain DHs are

expected to incur Rs 8.7 million per district hospital in 2010/11 under existing situation. Introduction of free care at district hospitals would incur them an additional Rs 2.6 to 4.3 million per hospital and consequently between Rs. 41 to 68 million as a program cost depending upon demand response. The additional cost with medium demand projection is about 30 percent higher than the cost without programme (Table 20). The cost of the medium demand projection likewise and is 2.3 times lower than the expected cost for universal free care in all district hospitals.

Incremental Cost of Various Scaling up Options

Based on the projection of the demand for health services at district hospitals and the respective costs, incremental cost of various scaling up-options can be estimated. This will provide policy makers with the incremental cost of each of the scaling up options with normal growth without program as a baseline. Accordingly, universal free care will demand between 22.3 to 37.2 percent incremental cost over baseline cost without programme. These figures for free care to children below five years is 3.5 to 5.8 percent while it is 10.8 to 14.8 percent for free care at district hospitals in the mountain ecological belt.

Table Incremental Costs of Various Scaling Up Options (in percentage over without programme scenario)

Scaling up-options	Low	Medium	High
Universal free care	22.3	29.7	37.2
Free care for child<5 years	3.5	4.6	5.8
Free care for Mountain DHs	10.8	12.8	14.8

Source: Author's calculations

Projected growth of utilization in 2010/11 with various scaling up options

As an indication of what the number of additional patients would be to be served under these three scaling up options under in-patient, OPD and emergency care, the number of patients expected to increase is provided in the table below. This will help health policy makers and health care service providers to plan for infrastructure, human resource and provision of drugs and supplies if these scaling up strategies are to be adopted.

Table 20: Percentage Change in patient number by three scaling up strategy under high, medium and low increase scenario in District Hospitals (projection for 2010/11)

Service category	Universal free care*			Free care for child<5**			Free care in Mountain district hospital***		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
IP	22	29	37	22	29	36	20	27	34
OPD	20	26	33	20	27	33	35	47	59
Emergency	47	63	78	46	62	77	33	44	56

* Increase in average patient number in district hospitals; ** Increase in child patient below 5 years of age

**** Increase in patients in district hospitals in Mountain ecological belt*

The estimates show that highest patient pressure will have to be borne by the emergency service under all scaling up options (Table 21). This is quite natural as hospital registration for OPD hours is limited to 3-4 hours. People travelling long ways to the district hospitals which are located at the district headquarter arrive at off OPD hours.

Conclusions

Upgrading public health services is a continuous process and health economics tools help to produce information for informed decision making to make health services equitable, efficient and affordable. Demand projections in the absence of elasticity of demand data are difficult. However, in the absence of available data, methodologies need to be worked out that best reflect the actual scenario. The present study employed the demand projection for health care from the targeted free care at district hospitals started in 2008 to estimate the demand for health services under three scaling up options.

The first scaling up options of universal free care estimates show that 22, 30 and 37 percent additional resources have to be allocated to ensure free care at district hospitals under the low, medium and high demand scenario compared to without programme scenario. The age group based targeting of free care to children below 5 years in all district hospitals require 3.5 to 5.8 percent additional resources compared to without programme scenario. Likewise, the geographical targeting with free care to all patients in the mountain ecological belt require between 10.8 to 14.8 additional resources compared to without program scenario.

If we consider medium scenario, the cost of implementing the geographical targeting is 2.3 times lower than the universal targeting while the cost of age group targeting to children below five years is 6.5 times lower than the universal free care. Since the age group targeting automatically covers all three ecological belt and is relatively less resource demanding, the government may start up with this scaling up strategy.

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Chapter 4

Study of Free Health Care Policy in Referral Hospitals

Central; (NAMS and Bir Hospital)

Zonal ; (Koshi and Lumbini)

Introduction

In the background of free health care policy at SHP/HP, PHCC and District hospitals for target groups, there are policies targeted specifically for the poor and disadvantaged groups, including safety net for referral cases, safety net for catastrophic illnesses with cash support of (Rs. 50000), - and also the treatment support under the social security programs at the referral hospitals (Zonal/regional/sub-regional and Central). In this context, operational guideline has also been developed in 2007 for specific policies implementation as per the level of referral hospital. The MoHP allocated additional budget to implement the free health care on the basis of the operational guideline *for Free Health Care for Poor, Destitute and other Target group in Central, Regional, Sub- Regional and Zonal Hospitals 2064*".

The objective of the program stated in the guideline are 1) To ensure the access to health care for target groups, including poor, disabled, and elderly people; 2) To make universal access to health services providing essential health care in order to reduce morbidity and mortality rates and improve health status of people; 3) To develop effective coordination and referral services between central, regional, zonal, district and local level health facilities and 4) To ensure the availability of specialised and regular quality health service. The contents of the guideline are 1) Definition of target groups, 2) Process of decision making for free health care for target group, 3) Management of referral patients, 4) Organizational management, 5) Provision of total free or partial free services 6) Financial management, 7) Management of medicine and other medical supplies 8) Recording and reporting system 9) Monitoring and evaluation, and 10) Orientation program, for coordination and responsibility.

This chapter attempts to describe the present situation and the implementation status of the policy.

General Objective

The general objective was to conduct situation analysis to explore the management process of free health care service in secondary and tertiary referral hospitals (Koshi and Lumbini Zonal / Central: NAMS Bir Hospital).

Specific objectives

- To describe the process of free health care for target groups (poor), tackling/receiving of the referred cases,
- Utilization of total budget available for free health service from the Government source.
- Availability of additional source of fund for free health care (type of source and total amount in a year)

Methodology

Interview/Record reviews

- Review of hospital records and annual reports
- Review of operational guideline of free health care management in referral hospitals(central, regional, sub-regional and zonal)
- Mechanism of safety net to ensure the accessibility of FHS for target groups
- Utilization of free health care fund in selected zonal and central hospitals

Findings and Analysis of Referral Hospitals

4.1. General background of study Hospitals

4.1.1. National Academy of Medical Science, Bir Hospital, Kathmandu

Bir Hospital , established in 1889 A.D, as the first ever hospital in Nepal is now a tertiary level hospital with 450 beds, a very busy emergency and casualty department ,equally busy OPD with most of general services with, sub specialties and few super specialties. In 2008/9, the total OPD attendance in this hospital was around 325,923, total emergency attendance was at 48598 and 10261 patients were admitted into various departments. There are 22 departments providing general and specialized services, which include Cardiology, CTVS, Dental, Emergency, ENT, Eye, Gastrology (med), Gastro surgery, Gastroenterology, general practice, Gynecology, Liver, Medical, Nephrology, Neuro medicine, Neuro surgery, Orthopedics, Plastic Surgery, Radiotherapy, Skin, General surgery and Urology. The price list is given in Annex 6.

Table 21: Budget for free care and service utilization in NAMS, Bir Hospital

Source	Amount NRS	
Government total budget	250000000	policy implantation for all patient from dalit community Poor patient form other community using safety net.
Internal income (cabin, renting house for medical shops) students fees)	100000000	
Additional fund for free care	1 0000000	

(as per MoHP staff)		
Free service user in 2008/9	All service users for free OPD ticket and general bed.	total free or partial free
Christina dispensary (serving for last 20 years)	340000 per month (served 11572 patients 33204 times in 2008)	Support for free medicine

*In Bir Hospital the special policy on the **safety net in Catastrophic Illnesses- includes Cash Support**. In this scheme cash assistance up to Rs 50,000.00 is provided for cases of chronic renal failure, cancer, chronic heart problem, Alzheimer's disease & Parkinson's disease and paraplegia due to spinal injury. The total budget available for this policy is Rs. 47,00000. This scheme was functioning as per the operational guideline, 2064. The special guideline is developed to manage this fund. The amount is sanctioned to patients who are recommended by the concerned local authorities as being extremely poor, and also on the basis of the recommendations made by the specialist as per the diagnosis.*

Process of accessing the free health care in Bir Hospital

Free OPD/Emergency Service

The patients who come to the hospital claim as poor and tell the duty staff that they cannot afford the cost of services. They are then required to fill-in the free health care requisition form. The duty staff assesses the economic condition of the patient on the basis of the information he/she furnishes using the format. When the patient/s get final approval for free care then the patient is given free OPD ticket which entitle him to receive all services free of charge, including diagnostic and the medicine from Christine Dispensary (volunteer organization collecting money from sponsors).

Free Indoor service

There are two types of beds in Bir Hospital; the paying cabin and the general beds (300). The patient who uses the paying cabin should pay all services as per the rate of user fee. For patients who use the general bed all services, including bed, food are free of charge except the medicine and the other medical supplies which the patient has to pay for. But, for the poor patients, the Christin Dispensary provides the medicine, and other medical supplies free of charge,. On the recommendation of duty staff, and as per the prescription.

4.1. 2. Koshi Zonal Hospital, Biratnagar

Koshi Zonal Hospital is located in Biratnagar sub metropolitan, which is located at 1 hour distance from the east west highway. . It is the referral hospital for all the districts of Koshi Zone; namely Morang, Terathum, Shankuwashava, Dahnakuta and Sunsari in eastern region.

The Hospital was established in 1947 BS with 14 departments and 11 wards with 350 beds. The departments are Medical, Surgical, Gynae and Obs., Orthopaedic, ENT, Pediatric, Skin, Psychiatry, Eye, and Dental. The indoor services are running with all departments, except dental. Besides these services, the other facilities are Laboratory,

USG, endoscopy, X-ray, ECG, Audiogram, Emergency service. The price list of hospital services is given in annex 7.

Table 22: Budget for free care and service utilization in Koshi Zonal Hospital

Source	Amount	policy implantation for
Government Free health budget	4000000	all patient from dalit community Poor patient form other community using safety net.
5% of total Government budget for free care	1800000	
Free service user in 2008/9	8400 (investigation)	total free or partial free
	Medicine supply	record could not access

4.1. 3. Lumbini Zonal Hospital (LZH), Butwal

LZH lies in Butwal Municipality, which is located at the bank of Tinau river. Lumbini Zonal Hospital is one of the most developed and richest zonal hospitals of Nepal. It is centrally located for most of the districts of Lumbini Zone and also for the western region. Most of the patients from Lumbini Zone and those from Pyuthan, Dang, Syangja, Salyan, Rolpa & Dolpa etc, districts come here to seek the medical advice. It is the referral center of the above districts, so it covers the wide area in terms of the treatment of the patient.

The Hospital was established in 1967 BS with 6 beds, having 2 doctors. After construction of its own building, the hospital started its operation with 24 beds in 2024 BS. At present, 136 beds are available but the sanctioned beds are only 100; the rest 36 beds are added from the Hospital development committee. At present, the following OPDs are being run in the Hospital with five departments;

Medical, Surgical, Gynae and Obs., Orthopedic, ENT, Pediatric, Skin, and Dental. The indoor services are running with all departments except dental. Except these services, the other facilities e.g. Laboratory USG, X-ray, ECG, Audiogram, Emergency service, Intercom etc are provided throughout 24 hours. List of service charge of LZH is given in annex 8.

Table 23: Budget for free care and service utilization in Lumbini Zonal Hospital

Source	Amount for free health care	policy implantation for
Government Free health budget	2440000	Poor patient using safety net.
5% of total Government budget for free care	2000000	
Hospital internal source (total 4 corer)	2796317	for staff and patient recommended for hospital development committee even cabin service available in free in this category

Total	7236317	
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Table 24: Lumbini Zonal Hospital service user's record

Service	2065/66
Total Inpatient	12670
Total OPD	1,13786
Total emergency	32703
Total patient	1,59,159
Total patient of free treatment	26227(16.5%)
Total cost of free	1,48,36,322 (22.6%)

Source: Medical Record LZH

4. 2. Process of implementation of free health policy in study zonal (Koshi/Lumbini) and central (Bir) hospitals

The operational Guideline of free health care for referral hospitals

- The target groups are eligible to get free medicine services in referral hospitals as per the free drug list mentioned at district hospitals.
- Other services, all free or partially free are decided on the basis of assessment of the patients' economic condition.
- The patients from target groups referred from the various VDCs or districts to the referral hospitals should be reassessed using patient economic condition assessment form given in annexes of the guideline by social service unit and on the basis of the assessment e decisions are made for all- free or partially- free care.
- The patients who visit without following the referral process to the referral hospitals also get free care as per the policy of district hospitals after a thorough assessment of their economic condition to see if they are eligible for free health care services.
- Ultra poor and the destitute will only get specialised (more than district) services, all free, after their economic condition is properly assessed. Other category of target groups such as poor, elderly, disabled, FCHV will get partial free care (if they do not identify themselves as ultra-poor or destitute)

In practice

- As the patient claims that he/she is poor then the duty staff asks them to fill the format to request for free health care. The duty staff then assesses the socioeconomic condition of the patient using the format. The format is more or less similar to operational guideline.
- The form then is forwarded to medical superintendent to get the final approval. By the time the patient starts to get services.
- There is no social service unit. Therefore the decision regarding free health care is finally approved by MS as per the assessment and recommendation of the duty staff (nurse/doctor/paramedical)

- Special committee has not yet been established in zonal hospitals.
- There is no special provision for referred cases in practice as mentioned in guideline.
- The staffs are not much aware about the operational guideline.

4. 3. Management of free health care policy in referral hospitals

The operational Guideline of free health care for referral hospitals:

The guideline has clearly outlined the format to be used by users for free health care and the management in annexes sections. These forms are y 1) patient economic status assessment format, 2) budget plan as per fiscal year 3) free health care request form,4) expenses reimbursement form for patient 5) record format for free service users (target group profile and utilization of services) 6) financial report format ,7) social security program reporting format (quarterly), 8) emergency service register, 9)s Social security program reporting format (monthly) and 10) i Indicators of the monitoring and evaluation.

In practice:

The recording of the free health care is not maintained as per the guideline both for service users and by the financial managers. It was so difficult to access the exact record of free care users as per the policy. The monitoring/evaluation of the program is not done in a regular basis. Thus, the analysis of free service users as per the type of service and the amount invested for the free service was not possible. The hospital accountant mentioned that *all the services received from wards using general bed are free of charge. The in come from room rent, cabins charges and the government budget were used up for the care of general patients and for payment of the salary of e doctors and staff. There is a common account system in practice for academic programs of the NAMS and hospital service delivery.*

4.4. Issues and Challenges to implement the policy guideline (manager's perspectives)

- The mangers are not aware about the operational guideline
- Medical superintendent is little aware about the guideline but does not seem positive to implement due to lack of additional staff, budget and space to establish social service unit.
- The medical superintendents were very much concerned about the free health care policy and additional requirement of budget for development of institutional capacity such as additional human resource, rooms and bed as per the patient load. They mentioned that the free maternity care policy already overloaded because there is no additional budget to add human resource and beds. MS of Lumbini Zonal Hospital said that *"now we have to cope the daily load of maternity care as much as those of the weekly ones, hence, we need to expand*

the hospital to 300bed capacity and add human resource to cope with the ever increasing patients load".

Chapter 5

Study of User Fee Policy of Cooperative Hospitals in Kathmandu

Introduction

Cooperative Hospitals are established in various places of countries under the Cooperative Act. The financing scheme is the fund rising from the shareholders from the community. The hospital is mainly non-profit and dedicated to serving the people with cheaper or subsidized rates. They also make special policy for the shareholders or for their families. The principle of financing is community participation in health care. Government role is to provide approval to establish the hospital and do regular monitoring as per the standard of operational guideline to maintain the quality of care. This study will highlight accessibility and the affordability of the services and analyse the resources and benefits to the people.

Objective

Situation analysis on the cooperative- based health facilities/ hospitals and policy and mechanisms of free health service delivery

Methodology

Key informant interviews with concerned authorities of the hospitals under study
Literature and record review

Findings and Analysis

5.1. Stupa Community Hospital:

Stupa Community hospital is providing service for the last 7 years. The hospital has Medical, Surgery, ENT, Eye, Gynae, Maternity, Pediatric, Dermatology, Orthopedic, and Dental OPD departments. It has the capacity of 55 beds (52 general and 3 cabins). It is equipped with 24 hour emergency facility and with most of the diagnostic services. At present, 12 (5 full time and 7 part time) doctors, 28 Nurses, 3 CMAs, 1 HA, 14 Staff Nurses, and 8 AMAs are working in the hospital.

Source of fund: Community member fee and user fees are the main sources of fund In 2008, the organization collected Rs. 28448390 from 374 share holders and Rs. 7491495 from service user fee.

Service utilization:

In last three years, the numbers of service users were as follows:

Year	OPD	Indoor	Emergency
2063/64	5196	904	3835
2064/65	5782	1055	2665
2065/66	7640	852	2958

User fees policy:

Regarding user fee policy, the share holders and staff of the hospital get discounts in different services, which vary from 5% (in medicine) to 50% (in bed). There was not any written policy of charity for poor and DAG people. However, the hospital is providing free services for a few poor people. The hospital director decides cases for free treatment: diagnostic plus general care. The service charges of Stupa Community Hospital are given in Annex 9.

5.2. Manmohan Memorial Community Hospital

The findings of the Manmohan Memorial Community Hospital are mostly based on the review of Hospital report "*NHSCL (2009) Report of the Third General Assembly, Nepal Health Service Cooperative Limited*" and interaction with the chief of the hospital.

Services:

The hospital has the facility for Radiology, USG, IVU, Endoscopy, Echo Cardiogram, Audiometry, Spirometry, ECG and EEG services for diagnosis. Hematology, microbiology, biochemistry, immunology, histopathology and cytology, virology and serology services are also available in its Pathology services. The hospital also provides ICU services, physiotherapy, DOTS, immunization, health check packages and family planning services. It is providing IP services with 100 beds capacity, 24 hours emergency and 7 hours OPD services along with specialist's services for general medicine, surgery, ENT, pediatrics, mental diseases, eye, neurology, gynecology and obstetrics, orthopedics, dental, urology and cancer treatment.

Source of fund:

Manmohan Memorial Community Hospital was established in 2006 with share amounts collected from shareholders (Rs. 0.1 to a maximum of 1 million) . There are 955 shareholders in April 2009. The hospital established under Nepal Health Service Cooperative Limited (NHSCL, 2009). Act.

The special provision of services provided to share holders consists of:

- Free health services and upto 3 beds are allocated to shareholders above 75 years of age
- A discount of 20 percent and 15 percent are provided on all medical costs to shareholders and their family members. The shareholders' children studying in the affiliated colleges of the hospital receive 10 percent discount in educational

- fees. Also, 5 percent discount is provided for drugs in the pharmacy of the hospitals.
- Shareholders spending more than 0.1 million in the hospital is provided with a 10 percent refund and honored in the general assembly.
 - Patients on referral by shareholder members are provided a 10 percent discount in all expenses.
 - A 30 percent discount to shareholder members for their overall health check-ups costs once a year is another benefit
 - A 10 percent discount is also given to children of shareholders studying in the Institute run by the cooperative once MBBS study starts

Out-reach services: free health camps in Dailekh, Sindhupalchowk, Dhading. The hospital has planned to establish a fund for the treatment of the poor and helpless in the future. There is no clear policy regarding health care to the dis-advantaged groups, except some free treatment based on the assessment of the patient by hospital authority at present.

Table 25: Services provided to inpatient and OPD visitors

Service	2063	2064	2065
OPD	13186	22167	23009
IP	928	2032	1984

(No separate data on Emergency, might have been included in OPD)

The Cooperative has been running the Minoan Memorial Institute of Health Sciences which offers courses for BSc in nursing, Bachelor in nursing, Bachelor in public health, Bachelor in pharmacy, Staff nurse, Health assistants and Lab technician courses. At present, there are 304 students studying under these courses. The hospital has also been running a Manmohan Memorial Saving and Credit Cooperative.

Chapter 6

Conclusion and Recommendation

6. 1. Ensure infrastructure in District Hospital and Referral Hospital

The scaling up of the free health care at district hospitals would increase the demand for quality service and so will the utilization of facilities be increased due to improved and easy access of people to these services. The scaling up of free health care at district hospital is contingent upon the expansion of the existing infrastructures, physical conditions and human resources are indeed the critical elements to be taken into consideration if we intend to promote universal access to health care. The **strengthening of infrastructure** for OPD, emergency and indoor services with adequate equipment must be ensured for the time being to address the increased size of service users due to free service delivery. Other equally important factors to be considered could be the timely and adequate budget allocation and its disbursement, formulation of informed and practical policy and operational guidelines, as well as their effective implementation accompanied by constant monitoring. In the absence of these efforts the existing facilities neither ensures the sustained availability of quality health care nor would help realize the goal of the universal access to health .

6. 2. Ensure adequate Human Resource

Availability of skilled human resource to provide services is key to the success of the present program, which must be ensured. At present, the government has managed to make available at least one medical doctor for each of the district hospitals under study, and in some districts there are more than 3 of them. This has developed positive impact on the patient's expectations. But as per the government policy, district hospitals must serve by and MDGP who can handle minor surgery cases, conduct caesarian section and render other important medical services, as and when needed. In gorkha district hospital an MDGP doctor is available who is very keen to expand the surgical services, he told that he was very soon going to start CS services there.. This shows that qualified doctors can do much with the help of other medical officers and the SBAs. In Rupandehi district hospital patient flow is found to be very high when the OPD of Gynaecologist is running. One pediatrician and one MDGP from this hospital are deputed to other hospitals. As a result the other doctors do not seem quite motivated to work. So, CS service is not available in Reupandehi, despite the fact that there is an operation theatre and other infrastructure facilities already in place in the hospital, with support of the DFID. In Baitadi, there is no government -deputed permanent medical superintendent working. The temporary officer may obviously not be well motivated to develop the hospital services in an effective and sustainable manner.

In this context, the government must ensure the 24 hours availability of permanent medical officers and skilled doctors. At least, one MDGP, one Pediatrician and one

Gynecologist/ Obstetrician, with adequate number of SBAs and anesthetic assistant are basic human resources required to cope with the growing demand of patients as the free health policy has also been expanded to those services.

6. 3. Availability and affordability of services at District Hospitals relevant to the free policy;

The basic health service, including medical services (OPD/Emergency/ Inpatient Services, SAS/PAC, minor surgical care, normal and assisted Delivery Care) , Diagnostic services Routine laboratory services, Routine radiology services, USG and ECG service are available in four study hospitals .In Baitadi and Bardiya districts USG, ECG and lab test for biochemistry are not available.

All the diagnostic services are offered on payment of the user fees and the rates are not so cheap. The free health care can be scaled up abolishing the user fees in package for SAS, PAC, minor surgical procedure and diagnostic services. At the same time, the missing services have to be made available in Baitadi and Bardiya. Caesarian section services are said to be free but were not available in all the study districts with the result that patients, specially mothers do not perceive any relief, nor derive any benefit from this policy when they have to visit other hospitals trequiring a long travel during labour pain.

6. 4. Usefulness and share of out of pocket expenditure of the patient

During the course of our interactions and interviews with doctors and patients it was revealed that out of the 40item free medicines, only 31of them were found to be directly prescribed to patients, and among them only 15 items are most useful. Some medicines are not used by some districts. The injectable and antisepticmedicines are only useful for services at the inpatient and emergency department and for the dressing of wound. In this context, the prescribers do not perceive that list because patients demand free medication, , as per the prescription. It was also known that only about 29% of patients are found to have received free medicines, . Average cost for OPD (Median) was reported to be around Rs 93 with quartile values at Rs 50 and 200 and Emergency average cost (median) stood as Rs. 183 with quartile values Rs. 55 and 342. Similarly, inpatient service average cost (median) was reported to come around Rs. 501 with quartile values at Rs. 215 and 1350.

The budget for free health care was found to have been used mostly to purchase medicines for target groups, which are not included in the free medicine lists. The high demand for free medicines raise the questions whether there is a lack of budget for medicine or the available medicines are not used rationally. Therefore, it has to be studied in detail to find out the usefulness and the rationale use of medicine by the prescribers and also the behavior and reaction on, and compliance with the treatment.

6. 5. Service utilization in study DH and Promotion activities

The flow of patient in the remote and hill districts are less in comparison to terai districts. The variation of patient flow and service utilization also vary from the location of hospital and initiative taken to develop awareness program to increase the chance for facilitating easy access to health care. The management should be working to organize more advocacy and coordination programs and activities with concerned stakeholders to use effectively the available health services and also for the promotion of health care there.

6. 6. Strategies to scale up Free Health Service at District Hospitals

The three scaling up options with three demand scenario provide alternatives for scaling up of primary health care at district levels. As stated earlier, peripheral health facilities have already been providing free health care. Universal free care at the DHs completes the target of primary health care envisioned in ensuring access to primary health care in the health policy.

The medium demand scenario is expected to be a more realistic projection of the demand under all three scaling up strategies.

The universal free care at the DHs is a relatively resource demanding strategy requiring around Rs.11 million per DH, and a total program cost of Rs. 647 million with an additional need of Rs. 185 million at 2010/11 price, under medium demand projection if this scaling up strategy is implemented. The other alternative is the free care to children below five years, which would require an additional budget of Rs.0.5 million per DH and an additional program cost of Rs. 287 million under medium demand scenario. This cost is 6.5 times lower than the universal free care strategy.

The third scaling up strategy of providing free care at DHs in the mountain districts requires an additional Rs. 2.2 million per DH and another additional program cost of Rs. 36 million for implementation under medium demand scenario. This cost is 5 times less than the cost of the universal free care strategy.

The government can start up with the medium cost. This is a highly beneficial health care strategy of free care to children below five years to start with. This will automatically address the scaling up strategy for the all regions including the mountain regions, though partially

6.7. Establishment of Social Security Unit to ensure accountability so as to provide services, as per the Operational Guideline of free health care in the district and referral hospitals

As has been often stated in earlier paragraphs that most of the medical staff and doctors were found not adequately aware of the Operational Guidelines, it is therefore suggested that orientation program be urgently conducted to key managers of the district and referral hospitals to sensitize and make them fully informed about the contents and provisions of the "Operational

Guideline”. Concurrently, specific policy and program should be planned to establish social security programs in each of the referral hospitals as per the need of human resource and budget. The social security unit should work to ensure the gender and social inclusion aspects are fully addressed. There should be a clear mechanism to manage the entire program in an accountable and transparent manner. Likewise, it is equally important to bear in mind that the available resources, such as medical equipment and supplies, medication, financial resources, hospital infrastructure and purchasing of drugs etc are used in a cost effective and efficient manner.

6. 8. Cooperative Hospitals

The cooperative hospitals are providing general and special health services through OPD, IP, Emergency and diagnostic services. The share holders are benefitted from services with a range of free and subsidized policy. The policy for poor patients seems to be available but a clear policy with regard to how these policies were implemented in favour of the poor patients is not available. The user fees are found more expensive than in the public sectors. So, general people are to pay more as in private hospitals to avail of the services in these hospitals..

6. 9. Strengthen the Management of National Free Health Program

At present, the national free health care program is being managed by Free Health Section of the Management Division in the Department of Health Service. There are only three staff responsible to monitor and coordinate the activities and programs of all the districts. Quite obviously, therefore, the Section, understaffed as it is, is facing many challenges to manage such a national scale health program., which included, among others, having to oversee the smooth and timely supply of all categories of medicines, assignment and deputation of required human resources in the hospitals as well as to supervise the quality and the availability of services etc. At the same time, regular monitoring requirement of the free care policy and programs has considerably overburdened the scant staff of the free health section. In this context, it bears to mention here that the Government has already made a policy decision to establish a new Division under the MoHP bringing the three existing sections, the Free health care section, Urban health care section and Environment health section under it in order to institutionalize the Social Security Program . But this policy decision has yet to be operationalised; the much talked about Division has not been established yet. Therefore, it is suggested that if government really wants to implement and scale up free health care systems effectively, then the above new Division-with the three sections under it must be created and made operational without further delay. Needless to say that the success of the existing free health program which aims at meeting with goal of providing universal access to health ultimately is overseen by a stand alone and well equipped Division with sufficient number of well experienced, highly qualified and skilled medical staff.

Annex

Annex 1: Study Tools for data collection

Tool 1

Observation Checklist of district hospital

<i>Name of Hospital</i>	<i>Date of observation</i>	<i>Name of observer/interviewer</i>	Name of informant
	OPD	Emergency	IPD
Room/Space			
Supplies			
Human resource			

Tool 2 : Format for Record review

Tool 2.1.

Rates of Registration, Curative services

<i>Name of Hospital</i>	<i>Date of observation</i>	<i>Name of interviewer</i>	Name of informant
Treatment categories	Price (Rs.)	Percentage out of total treatment	Percentage by total patients in service centers IP OP Emerg.
OP reg fee			
Emergency reg fee			
CAC /PAC			
Normal Delivery			
General Bed charge			
Oxygen /hour			
plaster			
suturing			

Tool 2.2.

Transportation rates and policy for referral cases

Emergency transport service

Rate

Ambulance

Micro

Policy: transport allowance for referred case

Tool 2.3.

Number of patients and free care recipient by fiscal year

District:

<i>Fiscal year (duration)</i>	<i>In-patient</i>		<i>Out patients</i>		<i>Emergency</i>		<i>remark</i>
	Total	Free	Total	Free	Total	Free	
2064/65 (Magh-Asadh)							
2065/66 (Shrawan-Poush)							
2065/66 (Magh- Asadh)							

Tool 2.4
Use of fund available for free health services
Record of 20065/66 fiscal year

District	Total amount received for free care	Lab and X-ray reagent	Drug for fee patient from non free list	source of information
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Tool 3. Lab tests

Name of Hospital	Date of observation	Name of observer/interviewer	Name of informant
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Tool 3.1.
Blood test

S. N.	Test categories (main categories only)	User fee (Rs.)	Percentage out of total blood tests	Percentage by total patients in service centers		
				IP	OP	Emerg.
1.	Widel test					
2.	RA factor					
3.	Blood Grouping					
4.	Urea					
5.	Uric acid					
6.	Creatinin					
7.	Blood total count					
8.	Diff count					
9.	ESR					
10.	Hb					
11.	VDRL					
12.	HIV					
13.	HBS Ag					
14.	Bilirubin					
15.	Blood sugar					
16.	Malaria					
Total Blood Tests this year						

3.2 Stool test

District	Test categories	Price (Rs.)	Percentage out of total stool tests	Percentage by total patients in service centers		
				IP	OP	Emerg.
	Routine test					
	Occult blood test					
Total stool test this year						

3.3. Urine test

District	Test categories	Price (Rs.)	Percentage out of total urine tests	Percentage by total patients in service centers		
				IP	OP	Emerg.
	RE/ME					
	Pregnancy test,					
Total urine test this year						

3.4. Others lab services

District	Test categories	Price (Rs.)	Percentage out of total urine tests	Percentage by total patients in service centers		
				IP	OP	Emerg
1.	semen analysis					
2.	AFB stain					
3.	Mantoux test					
	Total test this year					

Tool 4:
Diagnostic services
Tool 4.1
Radiology record

Name of Hospital		Date of observation	Name of observer/interviewer		Name of informant		
District	X-ray	Price (Rs.)	Percentage out of total x-rays	Percentage by total patients in service centers			
				IP	OP	Emerg.	
Total X-rays this year							

4.2. USG service record

Name of Hospital		Date of observation	Name of observer/interviewer		Name of informant		
District	Test categories	Price (Rs.)	Percentage out of total ultras-sound	Percentage by total patients in service centers			
	Ultra-sounds (USG)			IP	OP	Emerg.	Out side
Total ultra-sounds this year							

Tool 5

Assessment of Free Drug (40 items) availability and use

Name of district:

Source of information:

Date:

S. N.	Medicine	Availability	Use	Purchasing price
1.	Albendazol			
2.	Alprazolam			
3.	Aluminium hydroxide + Magnesium hydroxide			
4.	Amoxyciline 250mg			
5.	Aspirin			

6.	Atenolol			
7.	Atropine			
8.	Benzoic acid+Salicylic acid			
9.	Calamine Lotion			
10.	Charcol activated			
11.	Cap Chloramphenicol			
12.	Chloramphenicol eye ointment			
13.	Chlorpheniramine			
14.	Ciprofloxacin			
15.	Ciprofloxacin			
16.	Ciprofloxacin eye oint			
17.	Clove oil			
18.	Compound solution of Sodium lactate (Ringers' Lactate)			
19.	Dexamethasone			
20.	Dextrose Solution			
21.	Ferrous salt + Folic acid			
22.	Frusemide			
23.	Gamma benzene hexachloride			
24.	Gentamycin Inj.			
25.	Hyoscine butylbromide			
26.	Lignocaine			
27.	Magnesium Sulphate			
28.	Metoclorpropamide inj			
29.	Metronidazole 200mg			
30.	Oral Rehydration Solution (ORS)			
31.	Oxytocin			
32.	Paracetamol 500mg			
33.	Pheniramine			
34.	Phenobarbitone			
35.	Povidine Iodine			
36.	Promethazine			
37.	Salbutamol			
38.	Sodium chloride			
39.	Sulfamethoxazole+ Trimethoprim			
40.	Vitamin B complex			

Tool 6 Questionnaire for Exit Interview

<i>Date of interview:</i>	<i>Name of interviewer:</i>	<i>Name of hospital</i>		Name of respondents
Age of respondents	Sex of respondents	Family of patient Caste/ ethnicity	Education	Occupation of care taker of patient/ patient

Source of income of patient's family	Sufficiency of income in patient family	2. Registration fees	3. Type of service used by patient
4. Drug prescription and purchasing history	5. Place of Drug purchasing and cost	6. If partially purchased drug why 7. Days of hospital stay if admitted inpatient ward	

8. Copy of the Prescription

<i>Name of patient:</i>	<i>Sex</i>	Symptoms:
Date	Age	Lab test advised
X ray advised	USG	Referred any
Name of drug	total days (course)	
Prescriber		

Annex 2: Participants district stakeholder meeting and data review team

1. Nuwakot District Hospital (12th August 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Arjun Sapkota	DHO
2	Mr. Narayan Rai	Lab technician
3	Mr. Deepak Rimal	Free health focal person
4	Mr. Bal Mukunda Dangol	DHO, Statist O
5	Mr. Ram Raja Bhandari	AHA, Assistant to Radiology dept.

2. Gorkha District Hospital (21st August 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Guna Raj Lohani	DHO
2	Mr. Santosh Kr. Jaisawal	Radiology technician
3	Mr. Hari Khadka	Lab Assistant
4	Mr. Madhu Bhatta	Free health focal person
5	Mr. Raheshyam Shrestha	Medical recorder

3. Rupandehi District Hospital "Bhim Hospital" (28th August 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Prayaschit Shrestha	MS
2	Bishnu Gautam	Administration Staff
3	Sarbajit Barai	Med. Recorder
4	Manish Shrestha	Lab. Technician
5	Dhruba Shrestha	Radiographer

4. Inaruwa District Hospital "Sunsari" (6th September 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Daya Sankar Lal Karna	DHO
2	Ram Charita Mehata	Free health focal person
3	Dhruba Ghimire	Radiography assistant
4	Giri Raj Sharma	Lab. Technician
5	Saligram Karki	Lab assistant
6	Tumsa Shrestha	Research assistant

5. Baitadi District Hospital (18 Sep 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Bikram Basaula	Act. MS
2	Mr. Saroj Patel	Radiology Assistant
3	Gyan Raj Sharma	Lab Assistant
4	Dilli Ram Sharma	Stat Assistant
5	Keshav Prasad Gautam	Office Assistant

6. Bardiya District Hospital (20 Sep 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Mr. Gagan Singh HA	Act. -In-charge
2	Devaki Nandan Acharya	Lab Assistant
3	N. K. Sharma	Stat Officer
4	Yogendra Joshi	Radiology Assistant

Annex 3: Participants of Referral hospital

1. Lumbini Zonal Hospital (29th Aug 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. Yam B. Oli	Medical Superintendent
2	Mr. Laxmi Raj Regmi	Medical Recorder
3	Ram Prasad Pandey	Account Officer
4	Ram Sharan Sharma	Pharmacist
5	Gyanu Kumari Bhusal	Admin. Assistant
6.	Mina Somai	ANM on-duty Surgical ward

2. NAMS Bir Hospital (4 Sep 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Prof. C.P Maskey.	VC, NAMS, Bir Hospital
2	Dr. Dhirag Raj R.C	Director
3	Yagyswar joshi	Account assistant
4	Keshav Prasad Prasain	Account officer
5	Shankar Kumar Jha	Free health focal person

3. Koshi Zonal Hospital (4 Sep 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Designation
1	Dr. C.P Upadhyay	Medical Superintendent
2	Devi Prasad poudel	Medical Recorder
3	Ganesh Niraula	Account Officer
4	D. N. Jha	Pharmacist

Annex 4: Participants of national level stakeholders (2nd October, 2009)

<i>SN</i>	<i>PARTICIPANT</i>	Organization
1	Mr. Yogendra Gouchan, chience finance	MoHP, Planning
2	Mr. Lila , Social Security unit	MoPH, Planning
3	Mr. Girairaj Subedi	MoHP, Planning
4	Mr. Parasuram Shrestha	Free health care unit/ Management Division/ DoHS
5.	Mr. Mahendra Shrestha	MoHP
6.	Mrs. Rita Joshi	
7.	Yubaraj Aryal	MoHP
8.	Ghanashyam Pokharel	Planning section/Management Division/DoHS

Annex 5: Socioeconomic background of the DH service users (respondent of exit interview)

<i>1.1. Gender (patient)</i>					
	<i>Men</i>	36 (45.6)	5 (50.0)	4 (22.2)	45 (42.1)
	<i>Women</i>	43 (54.4)	5 (50.0)	14 (77.8)	62 (57.9)
<i>1.2. Caste/ethnicity</i>					
	Bra/Che	35 (44.3)	3 (30.0)	11 (61.1)	49 (45.8)
	Dalit	5 (6.3)	2 (20.0)	1 (5.6)	8 (7.5)
	Muslim	5 (6.3)	-	-	5 (4.7)
	Newar	4 (5.1)	1 (10.0)	3 (16.7)	8 (7.5)
	Tamang/Gurung/Magar	15 (19.0)	2 (20.0)	1 (5.6)	18 (16.8)
	Terai ethnic	15 (19.0)	2 (20.0)	2 (11.1)	19 (17.8)
<i>1.4. Age</i>					
	Children under 13	17 (21.5)	4 (40.0)	3 (16.7)	24 (22.2)
	Adult 14-60	56 (70.9)	4 (40.0)	13 (72.2)	73 (67.6)
	Elderly 60+	6 (7.6)	2 (20.0)	2 (11.1)	10 (10.2)
<i>1.3. Education (lit Ill)</i>					
	Illiterate	27 (39.2)	6 (60.0)	2 (11.1)	35 (32.7)
	Literate	42 (59.8)	4 (40.0)	16 (88.9)	72 (67.3)
<i>1.4. Occupation</i>					
	Agriculture	27 (34.2)	6 (60.0)	6 (33.3)	39 (36.4)
	Business	11 (13.9)	-	2 (11.1)	13 (12.1)
	Labor	9 (11.4)	1 (10.0)	1 (5.6)	11 (10.3)
	Service	10 (12.7)	1 (10.00)	4 (22.2)	15 (14.0)
	Others	22 (27.8)	2 (20.0)	5 (27.8)	29 (27.1)
<i>1.5. Sufficiency of income</i>					
	0-3 months	-	2 (20.0)	-	2 (1.9)
	3-6 months	14 (17.7)	4 (40.0)	3 (16.7)	21 (18.7)
	One year	52 (65.8)	3 (30.0)	6 (33.3)	61 (57.0)
	Surplus	13 (16.5)	1 (10.0)	9 (50.0)	23 (21.4)

Annex 6: Bir Hospital price list of services

<i>Services</i>	<i>Unit price in Rs in range</i>	<i>Services</i>	<i>Unit price in Rs in range</i>
Ambulance	200-400	Liver	10-550
Bed charge	110-1000	Microbiology	25-100
Biochemistry	50-400	Nephrology	125-2500
Blood bank	40-200	Neurology	600-1000
Cardiology	50-3000	Operation charge	2500-8000
CTVs	500-1000	Orthopedics	25-500
Dental	50-800	Parasitology	15-200
ENT	25-300	Physiotherapy	50-100
Gastroenterology	500-4000	Radiology	300-2500
Gastrology	250-500	Radiotherapy	150-5500
Hematology	20-200	Skin	50-400
Histopathology	30-600	Surgery	10-9000
Immunology	50-905	Ultrasound	400
		Urology	400-750

Source: Bir Hospital Account Section

Annex 7: Table 23: Koshi Zonal Hospital price list of services

RTHOPEDIC DEPARTMENT <i>Source: Account section Koshi Zonal Hospital</i>				
Bed Charge	Rate (Per Day)	1	Plaster with Anesthesia	DAY CASE CHARGES
General Bed Charge	Rs. 50	A	Upper Limb	Rs. 250
Double Bed Cabin	Rs. 200	B	Lower Limb	Rs. 500
VIP Cabin	Rs.2000	2	Plaster without anesthesia	
PAYING CASE OPERATION		A	Upper limb	Rs. 200
Major Operation Package Service	Rs. 7500	4	ITU	Rs.700
Intermediate Operation Package Service	Rs. 6000	B	Lower limb	Rs. 400
Minor Operation Package Service	Rs. 3000	3	Hip-spica Cast:	Rs. 600
		4	Plaster Removal charge	Rs. 50
		5	Intra-articular injection	Rs. 60
		6	Incision and drain	
		A	With GA/RB	Rs. 500
		B	With Local	Rs. 300
		7	Dressing Charge	Rs. 50 75

PHYSIOTHERAPY TREATMENT	Current Course 10 Days	Current Per sitting Rs.	PHYSIOTHERAPY TREATMENT	Current Course 10 Days	Current Per sitting Rs.
Short Wave diathermy	400/-	40/-	Chest Physio	250/-	30/-
U/S Therapy	400/-	40/-	Cervical Electric Traction	400/-	45/-
Intra-Red Heat	250/-	30/-	Lumber Electric Traction	500/-	60/-
Steam Pack (Hot Pack)	200/-	20/-	ICE or cold Therapy	100/-	15/-
Paraffin Therapy (Wax Bath)	400/-	45/-	Plaster – Arms and Short Leg	100/-	125/-
Muscle Stimulation	500/-	60/-	Plaster – Long Leg full Plaster	200/-	250/-
Trans Cutaneous Nerve Stimulation	400/-	40/-	Plaster – Hip Spica	400/-	500/-
Hemiplegic Pt. Exercises	700/-	75/-	I & D Local	50/-	60/-
Cervical Exercises	250/-	30/-	I & D GA	200/-	250/-
Back Exercises	250/-	30/-	Debriderent & Suture	200/-	250/-
Shoulder Exercises	250/-	30/-	Dressing	10/-	20/-
Exercises for fracture case	250/-	30/-	Hyjection Service	50/-	75/-

Source: Account section Koshi Zonal Hospital

Annex 8: Lumbini Zonal Hospital price list

OPD Service New patient 10/-
Old patient 5/-

USG	350/-	PCV	15/-
X-Ray(12x15)	110/-	ESR	10/-
X-Ray 12x10	100/-	Reticulocyte	25/-
X-Ray 12x8	100/-	RBC	20/-
ECG	125/-	Platelets	20/-
Endoscopy	375/-	BTCT	20/-
Patient Admission		PT	70/-
General	25/-	Blood Sugar	50/-
Cabin	300/-	Blood Urea	50/-
Operation		Serum Creatinin	60/-
Cabin Major	2500/-	Serum Bilirubin	50/-
Cabin Intermediate	1800/-	SGPT (ASG)	70/-
Cabin Minor	600/-	SGOT (ASG)	70/-
General ward Major	1000/-	Alkaline phosphate	70/-
General ward Intermediate	500/-	Albumin	45/-
General ward Minor	150/-	Total Protein	50/-
Plaster		Uric Acid	60/-
Minor	125/-	Amylase	150/-
Major	300/-	Triglyceride	100/-
Intermediate	200/-	LFT	250/-
Physiotherapy	10/-	Lipid Profile	200/-
Audiogram	125/-	CFS Test (Including ascites plural)	150/-
Inj ARV	15/-	Electrolyte	150/-
Police case examination	150/-	HBsAg	150/-
Birth certificate	100/-	Widal test	70/-
Dressing charge	15/-	VDRL	40/-
Tooth remove	30/-		
Oxygen only for cabin patient			
200/- for 6- 24 hrs			
VDRL (MCH clinic)	100/-		
Pregnancy test	80/-		
Inj TT	10/-		
Lab Service			
Lumber Picture	200/-		
Peritoneal tab	200/-		
Plural tab	200/-		
Intercostals drainage	200/-		
Cervical traction OPD	60/-		
" Indoor	50/-		
Blood grouping	25/-		
TCDC	30/-		
Hb	20/-		

<i>HIV Test</i>	300/	Malarial parasites	25/
Montoux Test	50/	Filarial parasites	30/
Ra Factor	65/	Stool for RM	15/
ASO Titre	125/	Occult Blood	15/
C. Reactive protein	80/	Reducing substances	15/
Culture all types	100/	Urine RM	15/
Gram stain	40	Bile salt	15/
Sputum for AFB	20/	Urobilinogen	15/
Semen analysis	50/	Acetone	15/
LE cells	15/	HCG (Pregnancy Test)	80/
		Urine Chyle	20/

Annex 9: Price list of Stupa Community Hospital

<i>Service</i>	Price
OPD	50
Emergency	100
Paying OPD	275
Ward consultation	150
Ward dressing	150
Cabin dressing	200
Cabin consultation	200
General bed	210
Cabin bed	1200
Deluxe cabin	1500
Minor operation	10,000
Intermediate operation	15,000
Major operation	20,000
Very major operation	25,000
Ultrasound	580
Delivery charge(general bed)	1500
Delivery (cabin bed)	2000

Annex 10: Cost estimation for free health care at District hospital

Annex Table 1 Average Cost Projection for Universal care

Service Category	Mountain			Hill			Terai			Nepal		
	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>
IP	3663	3867	4075	3038	3244	3450	5740	5958	6181	3699	3906	4115
OP	4990	5422	5854	5984	6217	6454	8418	8764	9111	6112	6424	6739
Emergency	2560	2780	2993	2017	2277	2538	7470	7833	8202	3134	3400	3666
Aggregate cost*	11213	12069	12922	11039	11738	12442	21627	22555	23494	12944	13730	14520
Program cost**	134561	144828	155063	353257	375611	398133	346032	360879	375909	776663	823811	871196

* Aggregate cost refers to total cost of in-patient, OPD and emergency care of a district hospital

** Program cost refers to total cost of the programme in all relevant districts

Annex Table 2 Average Cost Projection Free care for Children Under Five Years

Service Category	Mountain			Hill			Terai			Nepal		
	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>	<i>Low</i>	<i>Median</i>	<i>High</i>
IP	569	601	633	472	504	536	892	926	961	575	607	640
OP	775	843	910	930	966	1003	1308	1362	1416	950	998	1047
Emergency	398	432	465	313	354	394	1161	1217	1275	487	528	570
Aggregate cost	1743	1876	2008	1716	1824	1933	3361	3505	3651	2012	2134	2256
Program cost*	20911	22506	24097	54896	58370	61870	53773	56081	58416	120693	128020	135384