Differential Financing for Untied Funds, ARS Corpus and AMG Funds in Public Health Facilities of Karnataka

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Karnataka State Health System Resource Centre
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In Collaboration with

C B P S

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Abbreviations

AMG	Annual Maintenance Grants
ANC	Ante Natal Care
ARS	Aarogya Raksha Samithi
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Aanganwadi Worker
CHC	Community Health Centre
DH	District Hospital
FRU	First Referral Unit
GDP	Gross Domestic Product
GOI	Government of India
GoK	Government of Karnataka
IMR	Infant Mortality Ratio
IPD	In Patient Department
IPHS	Indian Public Health Standards
ISI	Indian Statistical Institute
ISO	International Organisation for Standardization
JSY	Janani Suraksha Yogana
MMR	Maternal Mortality Ratio
MoHFW	Ministry of Health and Family Welfare
MOU	Memorandum of Understanding
NABH	National Accreditation Board for Hospitals & Healthcare Providers

NRHM	National Rural Health Mission
OOP	Out of Pocket
OPD	Out Patient Department
PHC	Primary Health Centre
PIP	Program Implementation Plan
RCH	Reproductive and Child Health
RKS	Rogi Kalyan Samithi
SC	Sub Centre
TH	Taluk Hospital
UF	Untied Fund
VHSC	Village Health and Sanitation Committee

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Chapter 1: Background and Introduction

Poverty is conversely conceptualized as the inability of individuals to acquire the necessary capabilities, prominent amongst which is the capability 'to be healthy (Nussbaum, 1993). The Commission on Macroeconomics and Health of the World Health Organization (2001) argues that 'health is a creator and pre-requisite of development', with an extension in the coverage of health services and improved health care the key not only to better health outcomes and reductions in poverty, but also increased productivity, and growth in poorer countries (Sachs, 2001). Health is thus recognized as an inalienable human right that every individual can justly claim.

Despite significant improvements made in the past few decades, inequalities in access to affordable health care persist in India. If access to essential healthcare is not universally assured, we would fail not only in achieving rapid economic development but also in discharging our moral obligation to the citizens. Emphasis on economic growth with globalization and privatization as concomitant policy options has to be balanced by adequate safety nets for the poor. Health financing solutions for the poor in India range from free public health centres to health insurance schemes that are not necessarily sensitive or flexible enough for the needs of the rural populations. Easily accessible health care still remains a dream than a reality 65 years post-independence (Improving Public Health in India: Need for Innovative Solutions in Health Care Delivery, 2006). The mounting cost of hospital care, increasing out of pocket expenditure and its catastrophic impact on family finances demand an innovative measure by the government to prevent the state of "Iatrogenic Poverty" (Meessen, et al. 2003).

Given the current slow pace, India would find it difficult to achieve the MDGs for health by 2015. There is, therefore, a need for innovative solutions in financing and delivery of health care services. Thus, easily accessible health care to Indians is of paramount importance from the perspective of making health care available to poor and also boost economic and social development in the country.

1.1 Health Sector Financing

The way health system is financed is a key determinant of health and well-being of the general population. Illness itself leads to poverty through disability for a varying period or death. In both cases, it jeopardizes income generation.

The health care system of India intended to provide free health care to all. However, despite the presence of a large network of public health facilities, out of pocket expenses have been very high in India. Therefore, there are five major sources of health financing: (i) the tax-based public sector that comprises local, state and central governments, in addition to numerous autonomous public sector bodies; (ii) the private sector including the not-for-profit sector, organizing and financing, directly or through insurance, the health care of their employees and target populations; (iii) households through out-of-pocket expenditures, including user fees paid in public facilities; (iv) other insurance-social and community-based; and (v) external financing (through grants and loans)

The latest round of National Health Accounts of India shows that the estimated health expenditure in India for the year 2004-05 was 4.25% of the Gross Domestic Product (GDP). Of the total health expenditure, public expenditure constituted 19.67%, private sector expenditure 78.05 % and external flows contributed to 2.28. The government spends only US$ 5 per person per year on health care of which the states contribute a bulk of the government health financing.

The funds allocated to public health sector are made through the annual budget. The government allocates funds to the health facilities through plan (i.e., new investments) and non-plan (i.e., continuing expenses) allocation. The expenditure items for each activity and health centres are fixed. These are generally dependent on the level of health facilities and uniform across health facilities of same level irrespective of needs and performance. There is no discretion given to the facility to reallocate available funds for meeting a need or an emergency. In case of any 'deviation' the approval of the State Finance Department (and if a centrally sponsored scheme then the Central Government) is required which normally takes a few months at the minimum. Thus

we can see that the current approach of financing public health facilities does not leave scope for any unforeseen expenditure, need based activities or innovations.

About 72%-78% of the outpatient care and about 40%–62% of inpatient care is sought from the private sector (NSSO 2006, Peters 2002, NSSO 1998, NSSO 1989). Out of pocket (OOP) payments are the major source of financing health care in India while only an estimated 15% of population is covered under any form of health insurance. About 6% of patients who require hospitalisation do not seek health care because they cannot afford it and among those who seek hospital care, about 50% of patients have to borrow or sell assets to meet their medical expenses. About 2–3% of Indians are impoverished every year because of health care expenditures while the OOP also deepens poverty for already poor households. Low level of funding accompanied with little flexibility is considered one of the reasons for poor quality of health services available at public health facilities. This is especially relevant for maintenance and upkeep as it has been observed that most of health centres have not been maintained properly due to lack of steady fund, available locally for repair of infrastructure and basic facilities.

1.2 National Rural Health Mission and Flexible Financing

The National Rural Health Mission (NRHM) was established in the year 2005 to carry out necessary architectural correction in the basic health care delivery system with a plan of action that includes a commitment to increase public expenditure on health from 0.9% GDP to 2-3% of GDP

NRHM is driven by the vision that aims at setting forth a momentum in the public health care system:

- increasing public expenditure on health
- Reducing regional imbalance in health infrastructure
- Pooling resources
- Integrating organizational structures
- Optimizing of health manpower
- Promoting decentralization and district management of health programs

- Fostering community participation and ownership of assets
- Inducting management and financial personnel into district health system
- Operationalising community health centres into functional hospitals meeting Indian Public Health Standards in each Block of the Country (Government of India) 4

The main goals that NRHM seeks to accomplish are:

- Reduction in Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR)
- Universal access to public health services such as Women and Child Health, Water, Sanitation & Hygiene, Immunization and Nutrition.
- Prevention and control of communicable and non-communicable diseases including locally endemic diseases.
- Access to integrated comprehensive primary healthcare population stabilization, gender and demographic balance.
- Revitalize local health traditions and mainstream AYUSH promotion of healthy life style

NRHM tries to achieve these goals through a set of core strategies. Some of the main strategies include decentralized planning and management where a village health plan is prepared through a local team headed by the Health and Sanitation Committee of the Panchayat, appointment of female Accredited Social Health Activists (ASHA) to facilitate access to health services, upgrading the public health facilities to Indian Public Health Standards (IPHS), and Janani Suraksha Yogana (JSY) for reducing infant and maternal mortality.

Many innovations have been introduced under NRHM in order to deliver health services in an effective manner. Under NRHM, all health facilities are provided with a specific sum of money as untied grants which can be used by the health facilities as per its discretion in order to to improve the quality of services. There are 3 different kinds of funds that are flexible in nature and disbursed to health facilities in Karnataka under NRHM, namely, the ARS (Arogya Raksha Samiti) Corpus Grant, AMG (Annual Maintenance Grant) and Untied Funds. Village Health and Sanitation

Committees are established at village level for maintaining infrastructure, patient welfare and other funding requirements of the health facility which are outside the scope of traditional funding.

Arogya Raksha Samiti (ARS) / (Rogi Kalyan Samithi (RKS) in Karnataka) Corpus Funds

The Aarogya Raksha Samithi/Rogi Kalyan Samithi is a hospital based management committee which is constituted in every District Hospital (DH), Community Health Centres (CHC) and Primary Health Centres/First Referral Unit's (PHC/FRU). ARS/RKS was established with the motto of making optimum utilisation of hospital funds focussed on the welfare of the patients by ensuring citizen participation in the decision making.

The RKS committee constitutes of a group of trustees who manage the affairs of the hospital. Other than the facility staff it consists of members from local Panchayat Raj Institutions (PRIs), legislative body, civil society and officials from Government sector who are responsible for proper functioning and management of the hospital / Community Health Centre / First Referral Units.

RKS (Rogi Kalyan Samithi)/ARS Funds

ARS/RKS Committee is free to prescribe, generate and use the funds with it as per its best judgement for smooth functioning and maintaining the quality of services for patient welfare. While donation would be the most important modus of fundraising, user charges could be levied with adequate safety nets for the socially and economically backward groups and disadvantaged communities. The amounts donated by Chief Minister, other ministers, MLAs, MPs and civil society representatives also contribute to RKS funds.

The ARS/RKS Funds mainly consists of the following

- Grant-in-aid from the State Government and/or State level society (societies) in the health sector and/or District Health Society – Corpus Fund
- Grants and donations from trade, industry and individuals

- Receipts from such user fees as may be introduced for the services rendered by the hospital
- Receipts from disposal of assets

The total Corpus Funds under RKS provided to the various health facilities in Karnataka are:

Table 1: Total Corpus Funds under ARS/RKS

Grant (Rs. In Lakh)	DH	CHC/FRU/TH	PHC	SC	VHSC
RKS (Corpus Grant)	5,00,000	1,00,000	1,00,000	-	-

The prime objectives of the ARS/RKS Funds are:

a. Improve the management of the hospitals with citizens' participation
b. To ensure user-friendly behaviour amongst service providers for efficient healthcare delivery
c. To arrive at the "Minimum Service Guarantee" at the facility through consensus of RKS members and publicly display the same through "Citizens Charter" and complied with public domain.
d. Display a Citizens' Charter in the Health facility and ensure its compliance through operationalisation of a 'Grievance Redressal Mechanism'.
e. To work towards up-gradation of health institution, modernization of health facilities and purchase of essential equipment for the institution. To effect a continual up gradation of the facility in response to the patient needs and load with reference to the profile of patients and the treatment requirement i.e. Maternal Child Health Services, Family Planning Services, Communicable and non-communicable diseases.
f. Provide assured ambulance services for emergencies and during accidents to the patients within the radial jurisdiction (catchment area) of the facility and the out/in-patients who need referral transport.
g. Arrange for good quality diet, and drugs and stay arrangements for the patients and their relatives/attendants.

h. To ensure equity through provision of free treatment to patients below poverty line, socially and economically backward groups and mechanisms to cover their access costs (transport, diet, attendants' stay, etc.).
i. To undertake special measures to reach the unreached / disadvantaged groups.
j. Provide supervision to maintenance and expansion of hospital building.
k. Ensure an efficient and rational use and management of hospital land and building.
l. Organize training and workshops for staff members in their public dealing and counselling methods.

Annual Maintenance Grants (AMG)

The Annual Maintenance Grants are provided to the health facilities for the regular management, maintenance and upkeep of the facility building, and other expenses related. They are mainly focussed to meet urgent discrete activities that require relatively small amounts of money. There are no specific objectives based on which the AMG can be used, however guidelines are provided to the health facilities as a guide to help the health facilities in spending the funds.

The total Annual Maintenance Grants provided to the various health facilities in Karnataka are:

Table 2: Total Annual Maintenance Grants

Grant (Rs. In Lakh)	DH	CHC/FRU/TH	PHC	SC	VHSC
AMG	-	1,00,000	50,000	10,000*	

*Only in case the building is owned by the SC

Untied Funds (UF)

The necessity of untied funds have been felt due to the unavailability of funds for undertaking any innovative centre specific need-based activity, as the allotment of funds to the states has traditionally been of the nature of tied for implementing a particular activity/ scheme and this hardly left any funds for specific public health facilities (Nandan, 2008-09)

The Untied Funds is an innovative approach for provision of autonomy to the health centres. This fund is spent based on the local felt needs and is not bound to be spent for pre-defined purposes given by higher authorities. Provision of these funds is made in the NRHM to facilitate meeting urgent yet discrete activities that need relatively small sums of money. The Untied Funds can also be used for meeting unforeseen expenditures that are not defined (Nandan, Dixit, Sakalle, & Bansal, 2007-08). Although the Untied funds come with no rigid guidelines and provide flexibility to the health facilities to exercise discretion in the spending of funds, the health facilities are not being able to spend these funds to the fullest.

Untied Funds come with some specific objectives (Department of Health and Family Welfare, Government of Odisha):

- To increase functional, administrative and financial resources and autonomy to the field units.
- To develop the physical infrastructure and centre specific activities of health facilities

The irony is that while most health facilities are handicapped by shortage of funds, they fail to utilize funds given to them with no restrictions on how to utilize them. Though the funds are provided to these facilities with adequate guideline, the utilisation has not been encouraging. This may be due to various factors e.g. low level of awareness and capacity of the institutions and human resources to plan and execute the same.

The different levels of Untied Funds disbursed annually to different level of health facilities in Karnataka is given in the table below.

Table 3: Untied Funds disbursed annually to different level of health facilities

Grant (Rs. In Lakh)	DH	CHC/FRU/TH	PHC	SC	VHSC
Untied Grants	-	50,000	25,000	10,000	10,000

1.3 Rationale for Differential Financing - Karnataka's experience in utilisation of funds by Health Facilities

Currently all health facilities receive all three kinds of funds at a uniform level as per the level of facilities

Table 4: Funds allotted to different health facilities

Grant (Rs. In Lakh)	DH	CHC/FRU/TH	PHC	SC	VHSC
RKS (Corpus Grant)	5,00,000	1,00,000	1,00,000	-	-
Untied Grants	-	50,000	25,000	10,000	10,000
AMG	-	1,00,000	50,000	10,000*	
Total	**5,00,000**	**2,50,000**	**1,75,000**	**20,000**	**10,000**

*Funds disbursed if only Sub-centre has a building

The utilisation experience has been varied across health facilities. The state level utilisation of Untied Grants, RKS Corpus Grants and AMG Funds provided for healthcare facilities in Karnataka are as below:

Table 5: The state level utilisation of Untied Grants, RKS Corpus Grants and AMG Funds

Grant (Rs. In Lakh)	2009-10			2010-11*		
	Budget	Expenditure	%	Budget	Expenditure	%
Untied Grants	4,645	1,942	42	4,487	1,581	35
RKS (Corpus Grant)	2,675	1,963	73	2,602	1,151	44
AMG	1,519	1,390	91	1,831	767	42
Total	8,839	5,295	60	8,920	3,499	39

*from 1 April 2010 to 31 December 2010

Given the limited resource available for healthcare in the state, there is a need to rationalize the distribution of these funds and allocate them more efficiently to health facilities. Hence this becomes a strong case to introduce differential financing for these health facilities.

1.4 Rationale for conducting the Study

Before implementing differential financing (DF) there is need to understand the current utilisation pattern and problems in utilisation of the untied funds. The constraints and challenges in implementing the DF for the untied grants to the healthcare facilities should also be studied. Since the differential financing is planned to be initiated in Bangalore Urban and Udupi, it were carried out these studies in these districts.

1.5 Research Questions

1. What is the utilisation pattern of the untied grants and other funds provided to health facilities in the districts
2. What is the minimum and maximum utilisation percentage of the untied funds at the facility?
3. What are the categories under which these funds were utilized?
4. Was the fund utilized for the purpose for which they were disbursed?
5. What are the current major issues related to utilisation of the Untied Funds?
6. What is the correlation between the service delivery load and usage levels of the untied funds at the facility level?
7. What are the factors that result in differential performances of the facilities?
8. What are the indicators that may be used for disbursing untied funds to the districts? (Population, Healthcare Service Delivery Load, etc.).

Chapter 2: Methodology

2.1 Study Area: The study was undertaken in two districts (Udupi and Bangalore Rural) of Karnataka state in India

2.2 Study Design: A cross sectional study of primary and secondary level of health facilities (Village Health and Sanitation Committee, Sub Centres, Primary Health Centre, Community Health Centre and District Hospital) in the sample districts was undertaken. Retrospective data on resources, finance and performance of last three years (2008-09, 2009-10 and 2010-11) were collected.

2.3 Study Population

1. Village Health and Sanitation Centre – President and Secretary of the Village Health and Sanitation Committee
2. Sub-Centre – President and Secretary of Sub-centre Management Committee
3. Primary Health Centre – President and Secretary of Arogya Raksha Samithi
4. Community Health Centre - President and Secretary of Arogya Raksha Samithi
5. District Hospital- President and Secretary of Arogya Raksha Samithi

2.4 Study Unit: Public health facilities in the districts of Udupi and Bangalore Rural (VHSC, SC, PHC, CHC and DH)

2.5 Duration

- The study was conducted from November 2011 to March 2012.
  - Training for data collectors and supervisors was conducted in Udupi on 2nd- 3rd November 2011 and Bangalore Urban on 14th – 15th November 2011
  - The data in Udupi district was collected between mid-November 2011 to end of December 2011

- The data collection in Bangalore Urban took place from mid-November 2011 to mid-December 2011
- The data entry and analysis was done in January and February 2012
- The report was written in the month of March 2012

2.6 Sampling Frame

A purposive sampling was used to decide the sample size and sample health facilities. In the 2 selected districts of Udupi and Bangalore Rural the following framework was used:

- The district hospitals in both the districts were selected since they are the only district level hospitals in each district
- One Community Health Centre (CHC) from three different taluks was selected based on the level of performance. The Primary Health Centre's, Sub Centre's and Village Health and Sanitation
- Committees were selected from the above three taluks where the CHC were located. The selection was dependent on the President of the committee heading the centre. A purposive selection of these facilities was done so that no two health Centres selected have common presidents.
- The Secretary and President in each health facilities surveyed were interviewed. In case any of the above two members were not available for interview; some other member of the management committee was selected for the interview.

2.7 Sample Size

The sample studied includes 46 health facilities and interviewing 92 stakeholders managing these funds.

1) Health Facilities

Table 6: Study Sample- Health Facilities

Districts	District Hospital	CHC/FRU/TH	PHC	SC	VHSC	Total
Bangalore Urban	1	3	5	5	10	24
Udupi	1	3	6	6	6	22
Total	**2**	**6**	**11**	**11**	**16**	**46**

2) Stakeholders interviews

Table 7: Stakeholders Interviewed

Level of institution	Total number of institutions to be studied		Stakeholder to be Interviewed at each level of health facility	Total stakeholders interview	
	Bangalore Urban	Udupi		Bangalore Urban	Udupi
VHSC	10	6	2	20	12
SC	5	6	2	10	12
PHC	5	6	2	10	12
CHC/FRU/TH	3	3	2	6	6
DH	1	1	2	2	2
Total	**24**	**22**		**48**	**44**

Thus, a total of 24 health facilities, 48 stakeholder interviews were covered in Bangalore Urban District and 22 health facilities, 44 stakeholders interviews were covered in Udupi district.

2.8 District wise sample health facilities

Bangalore Urban

Table 8: Bangalore Urban Study Sample

Block Name - Taluk	Address	Sample Facility
		District Hospital Bangalore Urban
Bangalore North Taluka - Yelahanka		Siddharthnagar Hospital - CHC
		Chikkajala PHC
		Hesaraghatta PHC
	Sonnenahalli PHC	Kakolu Sub Centre
	Rajanukunte GP	Singanayakanahalli Sub Centre
	Sondekoppa	Lakkanahalli VHSC
	Makali PHC	Harokyatanahalli VHSC

	Gopalpura PHC	Vaderahalli VHSC
	Bettahalasur	Hosahalli VHSC
Bangalore East		KR Puram General Hospital - CHC
	Avalahalli	Avalahalli PHC
	KS Halli	Doddagubbi SC
	Avallahalli	Chikkabanahalli VHSC
	K.S. Halli	Bidarhalli VHSC
Bangalore Anekal Taluk		Anekal General Hospital - CHC
		Sarjapura PHC
		Haragadde PHC
	Attibele	Bidaraguppe SC
	Marsuru PHC	Hennagara SC
	Chandrapura	Laxmi Sagara VHSC
	MahanthaLingapura PHC	Buthanahalli VHSC
	Jigani	Kalkere VHSC
	Indluvadi	Soluru VHSC

Udupi Sample Health Facilities

Table 9: Udupi Study Sample

Taluk	Health Facility Type	Village
Udupi	VHSC	Handadi
	VHSC	Mallar
	SC	Biladi
	SC	Puttige
	PHC	Kemmanu
	PHC	Kodibengri
	CHC	Shirva
	DH	Udupi
Karkala	VHSC	Kervashe
	VHSC	Ninjoor
	SC	Renjala
	SC	Kejenje

	PHC	Bajagoli
	PHC	Ajekar
	CHC	Hebri
Kundapura	VHSC	Chitoor
	VHSC	Vakwadi
	SC	Jadkal
	SC	Yadyadi - Marthyadi
	PHC	Haladi
	PHC	Siddapur
	CHC	Byndoor

2.9 Reference Years

The performance of health facilities and utilisation of UF, RKS corpus funds, AMG for the financial years (April 1st to March 31st) of 2008 -09, 2009-10 and 2010-11 has been studied.

2.10 Data collection

Data collection was done by external agencies hired for the purpose. For Udupi district organization named CHANGE collected the data while for Bangalore Urban, IDPMS collected the data.

2.11 Training

Two days rigorous training was provided to the data collectors, supervisors and coordinators of both the districts separately by Centre for Budget and Policy Studies.

2.12 Review and collection of the records at health facilities

Financial records - Cash Book, ledger bills of expenditure, account register, activity registers, health information management system (HMIS), Human Resource records, Infrastructure records and Drugs and Medicines were used to collect the data of the health facilities in the pre-determined format for the "facility Data" Survey

2.13 In-Depth Interviews

Two members of the hospital management committee/health management committee (preferably President and Secretary) were interviewed in detail on their understanding of all three kinds of funds (UF, RKS, AMG) and problems in utilisation using a semi structured interview schedule.

2.14 Data Entry and Analysis Plan

The data was entered in MS excel with each health facility and interviews being given a unique ID to eliminate bias. Quantitative data was analyzed using STATA 10 software and MS excel. For the qualitative data the answers were coded and indexed to analyze the patterns in spending.

2.15 Limitations of the Study

- The study was conducted in a short span with budget limitations. Thus, the sample size was not large enough to have a high confidence on correlations between the various factors and performance of funds utilisation.
- The financial data of receipts and expenditure were maintained in a different format by health facilities. While some health facilities were aware of the breakup of the three different kinds of funds (UF, AMG, RKS Corpus funds); some were not. Thus it was difficult to correlate some important factors like knowledge of funds to utilization, availability of guidelines to utilization, expenditure to performance.
- The authors found uniformity in many of the factors that were assumed to be correlated to performance of funds utilization. This may be because of a small sample size or data collector's bias. It should be tested with a larger sample before assuming any sort of correlation.
- Few important data on human resource like number of Gynecologist, Pediatrician, MD Medicine and accountants were missed out in the final questionnaire. Thus, it was collected during data cleaning. The researchers have maintained the details in a separate file with the details of person giving the information.
- The study team also found a bias while answering some of the questions like problems in utilization of funds. While they highlighted some problems informally they did not highlight the same when interviewed formally.

Chapter 3: Background of Karnataka and Study Districts

3.1 Background of Karnataka

The state of 'Karnataka' is located in the southern part of India and is the eighth largest state in terms of total geographical area and ninth largest in terms of population in India. Karnataka state was formed on November 1, 1956 by merging the districts of Belgaum, Bijapur, Dharwad, and Uttara Kannada of Bombay Presidency; Bidar, Gulbarga and Raichur of Hyderabad state; and Dakshina Kannada of Madras Presidency with the princely state of Mysore. Glaring disparities persist across these regions in socio-economic and health achievements. The districts of Bangalore Rural and Udupi have been used as a sample to give us an ideal picture and quantifiable evidence for this study.

The state of Karnataka has a population of 61 million as of 2011 The state extends to about 750 km from north to south and about 400 km from east to west, and covers an area of about 1, 91,791 sq.km.[1] Karnataka has 30 districts grouped into four geographic regions as Northern Maidan, Central Maidan, Southern Maidan and Coastal and Malnad districts.

3.2 Bangalore Urban District Profile

Bangalore Urban District is one of the 30 districts in the state of Karnataka. It was formed in the year 1986, when Bangalore District was divided into Bangalore Rural and Bangalore Urban. Bangalore Urban district is one of the fastest growing cities in Asia with the tag of being the silicon valley of India due to its progressive trend in information technology.

The three Taluks in Bangalore Urban District are:

- Anekal
- Bangalore North
- Bangalore South

Literacy and Demographic Profile

According to the latest census, the urban agglomeration had an overall population of 9.5 million in 2011. There is a workforce of 2.2 million, within an area of 560 km and a literacy rate of 75.1%. The hype over the IT industry is underlain by Bangalore having about 30% of all IT workforce of the country. Interestingly, the 9.5 million population of urban Bangalore in 2011 includes migrants from outside the state, with the majority of these from urban areas.

Economic Profile:

Bangalore Urban was once known as the pensioners' paradise, but with the influx of IT and infrastructure it has lost this tag long ago. The physical growth and expansion of the city has been phenomenal over the past few years and the glaring evidence of this has been the ever escalating real estate prices and increased travel times.

The city has a personal disposable income greater than the national average causing the trickledown effect within the urban economy. The economic fabric of the city, although at times masked by the IT-based industries is varied, being also characterised by textile, automobile, machine tool, aviation, space, defence, and biotechnology based industries. In addition to this numerous services, trade and banking activities mark the city's economic landscape.

Health Indicators:

Bangalore urban is a relatively well performing district in health indicators ranking 5 in the state in overall health indicators. The district is ranked first in Human Development Index among all the districts of Karnataka.

On the other hand, rapid urbanization not matched with expansion of facilities have led to increased burden of life style disease, air borne and pollution induced diseases along with the existing disease burden.

The sex ratio stands at 908 (Population of India) which is the lowest sex ratio in the Karnataka contrary to Udupi which has the highest sex ratio. 85% of the women avail ANC check-ups during their first trimester Bangalore has clocked a decadal growth rate of population of 34.80 and is constantly taking steps towards achieving the Millennium Developmental Goals in health care by reducing the MMR and IMR rates within the district (Karanataka Human development Report, 2005).

Health Infrastructures have improved as the city is home to many super speciality hospitals. Bangalore's natural advantages in terms of good connectivity, infrastructure, and climate are an excellent base to develop a base for good health care provision (NRHM, Government of Karnataka, 2009-10).

3.3 Udupi District Profile

Introduction:

Udupi was formed on 24th August, 1997, carved out of Dakshina Kannada (South Canara) with Udupi city as the district head quarter. Administratively, the district has 248 villages, 146 GPs, one city municipality (Udupi city), two town municipalities (Karkala and Kundapura) and one town panchayat (Saligrama).

The three Taluks are:

- Udupi
- Karkala
- Kundapura

Demographic Profile:

The total population of Udupi district, as per 2011 census, is 1.1 million; of which 0.56 million are males and 0.61 million are females. The male-female ratio stands at 1000:1093 (2011 Census) which is one of the highest in the state. Udupi district has recorded the lowest population growth

rate in the state. The decadal population growth in the district was only 7.14 % between 1991 and 2001 and fell to 5.90 from 2001 to 2011.

Socio- Economic Profile:

Primary sector, which includes agriculture, animal husbandry, forestry, fishery and mining, has contributed 21 % of the district GDP; the secondary sector, which includes industry, construction, electricity and water supply 23 % and the tertiary, or service sector, which include transport, storage, communication trade hotels, banking and insurance, public administration and other services 56 %.

Literacy Status:

Though, Udupi district today ranked as one of the most literate districts in the state, the modern education system in the district has only a recent history. The district has literacy rate of 86.29 % ranks third in the state. The literacy rate among males is 91.69 % and among females 86.29%.

Health Indicators:

Udupi boasts of the best health indicators in the state ranking 1 on the Health Index. The state also relatively well developed in comparison to the rest of Karnataka with the overall HDI ranking being 3. In the past due to underdeveloped health infrastructure, Udupi had limited access to quality health care services. Post-Independence development of the state transport network, educational institutions brought a revolutionary change in the health infrastructure of the district. Both public and private sectors have played a developmental role in the health sector.

RCH (Reproductive and Child health) indicators are important determinants of the health status of a population. Udupi is known to have performed very well in improving the maternal and child health compared to the other districts in Karnataka. In 2006, 96.22 percent of children received full immunization with 97.74% being institutional delivery and 98.78% of the deliveries being safe.

Udupi has an enviable record of public-private initiatives in quality health delivery system. Public sector health care infrastructure through PHCs, community health centres and taluk and district level hospitals render health care services throughout the district. Sustained and committed focus on improving the overall health status of the district has had significant impacts and has helped make Udupi's health status the best in the state of Karnataka (Planning Programme Monitoring & Statistics Department, Government of Karnataka, 2008).

Chapter 4: Findings

4.1 Utilization pattern of Untied Funds, Annual Maintenance Grants and ARS Corpus Funds

The availability of funds was calculated by adding opening balance, receipts for the year and interest received on the UF + AMG + ARS corpus during the year. The expenditure was calculated adding the expenditure incurred from all the three kinds of funds.

The availability of funds and expenditure under untied funds + annual maintenance grants and ARS corpus funds in the sample health facilities for the year 2010-11 is presented below

Table 10: Total funds available and expenditure incurred under Untied Funds, Annual Maintenance Grants and ARS Corpus Funds for the year 2010-11

			Year 2010-11					
District	Level of health facility	Number of health facilities (n)	Opening balance	Funds received	Interest received	Total receipt	Total exp	% Utilized
Bangalore Urban	VHSC	10	59274	79970	1663	140907	88903	62.4
	SC	5	16760	70000	768	136933	126776	92.6
	PHC	5	23832	802141	9407	835380	803323	96.2
	CHC	3	175767	486592	3924	666283	669093	100.4
	DH	1	6854	1850000	0	1856854	127365	6.9
Udupi	VHSC	6	17284	56766	1335	75386	58157	77.1

	SC	6	23417	51820	1116	76353	43643	57.2
	PHC	6	259648	658348	9534	927530	827781	89.2
	CHC	3	117141	850000	7958	1295572	1239955	95.7
	DH	1	10618	500000	563	511181	455482	89.1
Total Sample	VHSC	16	76558	136736	2998	216293	147060	68.0
	SC	11	40177	121820	1884	213286	170419	79.9
	PHC	11	283480	1460489	18941	1762910	1631104	92.5
	CHC	6	292908	1336592	11882	1961855	1909048	97.3
	DH	2	17472	2350000	563	2368035	582847	24.6

Availability and expenditure of untied funds at Village Health and Sanitation level for the sample health facilities:

Every Village Health and Sanitation Committee receives untied funds of Rs.10,000 annually under NRHM. VHSC are not given any ARS Corpus funds or AMG. Thus, the total fund received by each VHSC per year under NRHM is Rs.10,000.

The total funds available (receipt + opening balance + interest received) in 10 sample VHSC in Bangalore for the year 2010-11 was around Rs 140,907 and expenditure incurred was around Rs. 88,903. The average availability was Rs 14,000 per VHSC and an average expenditure of Rs 8,890 per VHSC was incurred in the year 2010-11.

The total funds available in the 6 sample VHSCs in Udupi for the year 2010-11 is around Rs 75,385. This means an average availability of Rs 12,564 per VHSC. The expenditure incurred was around Rs. 58,157 for the year 2010-11. Thus an average expenditure of Rs 9,692 per VHSC was incurred.

The total funds available in the 16 sample VHSC was Rs 216,292 for the year 2010-11. The total expenditure incurred was Rs 147,060. Thus, an average of Rs 13,518 is available and Rs 9191 for expenditure.

The utilisation at the VHSC level ranges from 23% to 98% and most of sample VHSC utilisation has been more than 70%. The average percentage of funds utilized for the entire sample is 68%. The utilisation for the sample VHSC in Udupi was 77% while in Bangalore was only 63% of the funds available.

Availability and expenditure of untied funds and AMG at Sub-Centre level for the sample health facilities:

Every sub-centre receives Rs. 10,000 as untied grants yearly and Rs. 10,000 as Annual Maintenance Grants annually if it is running in government owned building. Thus the sub-centres running on government buildings receive around Rs 20,000 yearly under the above two grants and a sub centre running on rented building received Rs 10,000 annually.

Four of the five sub-centres studied in Bangalore urban were running in government owned building and they received AMG for the year 2010-11. While five of the six sub-centres studied in Udupi districts were also running on government owned building but only one received the AMG for the year 2010-11. Thus, out the entire sample of eleven sub-centres five facilities received AMG.

The total funds available under UF + AMG at the sub-centres in Bangalore for the year 2010-11 was Rs. 136,933 and expenditure incurred was Rs. 126,776. Thus the utilisation was 93%. The total funds available under UF + AMG at the sub-centres in Udupi were Rs. 76,353 and expenditure incurred was Rs. 43,643. Thus the utilisation was 57%.

On an average the funds available per sub-centre in Bangalore was Rs 27,387 and expenditure incurred was Rs. 25,355 under the above two funds for the year 2010-11. The average fund available per sub-centre in Udupi was Rs 12,726 and expenditure incurred was Rs. 7,274.

The average utilisation at sub-centre level was 79.9%. The utilisation at health facilities ranges from 7% to 100%.

The above table shows that the average release in Udupi was less mainly under AMG and the utilisation at sub-centre is as low as 57%, which needs to be investigated and improved upon.

Availability and expenditure of UF, AMG and ARS Corpus Funds at Primary Health Centre level for the sample health facilities:

A Primary Health Centre receives three kinds of funds under untied kind of nature: Annual Maintenance Grants, Untied Grants and Aarogya Rakhsha Samithi Grants.

Table 11: Funds received under ARS corpus grants, AMG and UF at PHC

Grant	Yearly funds received
ARS (Corpus Grant)	1,00,000
Untied Grants	25,000
AMG	50,000
Total	**1,75,000**

Thus, a PHC receives a total amount of rupees one lakh and seventy five thousand per year in the above three categories.

The total funds available under UF + AMG + ARS corpus grants at the PHC in Bangalore for the year 2010-11 were Rs. 835,380 and expenditure incurred was Rs 803,323. Thus the utilisation was 96%. The total funds available under UF + AMG + ARS corpus grants at the PHC in Udupi were Rs. 927,530 and expenditure incurred was Rs 827,781. Thus the utilisation was 89%. The utilisation in the entire sample ranges from 53% to 10% in the health facilities.

On an average the funds available per PHC in Bangalore was Rs 167,076 and expenditure incurred was 160,665 under the above three funds for the year 2010-11. The average fund available per PHC in Udupi was Rs 185,506 and expenditure incurred was Rs. 165,556.

The average release and utilisation in Udupi was less as compared to Bangalore in the year 2010-11 because of the high opening balance of previous year.

Availability and expenditure of UF, AMG and ARS Corpus Funds at Community Health Centre level for the sample health facilities:

A Community Health Centre receives three kinds of funds: Annual Maintenance Grants, Untied Grants and Aarogya Rakhsha Samithi Grants.

Table 12: Funds to CHC

Grant	CHC/FRU/TH
ARS (Corpus Grant)	1,00,000
Untied Grants	50,000
AMG	1,00,000
Total	**2,50,000**

Thus, a CHC get a total of rupees two lakhs and fifty thousand in the above three categories. The total funds available under UF + AMG + ARS corpus grants at the 3 CHC in Bangalore for the year 2010-11 was Rs. 666,283 and expenditure incurred was Rs 669,093. Thus the utilisation was 100%. The total funds available under UF + AMG + ARS corpus grant at the 3 CHC in Udupi was Rs. 1,295,572 and expenditure incurred was Rs 1,239,955. Thus the utilisation was 96%.

The average utilisation of the entire sample was 97.3% while the maximum utilisation was 100% and minimum utilisation at 94% at the health facility level.

On an average the funds available per CHC in Bangalore was Rs 222,094 and expenditure incurred was 223,031 under the above three funds for the year 2010-11. The average fund available per CHC in Udupi was Rs 431,857 and expenditure incurred was Rs. 413,318. The average availability is high in Udupi because of the high opening balance of previous year.

Availability and expenditure of ARS Corpus Funds at District Hospital level for the sample health facilities:

As per the NRHM guidelines a district hospital is released rupees five lakhs every year as ARS Corpus Grants. The fund available at Bangalore Urban (Jayanagar) District Hospital for the year 2010-11 was Rs. 1,856,854 while the expenditure was only Rs 127,365 which makes it around 7% of the funds available. The fund available at District Hospital Udupi for the year 2010-11 was Rs. 511,181 while the expenditure was Rs 455,482 which makes it 89% of the funds available.

4.2 Utilisation of funds for last three years

The utilisation of UF, AMG and ARS corpus was not calculated separately since these funds are deposited in the same account and some sample facilities have not reported the breakup of the three funds. The utilisation pattern of these funds for financial year 2008-09 to 2010-11 in the sample health facilities in the sample districts are presented below.

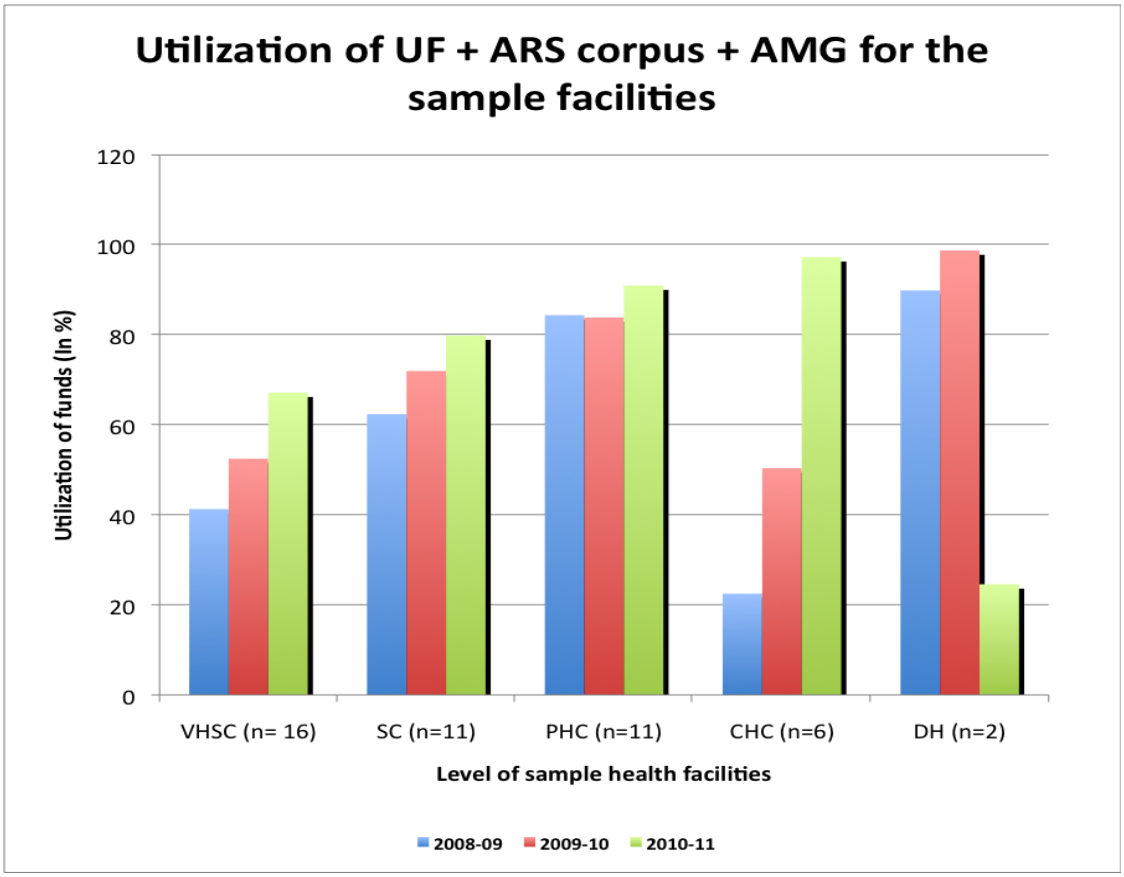

Figure 1: Utilisation of all sample facilities

It is evident from the above figure that the utilisation level of funds is increasing over years. It is also evident that as the level of health facility is increasing the utilisation level is also increasing. The overall utilisation level of District Hospital is low for the year 2010-11 because of exceptional situation in Bangalore Urban.

Utilisation of funds at sample health facilities in Bangalore Urban

The utilisation of funds for the sample facilities of Bangalore Urban for last three years are presented in the chart below

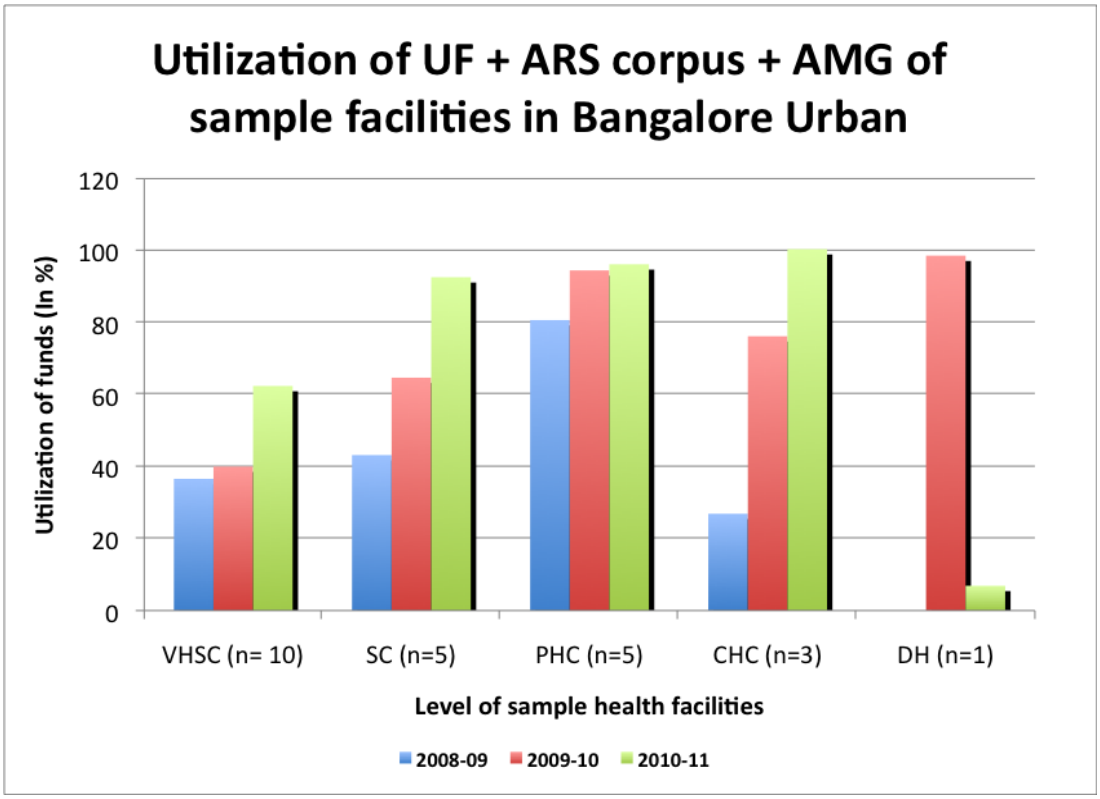

Figure 2: Utilisation of all sample facilities- Bangalore Urban

Overall we can see from the above chart that the utilisation level of funds is increasing over years in Bangalore Urban district. It is also evident that as the level of health facility is increasing the utilisation level is also increasing. The utilisation level of District Hospital Bangalore is low for the year 2010-11 because the hospital received huge amount of funds from ARS corpus but were not able to expend it in the same year because of bidding delay.

Utilisation of funds at sample health facilities in Udupi

The utilisation of funds for the sample facilities of Udupi for last three years are presented in the figure below

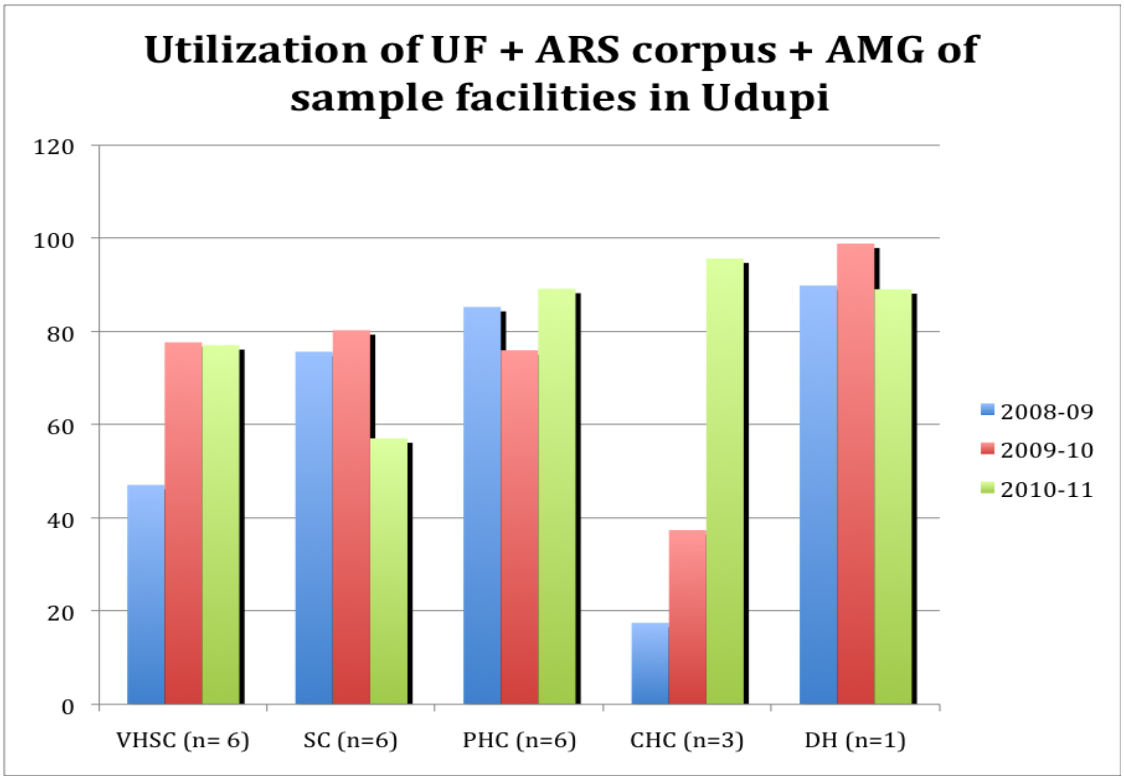

Figure 3: Utilisation of all sample facilities- Udupi

The sample facilities in Udupi do not show a clear increasing trend of utilisation over last three years except at CHC level. The trend of increasing utilisation with increasing level of health facilities is also not very clear.

4.3 Per Capita availability of funds and expenditure in the sample health facilities

The per capita availability and expenditure of funds at the sample health facilities are presented in the table below

Table 13: Per capita availability and expenditure of funds in sample health facilities for the year 2010-11

	Per capita receipt (In Rs.)					Per capita expenditure (In Rs.)					% utilisation (In %)
	Average	Median	Min value	Max value	SD	Average	Median	Min value	Max value	SD	
VHSC											
All sample (n=16)	10.4	8	0.5	31.2	8	7.1	6.7	0.4	16.6	6	68
Udupi (n=6)	4.5	2.8	0.5	12.9	5	3.5	2.4	0.4	9.8	4	77.1
Bangalore (n=10)	13.9	11	7.1	31.2	8	9.4	7.2	1.8	16.6	5	62.4
Sub centre											
All sample (n=11)	5.3	4	1.7	17.3	5	3.3	2.9	0.8	8.3	2	79.9
Udupi (n=6)	5.7	3.3	1.8	17.3	6	2.2	2	0.8	3.9	1	57.2
Bangalore (n=5)	4.9	5.3	1.7	8.6	3	4.6	4.7	1.4	8.3	3	92.6
Primary Health Centre											
All sample (n=11)	9.9	8.6	5.2	26.4	6	8.4	8.6	5	14.9	3	92.5
Udupi (n=6)	12.1	9.9	5.2	26.4	8	9.7	9.1	5.1	14.9	4	89.2
Bangalore (n=5)	7.1	6.1	5.8	9	2	6.9	6.1	5	8.9	2	96.2

Per capita availability of funds and expenditure at VHSC level

The current total allocation per VHSC for untied funds is Rs 10000. VHSC is expected to serve a population of around 1000. Thus, if we look at the per capita allocation, it should be on an average of Rs. 10 per VHSC. The analysis of sample VHSC shows the per capita receipt range from as low as Rs. 0.5 to as high as Rs 31.2. There is a huge difference in the per capita

allocation between Udupi and Bangalore. While the average per capita allocation per VHSC in Udupi is Rs 4.5, it is Rs 13.9 in Bangalore.

The average per capita expenditure is also guided by the average allocation. Thus we can see that average per capita expenditure is Udupi is only Rs. 2.4 at VHSC level while it is RS 7.2 in Bangalore. The per capita expenditure ranges from Rs 0.4 to Rs. 16.6.

Per capita receipt and expenditure at SC level

The total allocation per SC is Rs 10,000 under untied funds and Rs. 10,000 for AMG funds. A Sub Centre is expected to cater a population of around 5,000. Thus per capita allocation for untied funds should be on Rs. 2 on an average. And per capita allocation for AMG should be Rs 2 on an average.

The study revealed that the per capita receipts of sample sub-centres range from Rs. 1.7 to Rs. 17.3. The average allocation per capita in Udupi is RS 5.7 while it is Rs. 4.9 in Bangalore Urban. The per capita expenditure at SC level ranges from Rs 0.8 to Rs. 8.3.

Per capita receipt and expenditure at PHC level

The total allocation per PHC is Rs 1,00,000 under ARS corpus funds, Rs. 25,000 under untied grants and Rs. 50,000 for AMG funds. A PHC is expected to cater a population of around 30,000. Thus per capita allocation for ARS corpus funds should be Rs. 3.33, Rs. 0.83 for untied funds and Rs 1.67 for AMG and an expected total per capita allocation of Rs. 5.83.

The study revealed that the total per capita allocation for all the three funds of sample PHC range from Rs 5.2 to Rs. 26.4. While the average per capita receipt is Rs. 12.1 in Udupi, it is only 7.1 in Bangalore Urban. The per capita expenditure ranges from Rs 5 to Rs. 14.9. The average per capita expenditure in Udupi is Rs. 9.7 and in Bangalore Urban is Rs 6.9.

The above analysis shows that while the norms of primary level health facilities is based on population, the per capita receipt and expenditure has a huge variations.

4.4 The guidelines for utilizing funds and expenditure incurred by the health facilities

There are broad guidelines given for utilizing untied funds, AMG and RKS corpus at each level of health facilities. The NRHM guidelines issued by the Centre (including any specific state guidelines) for the same are described below. The expenditure incurred by health facilities under each of the funds at each level of health facilities studied for the year 2010-11 are also described in this section.

Utilisation of Untied Funds (UF) at sample health facilities

Guidelines for utilizing Untied Fund by Village Health and Sanitation Committee

The VHSC's are eligible to get annually *Rs. 10,000/-* as Untied Funds. This Untied fund shall be the resource for local level community health activities.

- As a revolving fund from which households could draw in times of need to be returned in instalments thereafter.
- While this fund is utilized as a revolving fund the family getting the fund shall have to repay the fund in timely instalments.
- For any village level public health activity like cleanliness drive, sanitation drive, school health activities, ICDS, Anganwadi level activities, household surveys etc.
- In extraordinary case of a destitute women or very poor household, the Village Health & Sanitation Committee untied grants could be used for health care need of the poor household.
- The untied grant is a resource for community action at the local level and shall only be used for community activities that involve and benefit more than one household. Nutrition, education & sanitation, environmental protection, and public health measures shall be key areas where these funds could be utilized.
- Every village is free to contribute additional grant towards the Village Health & Sanitation Committee. In villages where the community contributes financial resources to the Village Health & Sanitation Committee untied grant of Rs.10, 000/-, additional

incentive and financial assistance to the village could be explored. The intention of this untied grant is to enable local action and to ensure public health activities.

The expenditure incurred by Village Health and Sanitation Committee (VHSC) under Untied Funds

The breakup of expenditure incurred by VHSC under various expenditure heads of Untied Funds (UF) are presented in the table below:

Table 14: Percentage of expenditure under various expenditure heads of untied funds at VHSC level for the year 2010-11

Expenditure at VHSC from Untied Funds	% of total expenditure	
	Bangalore	Udupi
As per guideline	**54.4**	**39.6**
Tea / snacks during Village Health and Nutrition Day	0.8	
Arrangement of Essential Instruments like BP instruments, weighing machine, examination table	0.9	2.2
Screen for maintenance of privacy during health check up	1.8	
Payment to Asha Worker for conducting Village Health and Nutrition Day	2.7	0.3
Other expense of Village Health and Nutrition Day	4.7	
Health care need of the poor household	1.1	13.5
Building transport communication link for transferring the patient to health facilities	0.5	13.3
Cleanliness and sanitation drive for the village School health activities	14.0	1.2
Health awareness activities (Family welfare, immunization, pregnancy,	10.3	1.3
In case of flood or any epidemic (Relief camps or supplies such as in case of flood it can supply Halogen tablet for purification of water, ORS, Bleaching powder etc)	7.5	
Improving the facilities of the Aanganwadi Centre fund for wall writing of slogan on health and sanitation	5.7	7.8
Contribution to sanitary latrine under Total Sanitation Campaign (*Rs 300 on behalf of 10 BPL Families)	2.9	
House hold surveys (door to door survey)	1.7	
Other	**45.50%**	**60.3**
Purchase of sandals & tablets for ANC women	22.4	
Purchase of drugs	8.4	
Meeting Expense	4.7	
Stationary items	3.7	2.3
Purchase of sarees	2.4	2
Repair works	0.4	
Aanganwdi camp		18.5
Informal Education at Aanganwadi		17.0
Loan		8.5

Baby Show		8.1
Leprosy House to House survey		1.8
Malaria Larva Survey		1.2
Food Supplement for poor and malnourished children		0.9
Other	3.5	

- *Utilisation from stated 'guidelines'*

In case of the VHSC's the expenditure from within guidelines constituted (54.4%) in Bangalore Urban and (39.6%) in Udupi while the expenditure from the others category constituted (45.5%) and (60.3%) respectively. In the case of Bangalore Urban we see that VHSC's show maximum expenditures in 'Cleanliness and Sanitation drives' (14%) and on 'health awareness activities' (10.3%), while in case of Udupi the maximum expenditure is seen on health care need for the poor (13.5%) and building transport communication link for transferring the patient to health facilities (13.3%).

- *Utilisation on 'Others' category:*

VHSC's in Bangalore Urban and Udupi utilize (45.5%) and (60.3%) of the funds from the others category respectively which primarily consists of miscellaneous small expenses which help run the anganwadi Centres and spread health awareness in the village. Bangalore Urban spends 22.4% of the total funds on purchase of sandals and tablets of ANC for women in others category. Thus, Udupi spends 18.5% on Aanganwadi camp and 17% on informal education at Aanganwadi under the others category.

Guidelines for utilizing untied funds at sub centre

As part of the National Rural Health Mission, it is proposed to provide each Sub Centre with Rs.10,000/- as untied fund to facilitate meeting urgent yet discrete activities that need relatively small sums of money.

- Minor modifications to sub centre- curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs, which can be done at the local level
- Ad hoc payments for cleaning up sub centre, especially after childbirth.
- Transport of emergencies to appropriate referral centres
- Transport of samples during epidemics.
- Purchase of consumables such as bandages in sub-Centre

- Purchase of bleaching powder and disinfectants for use in common areas of the village.
- Labour and supplies for environmental sanitation, such as clearing or larvicidal measures for stagnant water.
- Payment/reward to ASHA for certain identified activities
- To provide environment congenial for delivery and environment sanitation i.e. to clear stagnation of water and maggots
- Village health plan or plans (when sub centre has more than one VHSCs) approved any other activities

Untied funds shall NOT be used for any salaries, getting contracted services and recurring expenditures or to meet the expenses of the Gram Panchayat but may be utilized for fuel expenses of small vehicles used in monthly tours . Any type of Village Panchayat expenses not related, directly or indirectly, to health care shall not be paid, especially Village Panchayat administrative expenses and employees' expenses.

The expenditure incurred by Sub-Centre (SC) under Untied Funds

The breakup of expenditure incurred by SC under various expenditure heads of Untied Funds (UF) are presented in the table below:

Table 15: Percentage of expenditure under various expenditure heads of untied funds at SC level for the year 2010-11

Expenditure at SC from Untied Funds	% of total expenditure	
	Bangalore	Udupi
As per guideline	**69**	**23.6**
Ad hoc payments for cleaning up sub centre, especially after childbirth	0.6	3.2
Transport of emergencies to appropriate referral centres	13.3	0.9
Transport of samples during epidemics	10	
Purchase of consumables such as bandages in sub centre	6.7	3.6
Purchase of bleaching powder and disinfectants for use in common areas of the village	26.8	2.8
Labour and supplies for environmental sanitation, such as clearing or larvicidal measures for stagnant water	5.1	3.6
Payment/reward to ASHA for certain identified activities	2.9	
Minor modification to SC (Curtains, repair of taps, installation of bulbs,	3.6	9.5

other repairs)		
Other expenditure	**30.5**	**76.3**
Furniture	**9.8**	16.3
Meetings	5.9	
Name board & stationeries	5.7	6.7
Purchase of Medicines (Rabipur 21.8%)	5.5	39.6
Health camp or check-up / Village Health and Nutrition Day	2.0	6
Purchase of weighing machine/ BP apparatus	1.8	4.7
Nutritional food to patients		3
Not Allowed	**0.5**	
Payment of salaries		
Fuel expense for monthly village tours	0.5	
Vehicle Purchase		

- *Utilisation from stated 'guidelines'*

In case of the SC's the utilisation of funds from within the stated specific guidelines for Bangalore urban is (69%) and for Udupi (23.6%). The maximum expenditure is incurred on 'purchase of bleaching powder and disinfectants for use in common areas of the village' by Bangalore Urban – (26.8%), 'transport of emergencies to appropriate referral Centres' (13.3%) and 'transport of samples during epidemics' (10%). Udupi district SC's reflect very small expenditures from the specified guidelines with only (9.5%) utilized with modification of the SC's and small negligible amounts summing up to (23.6%).

- *Utilisation on 'Others' category*

The 'others' category reflects only (30.5%) for Bangalore Urban which primarily constitutes furniture (9.8%). Udupi reflects maximum expenditure under the 'others' category (76.3%) with (39.6%) spent on purchase of medicines and (16.3%) on purchase of furniture.

- *Utilisation on 'not allowed' category*

SC's in Bangalore utilized (0.5%) on fuel expense which is the 'not allowed' category of Untied Funds.

Guidelines for utilizing Untied Fund at the PHC

Health sector reforms under the National Rural Health Mission (NRHM) aims to increase functional, administrative and financial resources and autonomy to the field units under which every PHC will get Rs. 25,000/- p.a. as untied grant for local health action.

- Minor modifications to the centre- curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs, which can be done at the local level
- Patient examination table, delivery table, BP apparatus, haemoglobin meter, copper-T insertion kit, instruments tray, baby tray, weighing scales for mothers and for newborn babies, plastic/rubber sheets, dressing scissors, stethoscopes, buckets, attendance stool, mackintosh sheet and other equipment needed as per IPHS guide lines, for the systematic working of the Centre
- Provision of running water supply
- Provision of electricity
- Ad hoc payments for cleaning up the Centre, especially after childbirth.
- Transport of emergencies to appropriate referral Centres
- Transport of samples during epidemics
- Purchase of consumables such as bandages in the Centre
- Purchase of bleaching powder and disinfectants for use in common areas under the jurisdiction of the Centre.
- Labour and supplies for environmental sanitation, such as clearing or larvicidal measures for stagnant water.
- Payment/reward to ASHA for certain identified activities
- Repair/operationalising soak pits
- All the necessary materials recommended by the PHC and compliant to the IPHS standards may be purchased, but this is to fill in temporary gaps only.
- To ensure that services are provided under the frame work of NRHM and as per IPHS standards, getting the services of specialists or experts on contract basis

Untied fund shall **NOT** be used for the following type of expenses

- Purchase of motor vehicles, etc.
- payments towards advertisements in newspapers / journals / magazines and information, education and communication based expenses
- If stalls are rented for arranging fairs with a view to spread awareness about health related projects / programmes, such rent

- Under centralized system bulk purchases at PHCs should not be done

Untied funds shall not be utilized for the following, except, under special circumstances with the District Health Society approval

- Encouraging good performance at higher work load or under difficult situations, and for facilities provided to the inspecting agencies engaged in measuring and inspecting the quality and range of the services.
- Wages paid to full-time and part-time employees. But this will be of temporary nature only, till their services are confirmed. To ensure the specific service (both quality and range included) is delivered these types of employees may be engaged with the approval of the District Health Society.
- Other than transport services with regard to referral services and emergency services no other personalized activities shall be undertaken. For these no prior permission is needed.

The health facilities are not required to take prior approval before implementing the schemes from the untied funds but shall have to send quarterly Statement of Expenditure and Utilisation Certificate.

The expenditure incurred by Primary Health Centre (PHC) under Untied Funds

The breakup of expenditure incurred by PHC under various expenditure heads of Untied Funds (UF) are presented below:

Table 16: Percentage of expenditure incurred under various expenditure heads of untied funds at PHC level for the year 2010-11

Expenditure at PHC from Untied Funds	% of total expenditure	
	Udupi	Bangalore
As per guideline	**22.2**	**42.2**
Minor modifications to the Centre- curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs	4.2	
Patient examination table, delivery table, BP apparatus, haemoglobin meter, copper-T insertion kit, instruments tray, baby tray, weighing scales for mothers and for newborn babies, plastic/rubber sheets, dressing scissors, stethoscopes, buckets, attendance stool, mackintosh sheet	13.3	19.3
Provision of electricity	1.1	13.2
Ad hoc payments for cleaning up the Centre, especially after childbirth.	0.4	
Purchase of consumables such as bandages in the Centre	2.2	
Dry pits repairs and maintenance	0.6	
Labour and supplies for environmental sanitation, such as cleaning larvicidal measures for stagnant water		9.7
Payment/reward to ASHA for certain identified activities	0.4	
Other expenses	**14.4**	**0**
Lab apparatus	2.5	
Travel a8.8%)	8.8	
Lamination of display	2.3	
Replacing electronics	0.8	
Not allowed	**63.3**	**57.9**
Purchase of Office Stationery and equipments, training-related equipments, vehicles etc.*	16.1	
Engagement of full time or part time staff and payment of honorarium/incentives/wages of any kind*		27.1
Purchase of drugs, consumables and furniture.*	37.4	7.1
Payments towards inserting advertisements in any Newspaper/ Journal / Magazine and IEC related expenditure.*	5.4	20.7
Organizing "Swasthya Mela" or giving stalls in any Mela for ostensible purpose of awareness generation of health schemes / programmes*	3.5	
Payment of incentives to individuals /groups in cash/kind*	0.9	3

- *Utilisation from stated 'guidelines'*

In case of the PHC's, both in Bangalore Urban and in Udupi most of the expenditure is incurred outside the labyrinth of the guidelines. Only (22.2%) for Udupi and (42.2%) for Bangalore Urban come from stated guidelines constituting principally of medical instruments (13.3%) for Udupi and (19.3%) for Bangalore Urban.

- *Utilisation on 'Others' category*

From the others category around (14.4%) was utilized by Udupi primarily consisting of Lab Apparatus (2.5%), replacing electronics (0.8%), and travel and refreshment for ICTC (8.8%). Bangalore Urban did not expend any amount from 'others' category of the stated guidelines.

- *Utilisation on 'not allowed' category*

A startling aspect of the expenditure incurred by the PHC's in Udupi as well as in Bangalore Urban is that the maximum expenditure incurred comes from the 'not allowed' category. A whopping (63.3%) in Udupi which primarily consists of office stationary, training related equipment (16.1%), purchase of drugs, consumables and furniture (37.4%). Bangalore Urban spends (57.9%) on others category which constituted engagement of full time or part time staff and payment of honorarium/incentives/wages of any kind (27.1%) and payments towards inserting advertisements in any Newspaper/ Journal / Magazine and IEC related expenditure (20.7%).

Guidelines for utilizing untied funds at the Community Health Centre

An amount of Rs 50,000/- is released per year towards Untied Funds at every CHC

- Minor modifications to the centre: curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs, which can be done at the local level
- Patient examination table, delivery table, BP apparatus, haemoglobin meter, copper-T insertion kit, instruments tray, baby tray, weighing scales for mothers and for new-born babies, plastic/rubber sheets, dressing scissors, stethoscopes, buckets, attendance stool, mackintosh sheet
- Provision of running water supply
- Provision of electricity
- Ad hoc payments for cleaning up the centre, especially after childbirth.

- Transport of emergencies to appropriate referral Centres
- Transport of samples during epidemics.
- Purchase of consumables such as bandages in the centre
- Purchase of bleaching powder and disinfectants for use in common areas under the jurisdiction of the centre
- Water cooler and water purifying machines
- Labour and supplies for environmental sanitation, such as cleaning larvicidal measures for stagnant water.
- Repair/operationalising soak pits
- Staying facilities for poor patients and their aids. This includes facility for cooking their food (according to social and rural background).
- Construction of kitchen or outsourcing the patients and their aids' food practices
- Including security for women, providing proper security to the hospital and related buildings
- Improvisation of the hospitals' sign boards – Health care workers help for patients to easily identify the available services and to provide quality services
- Special control systems for preventing street dogs, rodents, and other harmful living beings from entering the hospital premises
- Purchase of equipment : required as per IPHS guidelines for each facility
- Expenses incurred in meeting the NABH or ISI or any other recognized organization's quality standards. ISO certification should be able to achieve at different levels human resources availability and the available human resources should get certification for having provided quality services
- To ensure that services are provided under the frame work of NRHM and as per IPHS standards, getting the services of specialists or experts on contract basis

The following nature of expenditures should **NOT** be incurred out of the untied fund:

- Purchase of training-related equipment, vehicles etc.
- Engagement of full time or part time staff and payment of honorarium / incentives / wages of any kind

- Purchase of drugs, consumables and furniture.
- Payments towards inserting advertisements in any Newspaper / Journal / Magazine and IEC related expenditure.
- Organizing "Swasthya Mela" or giving stalls in any Mela for ostensible purpose of awareness generation of health schemes / programmes.
- Meeting any recurring non-plan expenditure.
- Taking up any individual based activity except in the case of referral and transport in emergency situations.

Untied fund should not be utilized for the following, *except* under special circumstances with the permission of the District Health Society:

- Encouraging good performance at higher work load or under difficult situations, and for facilities provided to the inspecting agencies engaged in measuring and inspecting the quality and range of the services.
- Wages paid to full-time and part-time employees. But this will be of temporary nature only, till their services are confirmed. To ensure the specific service (both quality and range included) is delivered these types of employees may be engaged with the approval of the District Health Society.
- Other than transport services with regard to referral services and emergency services no other personalized activities shall be undertaken. For these no prior permission is needed.

For equipment purchased out of untied funds the following conditions apply:

1. In the centralized system bulk purchase orders should not be given for all Community Health Centre / District hospitals
2. District or State Government should help Community Health Centres/ District Hospitals in buying the instruments and should publish the rates of each of the instrument and should provide the seller's details
3. If small instruments' (e.g. BP apparatus, weighing machine, etc.) stocks are available in co-operative societies / Government shops or go-downs, Community Health Centres/ District Hospitals may directly purchase without going to the market

4. This is allowed in order to shorten the distance between Community Health Centres/ District Hospitals and not to restrict the Centralized purchase system. Community Large numbered facilities sometimes want to get upgraded by purchasing certain equipment such as Ultra Sound Equipment or Generator. These come under State PIP and have separate Revenue and Expenditure heading.

The Centres are required to take prior approval from Hospital Management Society before utilizing from the untied funds. The centre shall have to send quarterly Statement of Expenditure and Utilisation Certificate to district regularly. The account is also subject to supervision of state/district officials as on when required.

The expenditure incurred by Community Health Centre (CHC) under Untied Funds

The breakup of expenditure incurred by CHC under various expenditure heads of Untied Funds (UF) are presented in the table below:

Table 17: Percentage of expenditure incurred under various expenditure heads of untied funds at CHC level for the year 2010-11

Expenditure at CHC from Untied Funds	% of total expenditure	
	Bangalore	Udupi
As per guideline	**99.5**	**3.5**
Minor modifications to the Centre, curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs, which can be done at the local level		3.5
Patient examination table, delivery table, BP apparatus, haemoglobin meter, copper-T insertion kit, instruments tray, baby tray, weighing scales for mothers and for newborn babies, plastic/rubber sheets, dressing scissors, stethoscopes, buckets, attendance stool, mackintosh sheet	99.5	
Others	**0.5**	**17.3**
BSNL recharge	0.3	
Bank charges	0.2	
Lab items and equipments		10.9
Waste management		6.4
Not allowed		**79.2**
Purchase of training-related equipments, vehicles etc*		19
Purchase of drugs, consumables and furniture*		49.6

Organizing "Swasthya Mela" or giving stalls in any Mela for ostensible purpose of awareness generation of health schemes / programmes*		10.6

- *Utilisation from stated 'guidelines'*

  CHC's in Bangalore Urban and in Udupi reflect completely different scenarios in their expenditures patterns. Bangalore urban expenditures are mostly incurred from within the stated guidelines (99.5%) as reflected in the table above and principally comprises of medical instruments. Udupi CHC's on the contrary reflects just about (3.5%) from the stated guidelines which comprises of modifications to the health facilities.

- Utilisation on 'Others' category

  Both Bangalore Urban and Udupi reflect small expenditures from the 'others' segment of the guidelines. Bangalore Urban reflects phone (0.3%) and bank charges (0.2%) summing up to (0.5%) while Udupi District reflects lab items and equipments (10.9%) and waste management (6.4%) from 'others' segment of stated guidelines.

- *Utilisation on 'not allowed' category*

  The CHC's in Udupi reflect most their expenditures from under the 'not allowed' category (79.2%). These items heads are specifically stated under the guidelines that they should not be borne out of UF's. They primarily consists of expenses on purchase of drugs, consumables and furniture (49.6%), purchase of training-related equipments, vehicles etc (19%) and organizing "SwasthyaMela" or giving stalls in any Mela for ostensible purpose of awareness generation of health schemes / programmes (10.6%). Bangalore Urban CHC's do not expend any funds under the 'not allowed' category of UF's

Utilisation of Annual Maintenance Grants at sample health facilities

Guidelines for utilizing Annual Maintenance Grants at the Sub Centre (SC)

An amount of Rs.10, 000/- for each SC, functioning in the government building, will be released as maintenance fund.

- The maintenance fund can be utilized for maintenance of SC buildings, functioning, gardening, toilets, painting & white washing of the facility, water supply.
- Whenever required a person can be hired for cleaning the Sub Centre @ Rs. 100 per day.

- Minor repairing of hospital building as required after approval of sub centre Committee.

The expenditure incurred by the Sub-Centre (SC) under Annual Maintenance Grants

The breakup of expenditure incurred by SC under various expenditure heads of Annual Maintenance Grants (AMG) are presented in the table below:

Table 18: Percentage of expenditure incurred under various expenditure heads of AMG at SC level for the year 2010-11

Expenditure at SC from AMG	% of total expenditure	
	Bangalore	Udupi
As per guideline	**83.7**	
Maintenance of SC buildings	4.2	-
Gardening		
Toilets	11.7	
Painting & white washing of the facility	1	
Water supply	3.1	
Minor repairing of hospital building	61	
Cleaning sub centre when required @Rs 100 per day	2.7	
Other	**16.2**	**-**
Bleaching powder (other)	1.9	
Purchase of Electrical Accessories (other)	14.4	

For the year 2010-11, AMG were provided to the SC's in Bangalore Urban and not of those in Udupi.

- *Utilisation from stated 'guidelines'*

SC's in Bangalore Urban who own their own building and receive AMG reflect most of their expenditure from the guidelines provided to them (83.7%) as shown in table 18. The maximum expenditure is incurred for hospital repairs (61%) and toilets (11.7%).

- *Utilisation on 'Others' category*

The SC's utilize a small percentage of funds from the 'other' category (16.9%) which includes purchase of electrical accessory (14.4%) and Bleaching powder (1.9%).

Guidelines for utilizing Annual Maintenance Grants at the Primary Health Centre

Every PHC will get an Annual Maintenance Grant of Rs.50,000/- for improvement and maintenance of physical infrastructure.

- The maintenance fund can be utilized for OPD/indoor buildings, functioning toilets, gardening, painting & white washing of the facility, water supply maintenance. The fund for maintenance is Rs. 50,000/- per facility
- Maintenance of generator and POL
- Contracting out of services like cleaning of campus, hospital wards, etc
- Minor repairing of hospital building as required after approval of Management Society
- Maintenance of electrical installations and instruments sterilizers, autoclave, replacement of bulbs, tubes if needed to be done on priority
- Engagement of contractual staffs like sweeper (1) and driver for ambulance @ Rs, 1000 per month
- Hospital waste disposal system like procurement of bins, trolley etc

The expenditure incurred by the Primary Health Centre (PHC) under Annual Maintenance Grants

The breakup of expenditure incurred by PHC under various expenditure heads of Annual Maintenance Grants (AMG) are presented in the table below:

Table 19: Percentage of expenditure incurred under various expenditure heads of AMG at PHC level for the year 2010-11

Expenditure at PHC from AMG	% of total expenditure	
	Bangalore	Udupi
As per guideline	**96.3**	**84.2**
Maintenance of OPD/indoor buildings, functioning toilets, gardening, painting & white washing of the facility, water supply maintenance	33.9	66.3
Maintenance of Generator and POL		
Contracting out of services like cleaning of campus, Hospital Wards, etc.	15.9	2
Minor repairing of hospital building as required after approval of Management Society	18.6	1.5

Maintenance of Electrical Installations and Instruments Sterilizers, Autoclave, Replacement of Bulbs, Tubes	4.6	4.8
Engagement of contractual staffs like Sweeper (1) and driver for ambulance @ Rs.1000 pm.	1.6	0.3
Hospital Waste Disposal System like procurement of bins, trolley etc.	21.7	9.3
Other	**3.6**	**15.7**
Miscellaneous	2.8	
Water treatment	0.9	
DISH TV		0.3
Furniture		0.1
Sign Board		0.4
Medicine		2.2
Equipment Purchase		0.8
IEC		2.8
Vehicle Shade construction		9.1

- *Utilisation from stated 'guidelines'*

The PHC's in Udupi and Bangalore Urban reflect a huge portion of their expenditure from the guidelines. Bangalore Urban a total of (96.3%) of the funds are from the guidelines which includes principally maintenance of the hospital and other related activities (33.9%), waste disposal system (21.7%), minor repairs of the building (18.6%), contracting of services for cleaning (15.9%) and other heads.

Udupi PHC's on the other hand also utilize (84.2%) of their funds from guidelines including (66.3%) on maintenance of hospital and related activities, (9.3%) on waste disposal system and some other heads.

- *Utilisation on 'Others' category*

The PHCs both in Bangalore Urban and Udupi utilize a minor portion of their AMG expenditure from 'others' (3.6%) and (15.7%) respectively.

The utilisation of the AMG funds as per the guidelines by the PHC's in Udupi and Bangalore may prove that they do indeed have a thorough knowledge of the guidelines and the segments under which they are meant to be utilized.

Guidelines for utilizing Annual Maintenance Grants at the Community Health Centre

An amount of Rs 1,00,000/- will be released per facility as maintenance fund per year

- The maintenance fund can be utilized for OPD/indoor buildings, functioning toilets, gardening, painting & white washing of the facility, water supply maintenance.
- Maintenance of generator and POL
- Contracting out of services like cleaning of campus, hospital wards, etc.
- Minor repairing of hospital building as required after approval of the Management Society.
- Maintenance of electrical installations and instruments sterilizers, autoclave, replacement of bulbs, tubes if needed to be done on priority.
- Engagement of contractual staffs like sweeper (2) and driver for ambulance up to Rs 1000 per month
- Water cooler and water purifying machines
- In emergencies expenses for transportation to referral centres
- Uninterrupted supply of water: generally, water supply expenses are borne by the State budget. For this purpose, till the state budget provides this fund may be used as a temporary source of funds
- Purchase of equipment : required as per IPHS guidelines for each facility
- Expenses incurred in meeting the NABH or ISI or any other recognized organization's quality standards. ISO certification should be able to achieve at different levels human resources availability and the available human resources should get certification for having provided quality services
- To ensure that services are provided under the frame work of NRHM and as per IPHS standards, getting the services of specialists or experts on contract basis.

The expenditure incurred by the Community Health Centre (CHC) under Annual Maintenance Grants

The breakup of expenditure incurred by CHC under various expenditure heads of Annual Maintenance Grants (AMG) are presented in the table below:

Table 20: Percentage of expenditure incurred under various expenditure heads of AMG at CHC level for the year 2010-11

Expenditure at CHC from AMG	% of total expenditure	
	Bangalore	Udupi
As per guideline	**100**	**71**
Maintenance OPD/indoor buildings, functioning toilets, gardening, painting & white washing of the facility, water supply maintenance		53.1
Maintenance of Generator and POL		
Contracting out of services like cleaning of campus, Hospital Wards, etc.	7.7	
Minor repairing of hospital building as required after approval of Management Society		7.2
Maintenance of Electrical Installations and Instruments Sterilizers, Autoclave, Replacement of Bulbs, Tubes	45.4	8.3
Engagement of contractual staffs like Sweeper (2) and driver for ambulance @ Rs, 1000 pm	47	
Hospital Waste Disposal System like procurement of bins, trolley etc.		2.4
Other		**29.1**
Dental Equipments		16.7
Sign Board		0.7
Ambulance repair		5.1
Stationary		1.2
Medicine and furnishing		4.4
Electronic item		0.4
IEC		0.6

- *Utilisation from stated 'guidelines'*

The CHC's in Bangalore reflect (100%) of their expenditure from stated 'guidelines'. A total of (47%) of the expenditure is from the engagement of contractual staff, (45.4%) for electrical instalments, and (7.7%) on cleaning of campus and hospital wards. The CHC's in Udupi on the other hand utilize (71%) of which maximum goes to general maintenance of the building (53.1%) as reflected in the table above.

- *Utilisation on 'Others' category*

CHC's in Bangalore Urban show a lot of miscellaneous expenditure under the others category totalling to (29%).

Utilisation of Arogya Raksha Samithi (ARS) Corpus Funds at sample health facilities

Guidelines for utilizing Aarogya Raksha Samithi/Rogi Kalyan Samithi Corpus funds at the Primary Health Centre

All the Block PHC and 24*7 PHC are release of *Aarogya Raksha Samithi/Rogi Kalyan Samithi* Corpus funds of Rs 1, 00,000/- per year

- Identifying and solving the problems faced by the patients in facility;
- Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital;
- Expanding the hospital building, in consultation with and subject to any guidelines that may be laid down by the State Government;
- Making arrangements for the maintenance of hospital building (including residential buildings), vehicles and equipment available with the hospital;
- To improve boarding / lodging arrangements for the patients and their attendants;
- Entering into partnership arrangement with the private sector (including individuals)
- for the improvement of support services such as cleaning services, laundry services, diagnostic facilities and ambulatory services etc.;
- Developing / leasing out vacant land in the premises of the hospital for commercial purposes with a view to improve financial position of the society;
- Encouraging community participation in the maintenance and upkeep of the hospital;
- Promoting measures for resource conservation through adoption of wards by institutions or individuals; and,
- Adopting sustainable and environmental friendly measures for the day-to-day management of the hospital, e.g. scientific hospital waste disposal system, etc.
- Procurement of hospital lines, drugs if not adequately supplied from state budget.

The expenditure incurred by the Primary Health Centre (PHC) under Aarogya Raksha Samithi corpus funds

The breakup of expenditure incurred by PHC under various expenditure heads of ARS corpus funds (ARS) are presented in the table below:

Table 21: Percentage of expenditure incurred under various expenditure heads of ARS corpus funds at PHC level for the year 2010-11

Expenditure at PHC from ARS	% of total expenditure	
	Bangalore	Udupi
As per guideline	**93.8**	**71**
Identifying and solving the problems faced by the patients in facility		0.3
Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital	76.1	12.5
Expanding the hospital building, in consultation with and subject to any Guidelines by State		
Making arrangements for the maintenance of hospital building (including residential buildings), vehicles and equipment available with the hospital	11.7	40.3
Improving boarding / lodging arrangements for the patients and their attendants		2.4
Encouraging community participation in the maintenance and upkeep of the hospital	0.1	0.7
Adopting sustainable and environmental friendly measures for the day-to-day management of the hospital, e.g. scientific hospital waste disposal system, etc.	1.9	3.4
Procurement of hospital linens, drugs if not adequately supplied from State Budget	4	24.5
Others	**6.2**	**15.9**
ICTC payments	1.6	
NRHM account maintenance	0.5	
Payment to night watchman	1.1	3.1
Purchase of sandals to ANC women/Mats to Aanganwadi centre	0.2	
Management of the hospital, e.g. scientific hospital waste disposal system, etc.	2.8	5.8
Repair		2.6
Stationary		2.3
IEC		2
Driver		0.1

- *Utilisation from stated 'guidelines'*

The ARS funds provided to the PHC's are expended well within the stated guidelines by both Udupi (71%) and Bangalore Urban (93.8%). In the case of Bangalore Urban majority of the

expenditure is incurred in acquiring new equipment (76.1%), while in case of Udupi it is for maintenance of hospital building (40.3%) and procurement of hospital linens (24.5%)

- *Utilisation on 'Others' category*

The PHC's utilize the ARS funds for a small portion of the 'others' explained under guidelines, of about (6.2%) for Bangalore Urban and (15.9%) for Udupi.

Guidelines for utilizing Aarogya Raksha Samithi/Rogi Kalyan Samithi corpus funds at the Community Health Centre

All the Community Health Centres receive *Aarogya Raksha Samithi/Rogi Kalyan Samithi* Corpus funds (RKS) of Rs 1,00,000/- per year

- Identifying and solving the problems faced by the patients in facility
- Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital;
- Expanding the hospital building, in consultation with and subject to any guidelines that may be laid down by the State Government;
- Making arrangements for the maintenance of hospital building (including residential buildings), vehicles and equipment available with the hospital;
- Improving boarding / lodging arrangements for the patients and their attendants;
- Entering into partnership arrangement with the private sector (including individuals) for the improvement of support services such as cleaning services, laundry services, diagnostic facilities and ambulatory services etc.;
- Developing / leasing out vacant land in the premises of the hospital for commercial purposes with a view to improve financial position of the Society;
- Encouraging community participation in the maintenance and upkeep of the hospital.
- Purchase of drugs, consumables and furniture
- Promoting measures for resource conservation through adoption of wards by institutions or individuals.
- Adopting sustainable and environmental friendly measures for the day-to-day management of the hospital, e.g. scientific hospital waste disposal system, etc.
- Procurement of hospital linens, drugs if not adequately supplied from State Budget
- Purchase of equipment : required as per IPHS guidelines for each facility

- Expenses incurred in meeting the NABH or ISI or any other recognized organization's quality standards. ISO certification should be able to achieve at different levels human resources availability and the available human resources should get certification for having provided quality services
- To ensure that services are provided under the frame work of NRHM and as per IPHS standards, getting the services of specialists or experts on contract basis

The expenditure incurred by the Community Health Centre (CHC) under Aarogya Raksha Samithi corpus funds

The breakup of expenditure incurred by CHC under various expenditure heads of ARS corpus funds (ARS) are presented in the table below:

Table 22: Percentage of expenditure incurred under various expenditure heads of ARS corpus funds at PHC level for the year 2010-11

Expenditure at CHC from ARS	% of total expenditure	
	Bangalore	Udupi
As per guideline	**99.9**	**94.9**
Identifying and solving the problems faced by the patients in facility	74.4	
Purchase of medicines when they are not in stock		16.5
Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital		68.2
Making arrangements for the maintenance of hospital building (including residential buildings), vehicles and equipment available with the hospital		0.1
Improving boarding / lodging arrangements for the patients and their attendants		0.7
Encouraging community participation in the maintenance and upkeep of the hospital		0.7
Procurement of hospital lines, drugs if not adequately supplied from State Budget	25.5	
Renovation of Building, For installing privacy curtains, drinking water supply , Lighting, for carrying out minor repairs or replacing some items		4.8
water coolers and water purifying machines		3.9
Others	**0.1**	**5.1**
Bank charges	0.1	
Camp		0.4
Lab Item		0.9
Stationary		0.9

Fuel		0.3
VHSC		1.6
Biomedical Waste		1.1

- *Utilisation from stated 'guidelines'*

The CHC's in Bangalore Urban utilize all their funds under stated guidelines (99.9%) which revolves around patient issues (74.4%) and procurement of hospital lines and drugs (25.5%). The CHC's in Udupi also utilize maximum under stated 'guidelines' (94.9%), of which maximum was towards acquiring equipment, furniture, ambulance (68.2%).

- *Utilisation on 'Others' category*

Small miscellaneous expenses totalling to (5.1%) is expended on the 'others' of the guidelines by CHC's in Udupi.

Guidelines for utilizing Aarogya Raksha Samithi/Rogi Kalyan Samithi Corpus funds at the District Hospital

All District Hospitals receive *Aarogya Raksha Samithi/Rogi Kalyan Samithi* Corpus funds of Rs 5,00,000 per year

- Identifying and solving the problems faced by the patients in the facility;
- Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital;
- Expanding the hospital building, in consultation with and subject to any guidelines that may be laid down by the State Government;
- Making arrangements for the maintenance of hospital building (including residential buildings), vehicles and equipment available with the hospital;
- Improving boarding / lodging arrangements for the patients and their attendants;
- Entering into partnership arrangement with the private sector (including individuals) for the improvement of support services such as cleaning services, laundry services, diagnostic facilities and ambulatory services etc.;
- Developing / leasing out vacant land in the premises of the hospital for commercial purposes with a view to improve financial position of the Society;
- Encouraging community participation in the maintenance and upkeep of the hospital;

- Promoting measures for resource conservation through adoption of wards by institutions or individuals; and,
- Adopting sustainable and environmental friendly measures for the day-to-day management of the hospital, e.g. scientific hospital waste disposal system, etc.
- Engagement of contractual staffs likes Sweeper (3) and driver for ambulance up to Rs. 1500 per month.
- Procurement of hospital lines, drugs if not adequately supplied from State Budget.

Aarogya Raksha Samithi/Rogi Kalyan Samithi can increase its fund base by way users' fees, donations and other sources. These guide lines apply to all types of funds except Central Government Grants. Any expenses not in line with these guide lines have to get District Health Society's approval.

The expenditure incurred by the District Hospital (DH) under Aarogya Raksha Samithi corpus funds

The breakup of expenditure incurred by DH under various expenditure heads of ARS corpus funds (ARS) are presented in the table below:

Table 23: Percentage of expenditure incurred under various expenditure heads of ARS corpus funds at DH level for the year 2010-11

Expenditure at DH from ARS	% of total expenditure	
	Bangalore	Udupi
As per guideline	**100**	**60.1**
Purchase of bandage, linen	100	
Acquiring equipment, furniture, ambulance (through purchase, donation, rental or any other means, including loans from banks) for the hospital		8.4
Purchase of medicines when they are not in stock		60.7
Others	**0**	**30.9**
Electronic Purchase (AC and TV)		30.9

- *Utilisation from stated 'guidelines'*

The ARS funds are expended by the DH in Bangalore Urban on purchase of equipment (100%) which was passed by tender. The DH in Udupi spent most of their ARS funds on purchase of medicines not in stock (60.7%) and acquiring equipment (8.4%).

- *Utilisation on 'Others' category*

The remaining (30.9%) of the ARS corpus funds by the DH in Udupi was spent on acquiring other equipment like (AC and TV).

A clear observation made with the ARS funds is that none of the health facilities utilize the funds under the "not allowed" category. All the funds expended by all the health facilities is well within the guidelines.

The guidelines of where to utilize the funds and where not to utilize the funds are available for health facilities. From the above analysis, it is evident that untied funds are used more flexibly as compared to AMG and ARS Corpus funds by the health facilities. There is a huge proportion of funds utilized in others and not-allowed category. The major expenditure in not-allowed category is done on purchase of drugs, consumable and furniture. This suggests that the supply of medicines from the state or budget for medicines available at the health facility is not enough to meet the needs of the facility. Thus, the objective of using untied fund for innovative centre specific need-based activity is diverted for the basic requirement of the facility. The state needs to review the not-allowed category into greater.

4.5 Quarter wise release and expenditure

Public health facilities in general are assumed to face a dearth of funds, the availability of which can help them expedite funds faster and ensure improved efficiency of management and health care delivery. However, the availability of funds in a timely manner is also an essential factor to help the facilities in spending funds. The non-availability of funds when the need arises severally constricts the spending capacity as well as the utilisation of funds made available to the health facilities.

The quarter wise release and expenditure of Untied Funds, Annual Maintenance Grants and Aarogya Raksha Samithi corpus grants for the year 2010-11 in 22 health facilities of Udupi are presented in the figure below:

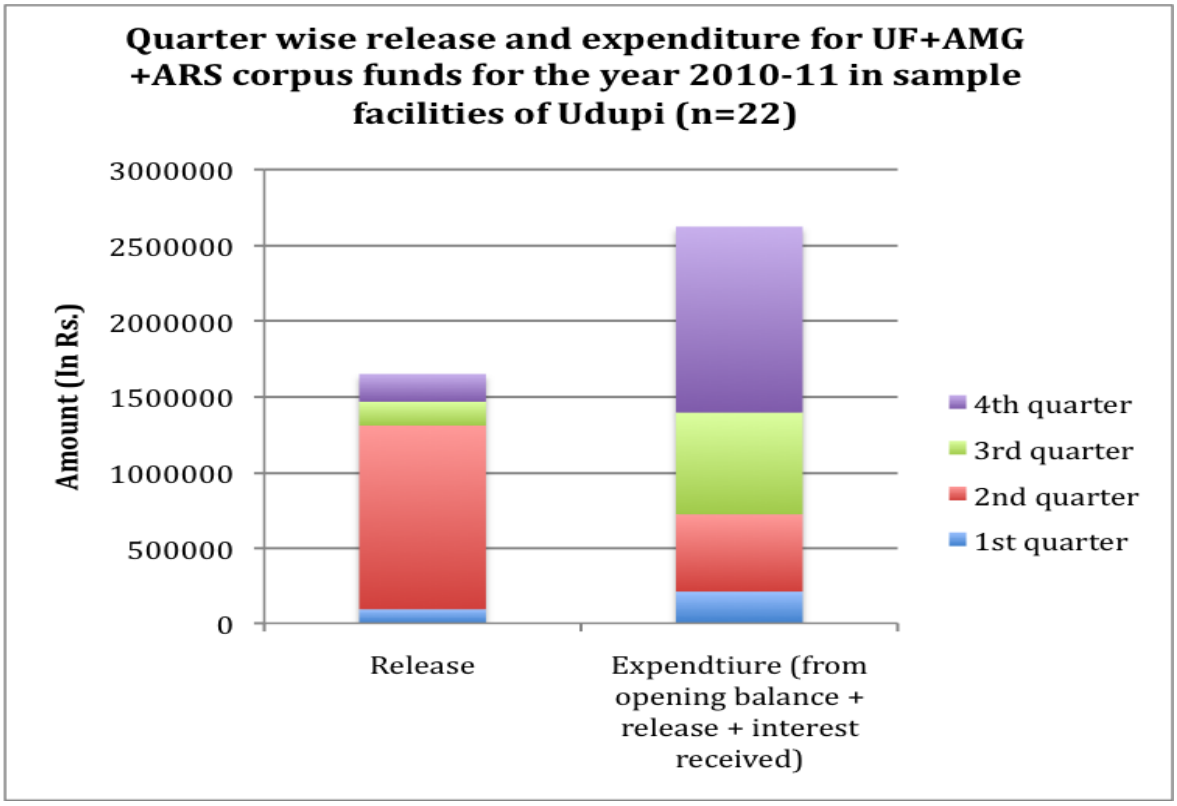

Figure 3: Quarter Wise release and expenditure of UF+AMG+ARS Corpus Funds

The release is less than expenditure in the above figure since release does not include opening balance and interest received to during the year while expenditure is incurred from total funds

available i.e opening balance + funds received during the year + interest received during the year.

The VHSC's receive most of their funds in the 1st quarter of the year; however they still spend their funds only towards 4th quarter (42%). The SC's on the other hand receive most of their funding in the 1st and 4th quarter and their spending is tilted towards the 4th (54%) quarter. The PHC's and CHC's receive maximum funding in the 2nd quarter while their spending is mostly focused towards the 4th quarter (50% and 60% respectively). Irrespective of the level of the health facility as well as the amount of funds given to them in the year, all of them show a trend of maximum spending in the 4th quarter.

In the figure above we see that the cumulative picture of health spending by all levels of health facilities. Maximum funds are disbursed to the health facilities in the 2nd quarter and the maximum utilisation is seen in the fourth quarter. Thus, if the spending of the funds remains tilted towards the fag end of the year irrespective of when they receive the funds, disbursing funds to the health facilities in the 1st quarter does not seem to make any tangible difference in their spending. Health facilities perhaps do spend the funds only towards the end of the financial year when they make an estimate of the funds they have in hand and their requirements there from.

There is a need to change this pattern of expenditure and stress on spending by the health facilities from the start of the year as and when need arises. Again, this point espouses the fact that most health facilities are not spending funds due to lack of knowledge and awareness rather than lack of need. Thus training of health facilities staff needs to be strengthened.

4.6 Problems in utilisation of funds

For analysing the reasons of under-utilisation, we present the problems stated by the president and secretaries of the managing committee of health centres, which had utilisation rates of less than 60% for the year 2010-11.

The problem described by Presidents and Secretaries for underutilisation in the personal interview is described in the table below:

Table 24: The problems described by Presidents and Secretaries for underutilisation

Health Centre	Utilisation of funds (In %)	Problem stated for low utilisation	
		President of the committee	Secretary of the committee
VHSC Laxmisagar, Bangalore	23	As the fund was not released on time, the balance amount was kept as reserve for any future work	As the fund was not released on time, the balance amount was kept as reserve for any future work
VHSC Hosahalli, Bangalore	29	Requirement was not there	Secretary not aware of utilisation figures and reasons for low utilisation
VHSC Chikkabanahalli, Bangalore	43	President not aware of utilisation figures and reasons for low utilisation	Initially there was no awareness as how to utilize the fund and the procedure of using it.
Sub-centre Puttige, Udupi	59.4	President not aware of utilisation figures and reasons for low utilisation	Less need
Sub-centre Kejenje, Udupi	7.3	Less need	Secretary believes there was full utilisation
Sub-centre Yedyadi Marthyadi, Udupi	41.8	President believes there was full utilisation of funds	Secretary believes there was full utilisation
PHC Kodibengre, Udupi	53.3	Untied funds: less Population and fewer opportunities. AMG: Rented building. ARS corpus: Less needs and opportunities	Untied funds: No emergency and No opportunities. AMG: Rented building. ARS: Less need
DH Banglaore urban (Jayanagar)	6.9	Tender process is getting postponed due to insufficient bidders	Tender process is getting postponed due to insufficient bidders

The reasons of underutilisation as we can see from the above table are funds released by the end of the year, less need and insufficient bidders to fulfil the tender requirements. Many of the response from the Presidents and Secretaries also showed that they were not aware of the amount of funds received and underutilisation. This also indicates low level of involvement of the two main key people of the committee, which might also be impacting the utilisation of such facilities.

In this section, we are just mentioning the reasons of low utilisation as mentioned by the President and Secretary of the VHSC. There might be many other factors, which could have resulted in low utilisation of funds in these facilities. We will look at these factors in next section.

4.7 Views of the stakeholders in improving the quality of health services

Prior to 2005, most of the public health facilities in the state faced the problems of underfunding, lack of infrastructural facilities and inadequate supply of staff. The concept of flexible financing was introduced with an objective to empower the health facilities to take up innovative activities and involve community in decision making which can result in improved quality of services.

A total of 92 Presidents and Secretaries of the ARS management committees were interviewed and asked about their views on role of NRHM in improving the quality of services and their suggestions to further improve public health care delivery.

It was evident that the launch of NRHM has indeed improved the quality of health service delivery in Karnataka. However, certain inherent institutional factors continue to act as barriers in making the public health care systems more efficient. The policy makers most often fail to recognise the ground realities and therefore the real reasons for the poor health service delivery. A clearer understanding of the reasons would help find workable solutions. Thus we asked them their views on improving the quality of services further. There were 166 suggestions from the 92 stakeholders interviewed. They are presented in the figure below:

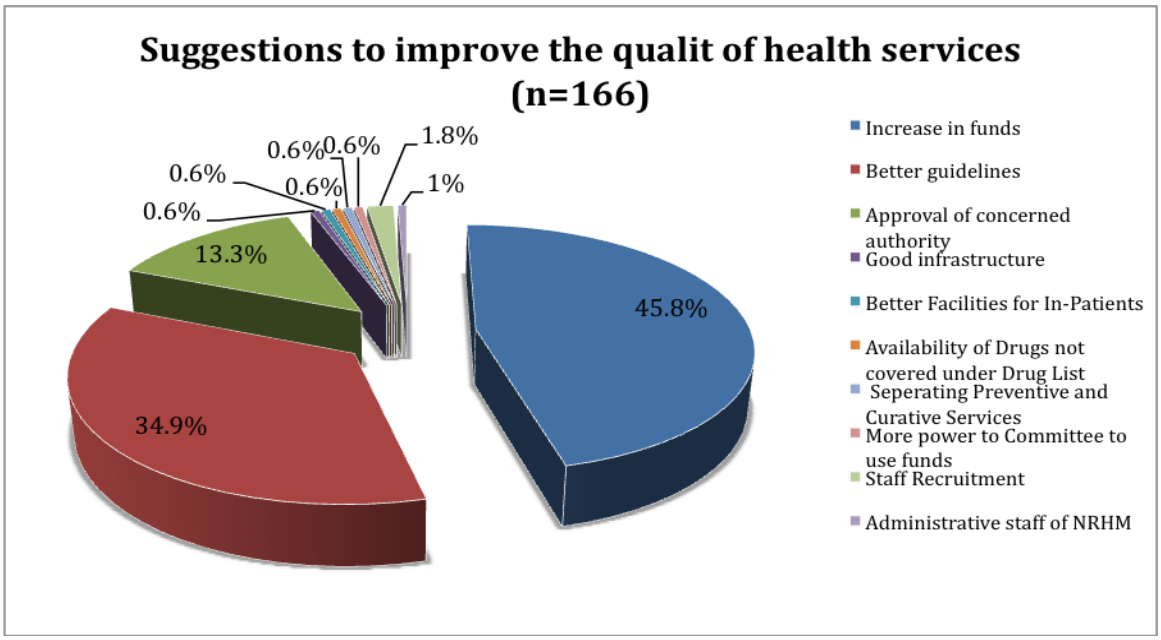

Figure 4: Suggestions to improve the quality of health services

Surprisingly enough, a total of (45.8%) of the respondents were of the opinion that an increased fund allocation could be the answer to improving the quality of health care. Such responses indicate that there is enough grounds to implement differential and performance based financing to the health facilities though "lack of awareness", "knowledge", "training" and other factors mentioned in the report earlier play an important role in preventing them from expending the funds in the required segments.

Supportive of the argument above is also the fact that (34.9%) of the respondents felt that better guidelines could go a long way in helping them utilize the funds provided to them. About (13.3%) felt that 'approval of concerned authority' can help in better health service delivery. Thus we suggest to improving the guidelines, providing training and supportive supervision should be given priority by the state to improve the performance.

It seems obvious that the state of health facility in Karnataka has ample scope for improvement and development, with the addition of a few missing links, the state would indeed be able to improve the overall health indicators of the state and also ensure welfare of its citizens.

4.8 Stakeholders view on differential financing

All the 92 stakeholders interviewed (President and Secretary of ARS committee), were asked about their opinion on introducing differential financing and the basis for the same. The opinions of the stakeholders are presented below:

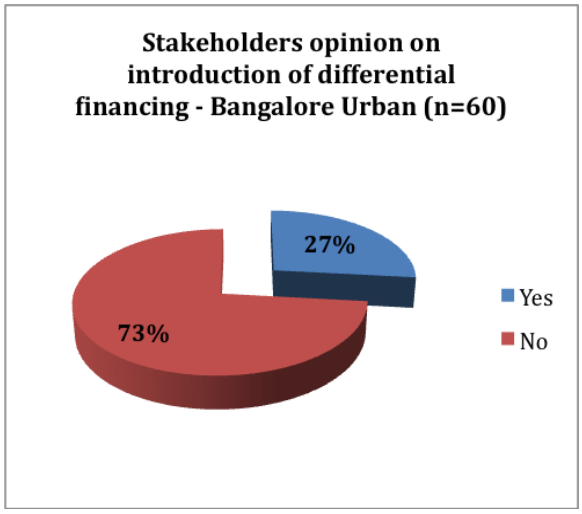

Figure 5: Stakeholders opinion on introduction of differential financing - Bangalore Urban

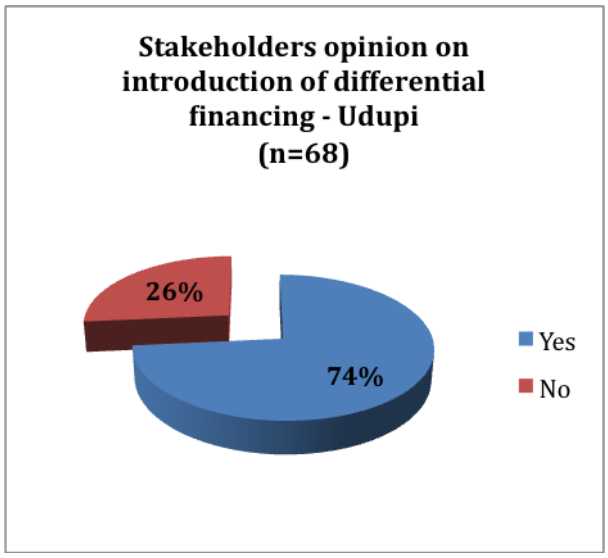

Figure 6: Stakeholders opinion on introduction of differential financing - Udupi

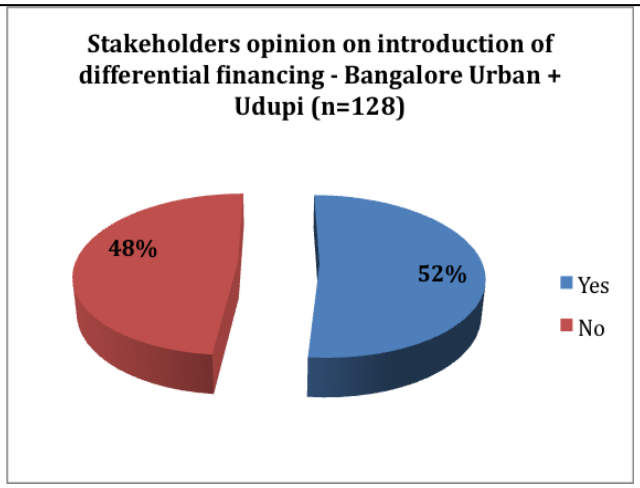

Figure 7: Stakeholders opinion on introduction of differential financing - Bangalore Urban + Udupi

In the district of Bangalore Urban, most of the health facilities were against the concept of differential financing (73%), and only a small majority (27%) were for giving different level of funds for different level of health facilities. At VHSC's about (67%) of the respondents were supporting the concept of differential financing while the fraction of respondents supporting it decrease we go higher in the facility hierarchy – (SC – 93% No and 7% Yes), (PHC – 89% No and 11% Yes), (CHC – 94% No and 6% Yes), (DH – 50% No and 50% Yes).

In the district of Udupi the situation is the contrary where the respondents were supportive of the concept of differential financing with (74%) supporting it and (26%) against it. At the level of VHSC's – (67%) was supportive of different level of funding and (33%) were against it. The other facilities were also supportive of it – (SC – 65% No and 35% Yes), (PHC – 3% No and 97% Yes), (CHC – 100% Yes) and (DH – 100% Yes). Overall, the respondents in the district of Udupi were overly supportive of the concept of differential financing which they felt would be extremely helpful in financing their requirements.

Although, Bangalore Urban and Udupi showed very different interest when it came to differential financing, most of the health facilities seemed supportive of funding based on requirements. The overall picture was pro differential financing as reflected in figure no. 7 above (52% Yes and 48% No).

This also implies that there would be lot of opposition from many stakeholders such as health facility staff and local politicians on the method of financing and an increased administrative load, grievance handline preparedness of the state.

4.9 Factors resulting in differential performance of health facilities

To understand the factors resulting in differential performance of utilisation of funds at health facilities, we listed all possible quantitative and qualitative factors that can impact the utilisation of funds.

These are as below:

- Per capita allocation
- Distance from district head quarter
- Number of beds
- Availability of infrastructure
- Availability of equipment
- Workload
- Availability of human resources
- Presence of health staff at the health centre
- Impact of training
- Cooperation among the committee members
- Decision making process for utilisation of funds
- Availability of guidelines

Impact of per capita allocation of funds on per capita expenditure

The per capita receipts by a health centre are assumed to have an impact on the activities of the health centre and also per capita utilisation of funds. The average per capita receipt and expenditure by the level of health facilities and districts has been described in section 4.3 (table 13). The correlation between these two factors has been worked out in the table below.

Table 25: Correlation between per capita receipts and per capita expenditure at sample health facilities for the year 2010-11

	Correlation coefficient
VHSC	
All sample (n=16)	0.84
Udupi (n=6)	1.00
Bangalore (n=10)	0.72
Sub centre	
All sample (n=11)	0.18
Udupi (n=6)	-0.13
Bangalore (n=5)	1.00
Primary Health Centre	
All sample (n=11)	0.88
Udupi (n=6)	0.86
Bangalore (n=5)	0.98
Community Health Centre	
All Sample (n=4)	0.99

The table shows that there is a significant level of correlation between per capita receipts and per capita expenditure

Impact of Distance of Health Facility from District Headquarter on Utilisation of Funds

It is assumed that when a primary health facility is close to the district head quarter (District Hospital) where higher level of health facilities are located, people generally tend to directly access higher level of health facilities instead of referrals. Thus, the work load in such primary health facilities might be lower which can result in lower utilisation of funds.

Thus, we calculated average distance from headquarters (i.e. from District Hospital) in health facilities from VHSC level to PHC level that had lower utilisation and compared it with average distance from headquarters of facilities from VHSC to PHC level that had higher utilisation. It was found that the average distance of facilities having utilisation less than 80% was 5 km less than average distance of health facilities having higher utilisation.

Impact of number of beds on utilisation of funds

It is assumed that higher number of beds in a health facility results in higher patient load and thereby high need and usage of funds. The number of beds is significant from the PHC level onwards. It was observed that most of the PHC selected as sample had uniform number of beds. And above PHC there was a very small sample size. Thus it is difficult to assess the impact of number of beds on utilisation of funds.

Impact of infrastructure on utilisation of funds

The availability of infrastructure was assumed to have an impact on utilisation of funds in two ways:

1. If the infrastructure is weak, the needs can be higher to fulfil the gaps and thus the utilisation can be higher
2. If the infrastructure if better, the patient turn out can be higher and thus the need of funds might be higher impacting utilisation.

We tried to test the assumption taking the standard infrastructure norms at each level from the quality criteria as set by the state government. The norm that was used at each level and the way the infrastructure index was calculated is described in Annexure 1.

The analysis of infrastructure index compared to utilisation from sub-centre (SC) level to community health centre (CHC) level found that the average infrastructure index is 53% in health facilities having utilisation more than 80% while it is 73% for the health facilities having utilisation of less than 80% i.e. about 20 percentage points higher.

Thus, based on the calculation done on limited sample size we can fairly assume that our second assumption mentioned above (greater infrastructure availability at health centre is related to greater utilisation of funds at the health centre) hold true looking at the aggregate picture. However these assumption need to be tested on a larger sample size.

Impact of availability of equipment on utilisation of funds

The availability of equipment was assumed to have an impact on utilisation of funds in two ways:

1. If the equipment availability is low, the needs can be higher to fulfil the gaps and thus the utilisation can be higher
2. If the availability is better, the patient turn out can be higher and thus the need of funds might be higher impacting utilisation.

We tried to test the assumption taking the standard equipment norms at each level from the quality criteria as set by the state government. The norm that was used at each level and the way the equipment index was calculated is described in Annexure 1.

The analysis of equipment index compared to utilisation from sub-centre (SC) level to community health centre (CHC) level found that the average equipment index is 74% in health facilities having utilisation more than 80% while it is 67% for the health facilities having utilisation of less than 80% i.e. about 7 percentage points higher.

Thus, based on the calculation done on limited sample size we can fairly assume that our second assumption mentioned above (greater the equipment availability at health centre is related to greater utilisation of funds at the health centre) hold true looking at the aggregate picture. However these assumption need to be tested on a larger sample size.

The availability of equipments was also correlated with utilisation of funds at Sub-centre, Primary Health Centre and Community Health Centre level using Pearson's correlation coefficient. There was no significant correlation observed at any of the level.

Impact of workload on utilisation of funds

The utilisation of funds was measured against the number of Village Health and Nutrition Day (VHND) conducted by each VHSC. The analysis showed that average VHND conducted by health facilities (n=8) below 80% funds utilisation was 4.5 for the year 2010-11 while the average

VHND conducted by health facilities (n=8) having utilisation rate greater than 80% was 8.6 for the year 2010-11. Thus, the data at sample VHSC suggest a linkage of higher utilisation linked to higher workload.

The work load at sub-centre level was assessed in terms of number of ANC, immunization conducted and number of Village Health and Nutrition Day organized.

Table 26: Impact of work load on utilisation of funds at sample sub-centre for the year 2010-11

SC	Number of SC	Average ANC women registered / 1000 population	Average Immunization provided / 1000 population	Average VHND conducted / SC
SC with fund utilisation less than 80%	3	14.9	10.2	8
SC with fund utilisation more than 80%	8	17.2	13.5	9.6

Thus, the data at sample SC also suggest a linkage of higher utilisation linked to higher workload.

The workload of Primary Health Centre was assessed taking number of OPD patients served per 1000 population, ANC women registered per 1000 population, deliveries conducted per 1000 population and number of children immunized per 1000 population. Out of 11 sample PHC's, only 1 PHC had utilisation less than 80%. Thus the analysis below shows the average work load difference between PHC's having utilisation rate below and above 95%.

Table 27: Impact of work load on utilisation of funds at sample primary health centre for the year 2010-11

PHC	Average OPD/1000 population	Average ANC women registered / 1000 population	Average deliveries / 1000 population	Average Immunization provided / 1000 population
PHC with fund utilisation less than 95%	1171.5 (n=3)	5.3 (n= 3)	0.2 (n=3)	6.3 (n=3)
PHC with fund utilisation more than 95%	454.4 (n=6)	22.6 (n=6)	2.4 (n=5)	19.9 (n=5)

The table above shows that there is a higher average OPD served per 1000 population and lower average ANC, deliveries and immunization per 1000 population in the health facilities where utilisation of funds is less than 95% when we compare it with PHC's where utilisation of funds is more than 95%.

At CHC level, the workload was assessed by number of OPD patients served per 1000 population, IPD patients served per 1000 population, ANC women registered per 1000 population, deliveries conducted per 1000 population and number of children immunized per 1000 population and number of RTI/STI patients treated per 1000 population. And at DH level additional information on average emergency handled and C-section performed per 1000 population. It was not possible to analyse the difference in work load between CHC's having high utilisation and low utilisation because all the CHCs where data is available had utilisation rate of more than 94%. The DH analysis was also not possible since there were only two DH in the sample and one of the DH had unexpectedly low utilisation for the year 2010-11.

Impact of human resource availability at the facility on utilisation of funds

It was assumed that the higher the number of staff in the facility available, the higher the chances of utilisation of funds.

At VHSC level the number of ASHA per 1000 population was assessed against utilisation of funds. It was found that the average ASHA /1000 population is 0.92 (n=8) in VHSC's where utilisation of funds is less than 80% while it is 1.11 (n=8) in the VHSC's where utilisation of funds is more than 80%.

At the sub-centre level the number of ANM per 1000 population was assessed against utilisation of funds. It was found that the average ANM available /1000 population is 0.54 (n=3) in SC's where utilisation of funds is less than 80% while it is 0.15 (n=8) in the SC's where utilisation of funds is more than 80%.

At PHC level the utilisation of funds was compared with average availability of general physician, staff nurse, ANM, pharmacist and lab technician per 1000 population served by the PHC. There was only 1 PHC in the sample with utilisation of funds less than 80%. Thus the comparison was made between PHC's having utilisation of funds less than and more than 95%. The results are as below

Table 28: Impact of availability of human resource on utilisation of funds at sample PHC for the year 2010-11

PHC	Average GP/1000 population	Average SN / 1000 population	Average ANM / 1000 population	Average Pharmacist / 1000 population	Average Lab Technician / 1000 population
PHC with fund utilisation less than 95%	0.09 (n=4)	0.03 (n= 4)	0.22 (n=4)	0.01 (n=4)	0.07 (n=4)
PHC with fund utilisation more than 95%	0.04 (n=7)	0.06 (n=7)	0.19 (n=7)	0.04 (n=7)	0.04 (n=7)

The analysis of CHC is not done in the following sections since only six CHC's were studied and the information entire information was available only for four CHC's. All this CHC's had fund utilisation of more than 94%. The analysis of DH was also not conducted because only two DH were studied and one had unexceptionally low utilisation because of delay in tendering process.

There is no definite trend of impact of availability of human resource on utilisation of funds at health facilities in the sample health facilities.

Impact of stay of health staff at the facility on utilisation of funds

The utilisation of funds was assessed against ANM residing in the sub centre. While the average utilisation in sub-centres where ANM is residing is 77%, it is 74% where ANM's are not residing. But there is no significant level of correlation between the ANM staying at sub-centre and utilisation of funds by sub-centre.

Impact of training on utilisation of funds:

The quantitative analysis did not show any significant impact of training on utilisation of funds. But the qualitative analysis highlighted the need of clarity in guidelines and training as an important factor to improve the utilisation of funds and performance of health facilities.

Impact of cooperation among committee members and decision making process on utilisation of funds

The cooperation among the members was assessed based on the question asked President and Secretary on what are the problems in taking decision on spending of funds. The members were also asked to reflect on decision making process. It was assumed that if there is full participation the decision making process is better and if the decisions are taken only by one or two members the process is poor. The analysis did not show any significant impact of cooperation among members and participatory decision making process on utilisation of funds at any level of health facilities.

Impact of availability of guidelines on utilisation of funds

Most of the health facilities expressed that they have the guidelines to utilize UF, AMG and ARS corpus funds. Thus the analysis of impact of availability of guidelines on utilisation of funds was not possible. But the qualitative analysis showed that that understanding of the guidelines was the major problem in utilisation of funds. Thus there is a need to work on revising the guidelines and providing further training.

4.10 Stakeholders view of the basis of differential financing

The views of Presidents and Secretaries interviewed (n=92) on the basis of allocating differential financing is presented below

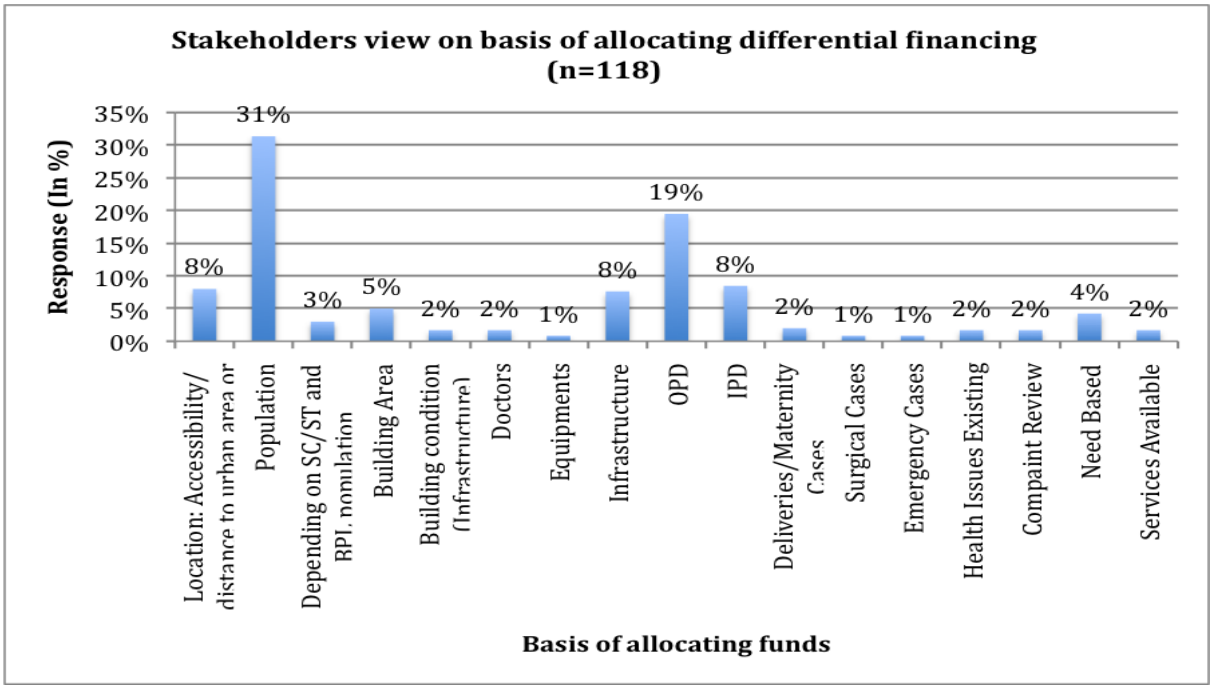

Figure 8: Stakeholders view on basis of allocating differential financing

Although most of the respondents were not too supportive of different level of funding, they did give many options which can be used as parameters for differential financing of funds at each health facility based on their requirements. A true measure of the requirement of the various health facilities according to them would be based on various criteria. Maximum respondent felt that population (31%) served by the health facility should be the basis of allocating different level of funds. Some other prominent factors that can be used as base for differential financing as per the stakeholders are number of OPD's (19%), IPD (8%), Infrastructure (8%), location of the health centre (8%) and building area/condition (7%).

As reflected in the figure no. 8 above that many other parameters could be used for different level of funding. Most of the other parameters mentioned by the respondents are not easily measurable or easily available. Thus it is advisable for the state to start with the most easily

available and acceptable parameters and then gradually increase the parameters based on experience.

4.11 Proposed formula for differential financing of untied funds, AMG and ARS corpus funds

The Presidents and the Secretaries of the ARS committees expressed various factors based on which differential financing can be allocated to the health facilities. The most prominent factor was population served by health facilities. Some other factors highlighted by them were number of OPD, IPD, infrastructure etc. The quantitative analysis of the previous section also shows that there is a high impact of per capita allocation on per capita expenditure. Thus the formula for allocation of untied funds and ARS Corpus funds on these health facilities is proposed to be based on population served by health facilities. The formula for per capita allocation and per bed allocation is based on the population norms and the norms of number of beds set by the government at that particular level of health facility.

Table 29: Proposed formula for allocating differential level of financing for untied funds and ARS corpus funds at all the level of health facilities

	Criteria of allocation of funds		
Health Facility	**Population served by the health facility**	**Number of functional beds**	**Lump sum**
Allocation of untied funds at VHSC	@ 10 Rs per capita		
Allocation of untied funds at SC	@ Rs. 2 per capita		
Allocation of untied funds + ARS at PHC	@ Rs. 4.17 per capita		
Allocation of untied funds + ARS at CHC	@ Rs. 0.63 per capita	@ Rs. 2500 per functional bed	
Allocation of ARS Corpus funds at DH			@ Current norm of 500000 per DH

The Annual Maintenance Grants can be allocated to SC, PHC and CHC on the basis of the condition of the structure and plinth area. The health centres can propose a plan for the year and the AMG funds can be allocated based on the plan within the criteria proposed above. Since the repair and maintenance amount can sometimes be more than yearly allocation to the health centre, the district can decide to allocate more than one year's AMG funds to the health facility based on the plan. The overall allocation to a health centre can be balanced over a period of five years.

Chapter 5: Conclusion and Discussion

NRHM was established in the year 2005 in order to improve the quality and access of rural health care delivery. It is a commendable move by the central government to improve the accessibility of health care and to strengthen the delivery of health care. Under NRHM, the concept of flexible financing has been introduced for the first time in the public health facilities of India. The initiative has raised the scope of meeting unforeseen expenditure at the facility level, taking up need based activities, innovations, decentralized decision making and community participation. The success of the initiative will contribute to improving the quality at public health facilities and increasing the public spending on health.

The flexible financing introduced in form of Untied Funds, Annual Maintenance Grants and Aarogya Raksha Samithi Corpus grants are uniform as per the level of health facility. The authors want to stress the importance of introduction of differential financing approach along with flexible financing approach to finance health facility in order to achieve optimal efficiency of public funds.

The study shows that utilisation of untied funds, annual maintenance grants and ARS corpus funds have been increasing in the sample health facilities over last three years. But the utilisation at VHSC and sub-centre level is lower which needs particular attention.

What was interesting was that although the funds come with broad guidelines and the health facilities do not require any mandate before they can expend the funds, the officials is some of the PHC's we visited were required to obtain hand written consent and obtain a statement for any expenses exceeding Rs. 500/-. The incessant delay in the release of funds every year also puts a lot of pressure on the facilities to spend the funds before the end of the financial year which also causes them to not be able to plan and execute their spending for the year. A lot of activities that need financial attentions often get ignored due to this.

The study highlighted that most of the health facilities do not have clarity of bifurcation of funds released under untied funds, annual maintenance grants and ARS corpus funds. The PRI President who is a co-signatory for the allotted funds is often ignorant of the workings of the health facilities and do not have suitable understanding or knowledge of the public health system to take educated and informed decisions on spending. Sufficient training and orientation becomes mandatory for them to understand how the funds can be spent for the strengthening of the public health system. Changing the signatory and keeping PRI as a part of approval committee in the ARS was also suggested as one of the solutions by the study units.

The analysis of expenditure incurred by the health facilities under the ARS Corpus funds has shown the usage of funds has helped in for identifying and solving the problems of patients at the facility. AMG funds have helped the health facilities in taking up minor repair and maintenance of the health facilities. The interaction with facility staff highlighted that the fund released under AMG for a single year is not sufficient for repair and maintenance work. The suggestion was to release the funds for together three years. The analysis of expenditure under Untied Funds revealed that the funds has helped health facilities take up local need based activities like purchase of sandals and tablets for ANC women, household surveys, organizing camps, arrangement of essential equipment etc. The analysis also highlighted that the maximum utilisation of funds at PHC and CHC level under untied funds is done in the not-allowed category specially drafted by the state government. Thus training the committee members on guidelines will help to improve the utility of funds.

There has also been an indication of need of clarity in guidelines. Though all the health facilities have received the guidelines, the interviews of President and Secretaries of the committee indicates that lack of understanding of guidelines is a major hurdle in utilisation of funds. This was a problem especially at sub-centre and VHSC level. This had led to greater dependence of these centres on Medical Officers of Primary Health Centres. Training, supervision/handholding and revising the guidelines can be helpful especially at SC and VHSC levels.

We tried to explore the link between utilisation of funds with various factors such as per capita allocation of funds, population served, number of beds at the health facility, work load, infrastructure, human resource etc.

The study found several interesting relations.

- The average distance of facilities having higher utilisation from district head quarter is higher than the average distance of facilities having lower utilisation.
- The average infrastructure and equipment availability is higher in health facilities having higher utilisation as compared to infrastructure availability of health facilities having utilisation
- The per capita allocation has a significant level of correlation with per capita expenditure
- There is no definite trend of impact of availability of human resource, number of beds, staff residing at the facility compound, training, cooperation among members, availability of guidelines on utilisation of funds at health facilities in the sample health facilities

The linkages described above might not be applicable to the entire state since the study districts were better off districts and the sample size was not enough to work out the correlations or significance test.

The study highlights that there is a high variation in per capita receipt of funds at the health facilities. The three categories of funds studied are allocated at an equal amount as per the level of health facilities irrespective of the population served. Though the primary health centres in India were established and expected to serve a population as per norms, over a period of time, there has been huge variation in population served by health centres at the same level. Thus we will find one PHC serving a population of 5,000 while other PHC serving a population of 50,000. The study also found that both the health facilities having such variations are getting equal amount of funds.

The study also established a link that per capita expenditure is dependent on the per capita receipts. Thus, the health facilities serving higher population and thereby expected to serve a

higher work load is getting much less allocation than a health facility which serves a smaller population.

We propose to base the formula of differential financing on the population served by health centres as a measure to rationalize allocation of funds and attain equity. For CHC it is proposed to consider number of function beds also as the basis of differential financing because that it will indirectly reflect the work load at the health centre. The study proposes to continue with the current funding pattern at District Hospital level since it is the apex hospital of the district and we had an insignificant number of DH available to carry out any analysis and base our recommendation.

The implementation of differential financing might raise several problems like opposition from local politicians and health centre staff, increased administrative load, increased need of training and supervision. These require high level of preparedness of the state.

The current study proposes a simple formula to start with so that it is easy to understand and minimal opposition from the stake holder's involved. Gradually the state can plan to incorporate performance indicators as a basis for differential financing.

Chapter 6: Key Recommendations

The current section provides some recommendations based on the findings of the study and our interaction in the field. The recommendation are grouped in some broad heads like policy recommendations, implementations recommendations, capacity building recommendations, financial management recommendations and differential financing recommendations

Policy Recommendations	• Strengthen health infrastructure and equipments availability at the health facility. The study found a positive link between the utilisation of funds and availability of infrastructure and equipments • The supply of medicines or enough budget should be ensured by the state otherwise the facility ends up in buying medicines out of the untied funds • The actors involved directly and indirectly with the use of untied funds, AMG and ARS should be consulted and their suggestions incorporated before making policy document
Implementation Recommendations	• Supervisory support to the districts with regular monitoring of the funds, every quarter or bi-yearly checks which will ensure that the funds are being utilized. This would also help is planning for any supplementary expenditures that may arise. • The guidelines provided would have to be made clear, simple and comprehensive to make it easy to comprehend. A section on FAQ taking note of the expenditure patterns in the past could be added for illustration. • Printed guidelines can be provided in the local language which can be put up in the office of Secretary and President of the Hospital management Committee for easy reference. The guidelines printed on the funds register will also help in easy

	reference. • Funds are given to meet sudden and sometimes unanticipated expenditure therefore the guidelines must be very clear and broad.
Capacity Building Recommendations	• Ensure and strengthen the public and community participation in decision making. • Proper and regular training must be provided every year to help them understand how the funds can be utilized. • The training should take the past experience of utilization of funds of the facilities as case study and explain them how they would have performed better in context of the needs of health facilities. • The government officials and supervisors should also be involved in the training
Financial Management Recommendations	• Timely release of funds, giving them substantial time to expend the funds • The release of funds should specifically mention the details of amount of funds released for UF, AMG and ARS • A separate accountant should be kept in-charge of the funds, as the MO is obviously too busy with other duties to be able to dedicate greater attention and time to the use of funds. • It can be made mandatory to keep aside specific amount of money from the funds for emergency cases. • The facilities sometimes feel the need for larger sums of money than what is provided under the NRHM funds especially under the category of AMG funds, and thus refrain from using any funds. The provision of need based funding or an envelope funding for three to five years will help in improving the use of AMG funds

	• Most facilities felt that the funds provided under Untied Funds, Annual Maintenance Grants and Arogya Raksha Samithi funds are insufficient. This view was expressed even by facilities whose utilization was poor. Thus, it is recommended that instead of increasing the amount of funds to at a uniform level, the state can plan to implement performance based financing • The capacity building exercise needs to focus more on VHSC and sub-centre level
Differential Financing Suggestions	• The state can start with implementing differential financing with indicators like per-capita allocation which might create less resistance from the stake holders. Gradually other indicators of performance can be added in the formula once the acceptance level is gained • Retraining of the staff and management committee is essential before implementing differential financing model • The model should be piloted in two to three districts before scaling up to the entire state • Timely evaluation of the differential financing model will help review the impact of the financing model on performance of health facilities and scaling up decision can be taken

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Annexure:

1. **Infrastructure norms and index used for calculations:**

Sub centre:

Infrastructure norm used:

Question no	Indicator	Answers	Score
13.3	ANM residing	1. In sub centre 2. In village 3. Outside village	If 1 score = 2 If 2 score = 1 If 3 score = 0
13.4	Condition of the building white wash	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.5	Any windows / doors broken	1. Yes 2. No	If 1 score = 0 If 2 score = 1
13.6	Solid waste containers available	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.7	Sub-Centre has running electricity connection	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.8	Sub Centre has power back-up in the form of functional Petromax/lantern/torch)	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.9	Benches for sitting available and placed in shaded place	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.10	Toilet with functional water arrangement	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.11	Drinking water for clients available	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.12	Curtain on windows to ensure privacy	1. Yes 2. No	If 1 score =1 If 2 score = 0
13.13	A Signboard/wall-painting exhibiting available services in the Sub-Centre	1. Yes 2. No	If 1 score =1 If 2 score = 0

Calculation of index for sub centre:

The scores of each sub centre were calculated based on the above norms and scoring pattern described.
The maximum score possible for any sub-centre as per above scoring pattern is 11. Thus the score received by any sub centre say sub-centre A was calculated as a percentage of the highest score possible.

For example: Sub Centre A score = 8. Then the index would be 8*100/11 = 72.7%

Primary Health Centre:

Infrastructure norm used:

SN	Facilities	Yes/No - Others	Score
12.4	Fully Functional Bathrooms	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.5	Fully Functional Toilets (with Functional Water facilities)	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.6	Separate Toilet for Men/Women	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.7	A functional CHC/PHC vehicle (with driver) or outsourced available on call 24 hrs for referrals	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.8	Staff Quarters for Doctor	1.Yes 2. No 3. Yes, but not sufficient	If answer = 1 score =1, If answer = 2 score = 0, If answer = 3 score = 0
12.9	Staff Quarters for ANM/nurses	1.Yes 2. No 3. Yes, but not sufficient	If answer = 1 score =1, If answer = 2 score = 0, If answer = 3 score = 0
12.10	Labour Room (With curtains and doors on window to ensure privacy)	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.11	Operation Theater	1. Yes 2. No 3. Yes, but not in working condition	If answer = 1 score =1, If answer = 2 score = 0, If answer = 3 score = 0
12.12	Immunization Room	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.13	Cold Storage Room	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.14	Functional Laboratory	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.15	Functional Pharmacy	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.16	Waste Disposal Management	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.18	A Signboard/wall-painting exhibiting available services in the PHC	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.19	All occupied beds have mattresses, rubber cover and clean bed sheet	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.20	Waiting area has benches in covered/shaded area	1.Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0

Calculation of index for primary health centre:

The calculation of index for PHC was done in the same way as explained for sub-centre
The scores of each PHC were calculated based on the above norms and scoring pattern described.
The maximum score possible for any PHC as per above scoring pattern is 16. Thus the score received by any PHC was calculated as a percentage of the highest score possible.

Community Health Centre:

Infrastructure norm used:

SN	Facilities	Yes/No - Others	Score
12.1.3	Fully Functional Bathrooms	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.4	Fully Functional Toilets (with Functional Water facilities)	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.5	Separate Toilet for Men/Women	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.6	A functional CHC/PHC vehicle (with driver) or outsourced available on call 24 hrs for referrals	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.7	Staff Quarters for Doctor	1. Yes 2. No 3. Yes, but not sufficient	If answer = 1 score =1, If answer = 2 score = 0 If answer = 3 score = 0
12.1.8	Staff Quarters for nurses	1. Yes 2. No 3. Yes, but not sufficient	If answer = 1 score =1, If answer = 2 score = 0 If answer = 3 score = 0
12.1.9	Labour Room (With curtains and doors on window to ensure privacy)	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.10	Operation Theater	1. Yes 2. No 3. Yes, but not in working condition	If answer = 1 score =1, If answer = 2 score = 0 If answer = 3 score = 0
12.1.11	Immunization Room	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.12	Cold Storage Room	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.13	Functional Laboratory	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.14	Functional Pharmacy	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.15	Waste Disposal Management	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.17	A Signboard/wall-painting exhibiting available services at CHC	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0

12.1.18	All occupied beds have mattresses, rubber cover and clean bed sheet	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.19	Waiting area has benches in covered/shaded area	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.20	Blood Storage Facility	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
12.1.21	Blood Bank	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0

Calculation of index for Community Health Centre:

The calculation of index for PHC was done in the same way as explained for sub-centre
The scores of each PHC were calculated based on the above norms and scoring pattern described.
The maximum score possible for any PHC as per above scoring pattern is 18. Thus the score received by any PHC was calculated as a percentage of the highest score possible.

2. Equipment norms and index used for calculations

Sub-centre

SN	Equipments	Yes/No	Score
14.1	BP Apparatus and stethoscope in working order	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.2	Baby weighing machine available and working	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.3	Baby Ambu bag available and functioning	1. In sub centre 2. In village 3. Outside village	If answer = 1 score =1, If answer = 2 or 3 score = 0
14.4	Delee's mucus sucker available and working	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.5	Delivery kit with scissors/blade, cord ties/clamps	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.6	Sufficient number of disposable syringes available	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.7	Infection prevention supplies available - Soap	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.8	Infection prevention supplies available – Gloves and mask	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.9	Infection prevention supplies available – Plastic buckets and mugs	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.10	Infection prevention supplies available – Working boiler or stove with K-oil available	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.11	Labour table, Step stool, mattress, mackintosh and Kelly's pad available	1. Yes 2. No	If answer = 1 score =1, If answer = 2 score = 0
14.12	Copes of Partograph for progress of	1. Yes 2. No	If answer = 1 score =1,

	labour available and being filled		If answer = 2 score = 0

The scores of each sub centre were calculated based on the above norms and scoring pattern described.
The maximum score possible for any sub-centre as per above scoring pattern is 12. Thus the score received by any sub centre say sub-centre A was calculated as a percentage of the highest score possible.

Primary Health Centre

SN	Facilities	1.Yes	2. No	Score
14.1	Examination table	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.2	BP apparatus in working condition	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.3	Stethoscope in working condition	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.4	Surgical instruments for operations	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.5	Autoclave/boiler in working order and being used	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.6	Weighing Scale for adults	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.7	Weighing scale for infant	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.8	Delivery Table & Baby Tray	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.9	New Born baby corner in labour room with radiant baby warmer	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.10	Cold Storage Equipments	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.11	Sufficient Number of Sterlized Syringes and Needles (min 50)	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.12	Paediatric Resuscitation Kit, Ambu Bag, NewBorn Mucus Extractor or bulb Syringe	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.13	Infection Prevention supplies -Surgical and Utility Gloves -Surgical Attires -Bleaching Powder, Plastic Buckets, Mugs, Soaps and Mops	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.14	Complete Delivery Kit	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.15	Sterile Manual Vacuum Aspiration syringe with sterile cannula	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.16	Sterile Ovum forceps and Curette	**1.Yes**	**2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.17	Sterile Suturing Tray	**1.Yes**	**2. No**	If answer = 1 score =1,

			If answer = 2 score = 0
14.18	Oxygen Cylinder	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.19	I/V stand, Sterile I/V needles/venflos/scalp vein needle and adhesive tape available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.20	At least 3 Suction apparatus	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.21	Emergency Tray with emergency injections available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.1	Microscope (40 *10 X magnification) in working order	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.2	Sahli's Haemoglobin meter	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.3	RPR kits (for: syphilis)	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.4	Gram staining (crystal violet, iodine solution, acetone-ethanol and safranin stain)	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.5	Urine albumin /Acetic acid and lamp for heat test or uristix available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
15.6	Sugar uristix/ (Benedict's solution and lamp for heat test) available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0

Community Health Centre

SN	Facilities	Yes/No	
13.1	Examination table	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.2	BP apparatus in working condition	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.3	Stethoscope in working condition	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.4	Surgical instruments for operations	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.5	Autoclave/boiler in working order and being used	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.6	Weighing Scale for adults	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.7	Weighing scale for infant	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.8	Delivery Table & Baby Tray	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.9	New Born baby corner in labour room with radiant baby warmer	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.10	Cold Storage Equipments	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.11	Sufficient Number of Sterlized Syringes	**1.Yes 2. No**	If answer = 1 score =1,

	and Needles (min 100)		If answer = 2 score = 0
13.12	Paediatric Resuscitation Kit, Ambu Bag, NewBorn Mucus Extractor or bulb Syringe	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.13	Infection Prevention supplies -Surgical and Utility Gloves -Surgical Attires -Bleaching Powder, Plastic Buckets, Mugs, Soaps and Mops	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.14	Complete Delivery Kit	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.15	Sterile Manual Vacuum Aspiration syringe with sterile cannula	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.16	Sterile Ovum forceps and Curette	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.17	Sterile Suturing Tray	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.18	Oxygen Cylinder	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.19	I/V stand, Sterile I/V needles/venflos/scalp vein needle and adhesive tape available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.20	At least 3 Suction apparatus	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.21	Emergency Tray with emergency injections available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
13.22	ECG machine	**1.Yes 2. No 3. Yes, but not in working condition**	If answer = 1 score =1, If answer = 2 score = 0, If answer = 3 score = 0
13.23	X-ray machine	**1.Yes 2. No 3. Yes, but not in working condition**	If answer = 1 score =1, If answer = 2 score = 0, If answer = 3 score = 0
14.1	Microscope (40 *10 X magnification) in working order	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.2	Sahli's Haemoglobin meter	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.3	RPR kits (for: syphilis)	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.4	Gram staining (crystal violet, iodine solution, acetone-ethanol and safranin stain)	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.5	Urine albumin /Acetic acid and lamp for heat test or uristix available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.6	Sugar uristix/ (Benedict's solution and lamp for heat test) available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0
14.7	Kits for ABO/Rh blood grouping and cross matching available	**1.Yes 2. No**	If answer = 1 score =1, If answer = 2 score = 0