

An Evaluation Report on Referral Transport System at Block PHCs of Patna, Bihar



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PREFACE

The National Rural Health Mission (NRHM) was launched by the Government of India on 12th April 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. The Mission envisages an additionality of 30% over existing annual budgetary outlays every year to fulfil the mandate to raise the outlays for public health from 0.9% of GDP to 2-3% of GDP. Under the Mission, multifarious activities have been initiated to strengthen the rural health care delivery system for the improvement of health of the rural population.

NRHM implementation framework does not envisage significant engagement of medical colleges in delivery of mission interventions. The role of medical colleges in RCH -II is largely limited to conduction of clinical skill based trainings. In the absence of any systematic engagement of medical colleges, faculty members of departments are clueless about the evidence-based technical strategies being pursued in the implementation of various National Health Programmes. There is a huge potential available in medical colleges of the country for undertaking innovations, facilitating programme interventions and conducting health systems research, which largely remains untapped.

The Rapid Assessment of Health Interventions (RAHI), a collaborative activity with the United Nations Population Fund (UNFPA), is a unique initiative taken under the wider umbrella of the Public Health Education and Research Consortium (PHERC) of the National Institute of Health and Family Welfare (NIHFW) for developing partnerships with different organisations working in the field of health and family welfare. The objective of the project is to accelerate NRHM delivery in identified states by organising timely, quality and appropriate inputs through rapid assessments/reviews to address priority implementation problems. During the first phase of the RAHI project, the UNFPA supported 12 health systems research projects in five low performing states viz. Madhya Pradesh, Jharkhand, Chhattisgarh, Uttar Pradesh and Orissa. During the second phase, another 12 health systems research projects from 6 low performing states viz. Uttar Pradesh, Uttarakhand, Madhya Pradesh, Jharkhand, Bihar and Rajasthan were taken up.

The rationale for supporting such rapid assessments stems from the discussions during the periodic Joint Review Missions and Common Review Missions. An impressive number of innovations have been supported by the states to improve access and enhance service quality. Many innovations are currently underway in the states and districts to deliver health care services in an effective manner. The state and district programme managers wish to know how well these innovations are performing so that in case of gaps corrective measures can be taken to achieve the stated objectives. There has been an increasing recognition for

incremental improvements in the programme delivery by undertaking quick and rapid health systems research and engineering the feedback into the processes. As an institutional response to such demand an attempt has been made to develop a network of institutions and strengthen their capacities on rapid appraisal methodologies for generating programme - relevant information at local and regional levels.

The rapid appraisal of some of the interventions taken up in the second phase of RAHI - project covered the issues of contribution of indigenous systems of medicine in operationalisation of 24x7 services, interface of ASHAs with the community and service providers, logistics and supply management system of drugs at different levels, functioning of mobile medical units, birth preparedness and complication readiness as a tools to reduce MMR, quality assessment of institutional deliveries, performance based incentives to ASHA Sahyogini, referral transport systems, functioning of programme management units, functioning of RKS, utilisation of untied funds at various levels and utilisation and client satisfaction of RCH service. The present study report entitled “An Evaluation Report on Referral Transport System at Block PHCs of Patna, Bihar” by the Department of Community Medicine, Patna Medical College, Patna, Bihar, was finalized by NIHFWS in consultation with UNFPA.

The findings and recommendations of these studies will trigger of a series of follow-up measures by programme managers in the state. We strongly feel availability of such a resource to the programme managers will provide necessary evidence -based inputs enabling them to make any mid course corrections and also scaling up. An added benefit will be incorporation of information about newer programmatic interventions in the medical curriculum.

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We are grateful to the Principal, Patna Medical College for giving us all necessary support in conducting the study.

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ABBREVIATIONS

APL	Above Poverty Line
BPL	Below Poverty Line
C.S.	Civil Surgeon
DHS	District Health Society
FGD	Focus Group Discussion
MOIC	Medical Officer Incharge
NIHFW	National Institute of Health and Family Welfare
PHC	Primary Health Centre
RKS	Rogi Kalyan Samitti
RAHI II	Rapid Appraisal of Health Intervention II
UNFPA	United Nations Fund for Population Activity
SHS	State Health Society
NGO	Non-Government Organization

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EXECUTIVE SUMMARY

Introduction

Outsourcing of referral transport services scheme has been launched since November 2006 in Bihar. Two sets of mechanism are existing. One is outsourced or donated (by local MP -MLAs) vehicle in the PHCs and the second set is Dial an ambulance 102.

The fund for the outsourced vehicle for all the PHCs are from the scheme of “Bishesh Adayagi Mad”, an amount of maximum up to Rs.500/- per month is given to the owner of the outsourced vehicle. As per kilometer charge is taken from the APL client for POL, from which a certain amount is deposited in RKS of PHCs which was very negligible. The mechanism for financial management for a donated or Government transport is that the rate is fixed for usual referral places in RKS meeting. It includes cost of petrol and maintenance from time to time.

There was a need of a baseline study to evaluate the effectiveness of the intervention in different districts of Bihar.

Overall Objective

To evaluate the coverage and functioning of referral transport system under NRHM in Block PHCs in Patna district of Bihar.

Specific Objectives

1. To list the actual number of transport amenities in block PHCs against the total population,
2. To assess the availability of the transport facility,
3. To measure the time response of the referral transport, and
4. To categorize the affordability of the transport with regard to clients.

Methodology

Cross-sectional descriptive.

Study Area

This appraisal was done in all those PHCs of district Patna where an ambulance facility (outsourced/donated/alternative) existed.

Selection of PHCs

Four villages per PHC were visited. The first village is the village PHC itself. Second, third and fourth villages are a distance of 2 km, 2 to 5 km, and more than five km away from the PHC respectively.

SALIENT FINDINGS

- A total of 811 houses were visited, where there had been an occasion to transfer a patient to the hospital in previous two months period from October 2008.
- Records from the control room of Dial an ambulance 102 services shows an annual coverage of 2791 services in a period of 1.1.07 to 28.12.08 in Patna district (3.83 services per day). Referral rates in the PHCs were also found negligible (one referral in 2 to 5 days).
- Availability of the referral transport for the patient utilization was irregular in the study period mainly due to the deputation of many of the vehicles in the flood relief area.
- Timely response could not be judged properly. 93% of the respondents used the transport from the PHC only. Then also 53% of them got it instantaneously. As of Dial an ambulance 102 services, maximum no. of clients could manage the transport only after 45 minutes, which cannot be in any way termed as emergency transport.
- BPL/APL demarcation was not in any way transparent from the primary data/record. A significant difference ($p < 0.01$) was revealed as per km charges claimed in different PHCs from the standard fixed by SHS/DSH. A weak negative correlation ($r = -0.45$) between increasing distance and cost was found – which is contradictory to the belief that charge claimed is higher for greater distances. 7% of the respondents mentioned that high charges is the reason for the non-use of PHC transport ($r=0.15$).
- Less number of ambulance with respect to the population norm, unequipped ambulances, continuous 24 hours duty by single driver per PHC, arbitrary cost frame work and urban preference for service provision were some of the causes found for inadequate population coverage.

KEY RECOMMENDATIONS

- Public awareness strategies should be prepared depending upon the target clients, and then be implemented for a sufficient period of time based on literacy and socio-economic level of the target clients in different PHCs.
- Adequate number of ambulances per PHC population can reduce the unavailability as well as response time. Cumbersome calling mechanism should be made simpler.
- Charging system should be standardized and made transparent to all inclusive of Dial an ambulance 102 services.
- A standard feedback format should be there to be sent from each PHC to the DHS/SHS at quarterly basis for monitoring and evaluation of the intervention which is miserably lacking.

CHAPTER 1

INTRODUCTION

Background

Since the inception of NRHM in Bihar, the state strongly envisages that the distance from village to block PHCs be covered by efficient hierarchical referral backed by a robust transport system. The stakeholders are allowed flexibility under the NRHM to plan, organise and implement services according to felt need. It is well known fact that curtailing the 2nd delay (reaching the care) has an all important role in reducing the mortality. For ages, the only option available to people like Manjhi was to carry the patient on a khatiya a traditional woven bed, on a 75 km stretch around the same mountain. Many pockets of the Bihar population still live with this lone primitive modality.

Against this backdrop, Government of Bihar introduced this system of outsourcing of ambulance services to increase the efficiency and reducing the time required for the referral. Certain mechanisms for referral transport have existed from before. This endeavour from the Government of Bihar has been implemented since November 2006.

Operationalisation in the State (Bihar)

In Bihar, 2 systems of referral transport have been initiated by the Government. Dial an ambulance service (102) was started in November 2006 in which ambulance owners were empanelled on the rates fixed by the Government. In the PHCs of Patna district, referral transport service is also maintained and operated by ambulances donated or outsourced. Funding is done by the local Rogi Kalyan Semiti and is free for BPL population

Two mechanisms are currently in vogue – in few PHCs vehicles have been outsourced locally by an RKS meeting in the PHC. A fixed amount of Rs. 500/- per day is given to the owner of the transport. The APL client is being charged per km as well as per visit. A small percentage of this amount is deposited by the driver in the RKS fund. The owner gives the salary to the driver and does the maintenance of the vehicles. The BPL patients who uses the transport, the charges of POL is being paid by the PHC after procuring the voucher from the driver. In few other PHCs, local MPs/MLAs have donated vehicles for this purpose. Maintenance of the donated vehicles is from the annual PHC allotment, but the km charge remaining the same.

The second mechanism runs through SHS Bihar. It is a dial an ambulance (102) system. SHS Bihar pays an annual fee of Rs 41,000 (38000 if a control room is provided by the Govt.) per region to an NGO (Aryabhatta Computers). The NGO has set up 6 regional control rooms, one of which is in Patna. When a patient calls 102, the control room staff arranges the nearest ambulance (including the one existing in the PHC) to pick up the patient. They also charge the same per km fare from the client.

The bottleneck of the programme the client is non-aware about the facility. The phone call can be made only from a BSNL connection while villagers usually have a Reliance/Airtel connection. A fallacy on the part of the healthcare system is that there is no existing mechanism for monitoring and evaluation. Existing vehicles do not meet the standard requirements of an ambulance.

No baseline data exists as regards the status of referral transport in the PHCs of district Patna. Outsourcing of the referral transport in the government health care delivery system is a new intervention and hence needs follow-up evaluation to gauge its efficacy. For sustainable and satisfactory services, a continuous monitoring mechanism must be in place .

Need for the Study

This project aims to fill the gap in the current information levels and provide new data to the policy makers for decision-making as to the improving the referral transport system.

Rationale

The most highlighted intervention under NRHM is the 24x7 emergency services. Increasing health services especially in rural areas without a competent transport service for referral is meaningless. The NRHM envisages that the distance from village to block PHCs be covered by efficient hierarchal referral backed by a robust transport system. The stakeholders are allowed flexibility under the NRHM to plan, organize and implement services according to felt needs ¹.

It is a well known fact that curtailing the 2nd delay has an important role in reducing the mortality in emergency². In Patna nearly 75,000 emergency cases are reported in a year which is estimated to be only 25% of the total emergency occurring in the city. 30% of these, who die in an emergency , could be saved if provided with emergency transportation and prompt care.

The Government of Bihar introduced the system of outsourcing of ambulance services to increase the efficiency and reducing the time required for the referral. Certain mechanisms for referral transport have existed from before. The goal of the Mission is to improve the availability of and access to quality health care by the people especially by those residing in rural areas. State Health Society, Bihar implemented Medical Emergency Services with a view to provide emergency transport to victims of accidents, risk pregnancy cases and other medical emergencies like cardiac, cancer, asthma, renal disorder, orthopaedic emergency, fire and police. These emergency medical services will cover the city of Patna and designated suburbs. This endeavour from the Government in the context of NRHM was started in November 2006. It will be pertinent to see the impact of the scheme on the health scenario of Bihar at the end of almost 2 years.

General Objective

To evaluate the coverage and functioning of the referral transport system under NRHM in the block PHCs in Patna district of Bihar.

Specific Objectives

1. To list the actual number of transport amenities in the block PHCs against the population.
2. To assess the availability of the transport facility.
3. To measure the time response of the referral transport.
4. To categorize the affordability of the transport with regard to clients.

Organisation of the Report

The report has four chapters. The first Chapter includes introduction of the study along with the rationale of the study and the objective both general and specific. The second Chapter provides a detailed note on methodology including sample design, rationale for selection sample district, PHCs, villages and various methods and tools that have been adopted in the study. The third Chapter reflects on results of the study along with narrations and descriptions with important quotes from the field to give a vibrant and authentic picture of the ground realities and the fourth Chapter contains important recommendations emerging from the appraisal, limitations of this study and future directions for research.

CHAPTER 2

METHODOLOGY

Study Design

Cross-sectional descriptive.

Study Area

The evaluation was done in sixteen block PHCs of district Patna in Bihar.

Study Units

1. Users and Non-users of PHC referral transport services
2. Community leaders in the study area
3. Civil Surgeon of district Patna
4. Medical Officer In-charge of the above sixteen PHCs
5. Drivers of the PHC referral transports

Sampling Design

A multistage sampling design was used.

1. Selection of PHCs

The PHCs under district Patna were chosen for the study.

Inclusion criteria: having a means of referral transport, either outsourced or any alternative.

2. Selection of Villages in PHCs

Four villages per PHCs were selected on the basis of distance from the PHCs.

First Village	PHC village itself
Second Villages	A village within 2 km of PHC
Third Villages	A village, 2-5 km from PHC
Fourth Villages	A village more than 5 km from PHC

3. Selection of Houses in Villages

All those houses where there was an occasion to transfer a patient to some hospital in the previous two months. Inclusion criteria: using PHC referral transport.

Table 1: Selected PHCs and Villages Under the Study

PHC Code	Name of the PHC (villages)	Villages 2 (Within 2 km of PHC)	Villages 3 (2-5 km from PHC)	Villages 4 (More than 5 km from PHC)
01	Phulwarisharif	Ranipur	Bhusaula Danapur	Gaunpura
02	Maner	Mahdava	Shivdial tola	Gauriya sthan
03	Fatuha	Budhuchak	Gobindpur	Dumri
04	Bakhtiyarpur	Ravaich	Dadaur-Bariyarpur	Bidhipur
05	Dhanarua	Raha	Paphera	Banshbigha
06	Bihta	Srirampur	Kurhar	Bindaul
07	Mokama	Shivnar	Brahmpur	Englishmore
08	Punpun	Neema	Pothi	Taranpur
09	Paliganj	Dharhara	Kurkuri	Sadsi
10	Masaurhi	Dahibhatta	Bhaishma	Nadaul
11	Naubatpur	Nagwa	Chhotkikopa	Ajwan
12	Bikram	Majhauhi	Nisharpura	Harpura
13	Pandararak	Lemuabad	Chhabitarh	Dhiver
14	Daniyawan	Badi Kewai	Machhariama	Salalpur
15	Barh	Malahi	Achhuara	Machharhatta
16	Danapur	Jamsaur	Shivalpar	Kothma

Data Collection methods:

Primary Data

1. In-depth interview of

- Clients availing PHC transport services to drivers of the referral PHC transport.
- Drivers of the vehicle.
- Medical Officer Incharge of the PHCs.
- Civil Surgeon-cum-member secretary DHS, Patna.

2. 6 Focus Group Discussion (FGD) to support the primary data collected from the clients were done: males, females and community opinion leaders.

Secondary Data

3. Record and registers were observed to elicit secondary data regarding

- Operational guidelines for the vehicles
- Record and logbooks of vehicles
- Selection process of outsourcing
- Column in the referral register
- Minutes of RKS
- Redress and monitoring mechanism

- Government expenses to run the scheme

Research Tools

1. Semi-structure interview schedules for doing the in-depth interviews.
2. Preformed check for focus group discussion.
3. Observation check-lists elicit the secondary data.

Data Collection

Data collection were done from first October to second November 2008.

- Five teams of field investigators collected the baseline data from the villages.
- Two supervisors did the overall check and collected secondary data.
- Principal investigator and co-investigator monitored and collected the data.
- Support team from NIHFW gave the valuable help and direction as well as did the monitoring and supervision in the field itself.

Data Analysis

Frequency tables were made out of the collected primary data. Percentages and necessary statistical analysis were done in Microsoft Excel 2007.

Quality Assurance

The entire project was monitored and supervised by principal investigator (PI). The PI personally conducted the in-depth interview of district officials and FGDs. Central Monitoring Team from NIHFW closely monitored the training, field activities, data analysis and report writing. Recorded interviews were coded and further translated after the completion of data collection. Each PHCs was given a code number also. Each interview was given an ID number to eliminate bias. The PI and the Co-PI supervise the data handling and data analysis.

Ethical Considerations

The project structure was examined and cleared by ethical committee of the institution review board at NIHFW for ethical consideration.

CHAPTER 3

FINDINGS AND DISCUSSION

Study findings were classified broadly into following sections to evaluate quality emergency referral services in the block PHC of district Patna, Bihar :

1. Utilization of the PHC transports system
 - No. of Users and Non-users of the PHC transport services
 - Urban rural ratio in utilizers of 102 services, district Patna.
 - Reason for non-use of PHC transport services.
2. Availability of the transport
 - Availability of the ambulance
 - Availability of the driver.
 - Non-response of the health staff/telephonic request to make transport available.
3. Timeliness of the emergency referral transport
 - Time response as given by the respondents
 - Time response as maintained in record of 102 control room, district Patna.
4. Affordability of the PHC transport services
 - Costs differences to a BPL/APL patients
 - Range of per kilo meter cost by PHC
 - Relation between distance from Patna and per k m cost claimed.
 - Relation between cost claimed and non-use.
5. Adequacy of coverage of the transport services
 - No. of ambulances existing vs required
 - Relation between use of transport and distance from Patna.

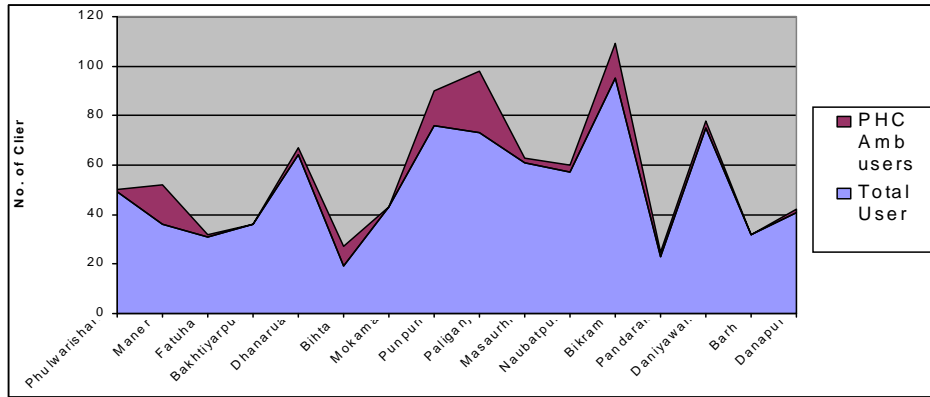
1. Utilization of the PHC transports system

No. of Users and Non-users of the PHC transport services

A total of the 811 houses were visited, out of which only 11% (93) had used the referral transport services of the PHC. Maner had highest number of users of PHC transport services (44%) followed by Bihta (42%) and Paliganj (34%), while Bakhtiarapur, Mokamah and Barh had reported nobody used

the PHC ambulance. Figure 1 depicts a nice resemblance to tip of the ice berg phenomenon for PHC transport users/total users of any public transport.

Figure 1: Proportion of PHC Transport Users and Total Users of any Transport.

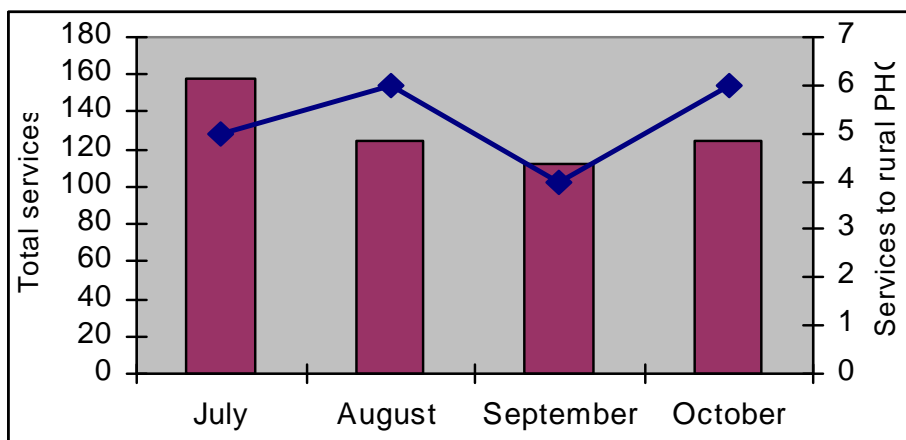


Record of 'Dial an ambulance102' collected from Control Room for district Patna, for the month of July, August, September and October 2008 shows a similar trend as that of PHC transport utilization by primary data.

Table 2: Utilization of 'Dial an Ambulance 102' in Four Months from Patna Control Room by Urban Rural Deference.

Month of 08	Total no. of services given/month.	No. of services to rural PHC Patna District/month
July	158	5
August	124	6
September	112	4
October	124	6

Figure 2: Utilization of 'Dial an Ambulance 102 in Four Months' from Patna Control Room by Urban Rural Difference



It is clear from the above table and figure that dial an ambulance services 102 is mainly working in the urban areas. The ratio of urban: rural referral are 25 : 1. The control room is situated in the campus of State Health Society, Bihar.

Rate of utilization of PHC transport as found from observation of referral register as evident from Table 3 is negligible. Highest rate is one referral in two days (25%) and in Mokamah and Bikram the rate of referral is as low as one in five days.

Reason for non-use of PHC transport/102 services

The reason for large number of non-use of PHC transport was found to be mainly due to unawareness. 60 % (490) of the non-user (718) were unaware of any such services in the PHC as well as 102.

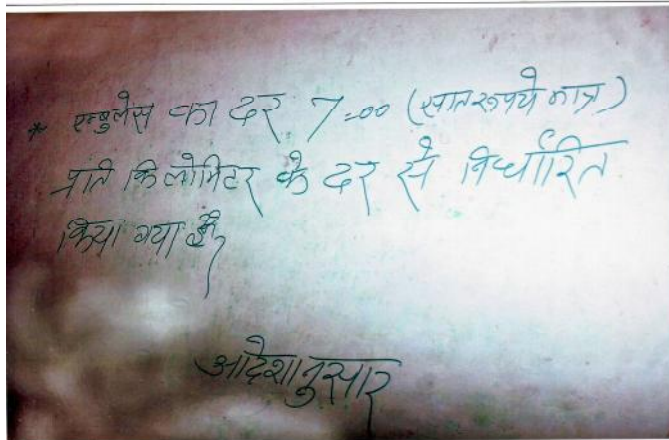
Table 3: Non-Awareness about PHC Ambulance/102 Services by PHC

PHCs	Total no. of non-user	Non-aware	Percentage
Phulwarisharif	48	30	61
Maner	20	13	36
Fatuha	30	26	84
Bakhtiyarpur	36	32	89
Dhanarua	61	59	92
Bihta	11	7	37
Mokamah	43	22	51
Punpun	62	24	32
Paliganj	48	26	36
Masaurhi	59	53	87
Naubatpur	54	19	33
Bikram	81	48	51
Pandarak	21	10	43
Daniyawan	72	68	91
Barh	32	32	100
Danapur	40	21	51
Total	718	490	60

Non-recurring expenditure sanctioned for creating public awareness in 'Tamil Nadu Health Systems Project – Phase II' – Establishment of Emergency Ambulance Services in 198 Blocks in 14 districts through partnership with Non-Governmental Organizations in April 2007 was 10,000 per unit, 198 units in 14 districts a total of 19.80 Lakhs ¹¹.

The awareness drive which was not found mentioned in SHS/DHS guidelines may have been useful as very well witnessed from the percentage of non-users of PHC transport due to unawareness. Only in two PHCs namely Bakhtiyarpur and Paliganj has the display of rates of ambulance in a wall. (Figure 3 and Figure 4).

Figure 3: Photograph of Wall Writing Outside MOICs Chamber at Bakhtiyarpur, PHC Code 04.



Advertisement for dial an ambulance 102 services was very few in the city of Patna one of them is shown in Figure 5 is placed at the center of Patna locality. Two more of the same advertisement were found. Unfortunately no advertisement were seen for 102 services in the rural areas.

Figure 4 : An 102 Advertisement at a Prime Location in the City of Patna.



The reason for non-use of transport was:

1. Unavailability of the transport .
2. Driver, delayed response,
3. High charges,
4. Non response or non-satisfactory behaviour of the health as well as transport staff.

2. Availability of the transport

Availability can be discussed under three headings as

- Availability of the ambulance
- Availability of the driver
- Non-response of the health staff/Telephonic request to make the transport available .

Table 4: Reasons for Non-Use of PHC Transport/102 Services by PHCs.

PHC Code	Total	Nonaware %	high charge and %	Driver not available and %	Delayed resp. and %	Non-response telephonic/on personal request	Behaviour not good	Ambl. not available	Favouritism and %
1	49	30(61)	1 (2)	1 (2)	7 (14)	4 (8)	0 (0)	0 (0)	0 (0)
2	36	13 (36)	0 (0)	0 (0)	0 (0)	5 (14)	1 (3)	1 (3)	0 (0)
3	31	26 (84)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
4	36	32 (89)	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	0 (0)
5	64	59 (92)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)
6	19	7 (37)	0 (0)	0 (0)	1 (5)	1 (5)	0 (0)	0 (0)	0 (0)
7	43	22 (51)	11 (26)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	1 (2)
8	76	24 (32)	3 (4)	0 (0)	4 (5)	27 (36)	0 (0)	0 (0)	0 (0)
9	73	26 (36)	2 (3)	0 (0)	0 (0)	1 (1)	0 (0)	1 (1)	0 (0)
10	61	53 (87)	1 (2)	0 (0)	0 (0)	3 (5)	0 (0)	0 (0)	0 (0)
11	57	19 (33)	18 (32)	0 (0)	10 (18)	5 (9)	0 (0)	0 (0)	0 (0)
12	95	48 (51)	9 (9)	0 (0)	0 (0)	3 (3)	0 (0)	0 (0)	0 (0)
13	23	10 (43)	1 (4)	2 (9)	0 (0)	3 (13)	0 (0)	5 (22)	0 (0)
14	75	68 (91)	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	3 (4)	0 (0)
15	32	32 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
16	41	21 (51)	7 (17)	1 (2)	2 (5)	7 (17)	1 (2)	0 (0)	0 (0)
Total	811	490 (60)	53 (7)	4 (0.49)	25 (3)	64 (8)	2 (0.25)	11 (1)	1 (0.12)

Availability of the Ambulance

All PHCs are having single vehicle either outsourced or donated. In Danapur, Mokamah, and Bikram the Government ambulances were non-functioning, and stationed at PHC itself. One ambulance per PHCs did not fulfil the population norm also (Range of Population 1.3 to 3.8 lacs). Ambulances were deputed to flood relief areas, is the main reason of unavailability of ambulance. There were other reasons which are shown in Table 6.

Table 5: Cause of Non-Availability of Ambulance in Study Period

Cause of no referral	PHC Code*	Percentage
Sent for flood relief	01,03,08,14	25
Out of order.	13	06.25
No mention in referral register although vehicle present in PHCs	09	06.25
Vehicle met with an accident on 29/9/08	05	06.25

* refer to page No.19 for names of the PHCs.

Availability of Driver

The post of one driver is sanctioned per PHC. In some PHCs the permanent drivers were on contract basis at a nominal monthly remuneration of Rs.2000/- per month. They were on duty for 24 hours. PHC Pandarakh driver was working on daily wage of per referral payment of Rs.100/-. Over an above PHCs Punpun, Daniyawa and Barh had no driver appointed at the time of study.

Non-Response of the Health Staff/Telephonic Request to make the Transport Available

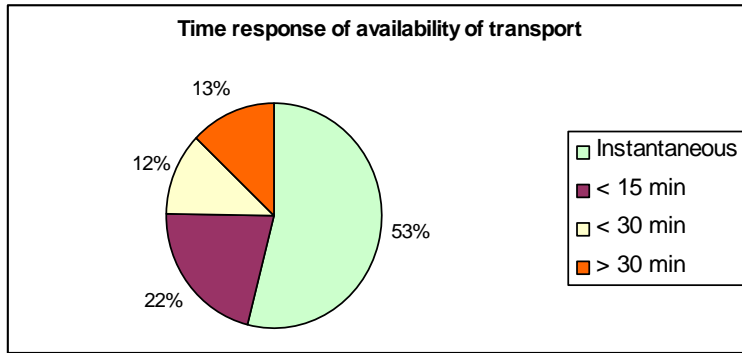
Most of the clients suffered because of non-response by the telephone receiver of 102 services as well as health staff at the PHCs. The client 0.12% even felt that they could not get the services because contact person at PHC was not available. Favouritism was also raised as cause of non-availability in two of the FGDs.

The main cause of telephonic 102 non-response was the services were available only through BSNL connection, but most of the mobile telephone, connection available at social periphery were of reliance or airtel.

3. Timeliness of the emergency referral transport

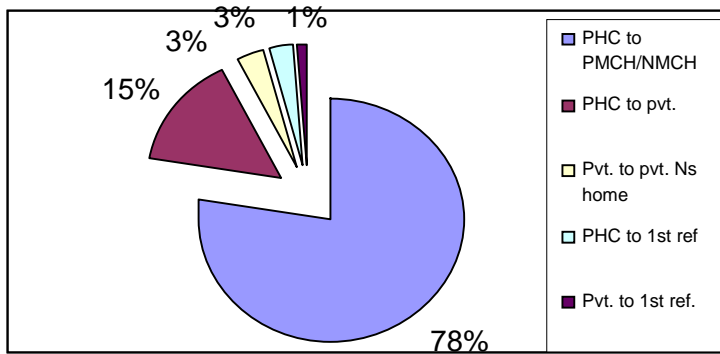
More than 50% of the clients got the transport instantaneously. 22% had to wait for 15 minutes to get the vehicle, 12% could get it after half an hour and 13% of the clients had waited more than half an hour to get the response.

Figure 5: Percentage of User of PHC Ambulance/102 Service by Time Response



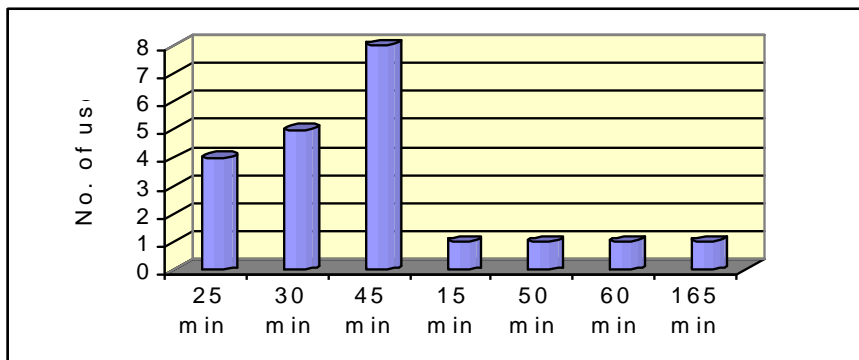
As evident in Figure 6, the main bulk of referral transport (96%) was made from PHC itself. From this figure timelines of the referral transport can not be gauged if it was made from patients home. As there is no patients whose referral has been made from their home.

Figure 6: Clients of the PHC Transport by Point of Referral and Destination.



The time response as maintained in the control room of 102 ambulance services shows a more grim picture. As it evident from the figure below maximum no. of clients could manage an ambulance only after 45 minutes. Only one client was lucky to get it in 15 minutes.

Figure 7: Time Response of Dial an Ambulance 102 Services in Minutes.



The mechanism of 102 services is that it uses the respective PHC transport (depending on availability) only after informing the MOICs or the Health Managers. A delay of 45 minutes to get a transport in emergency cases makes the system questionable.

4. Affordability of the PHC transport services

The cost of an ambulance may be paid for from several sources, and this will depend on the type of service being provided, by whom, and possibly to who.

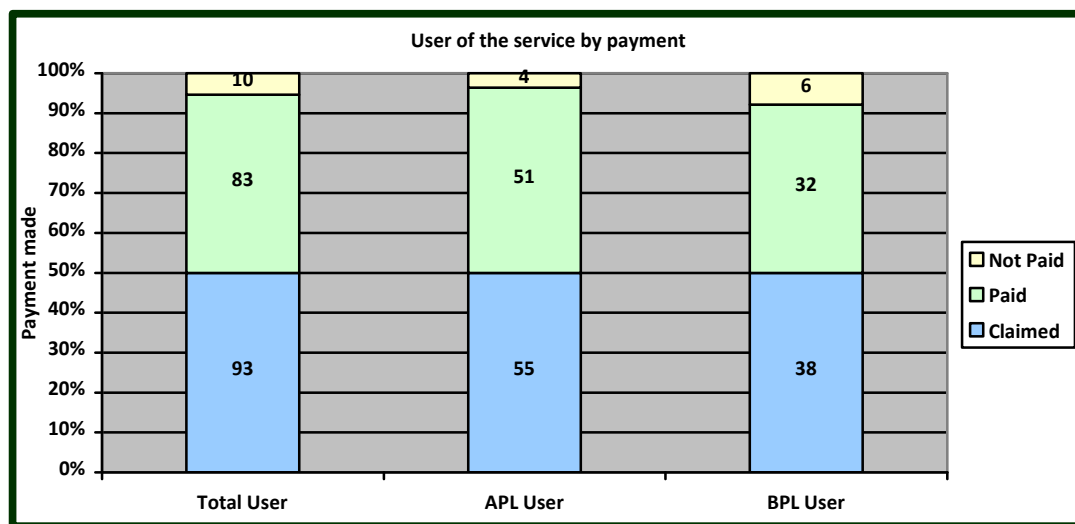
- Government funded service – The full cost of the ambulance is borne by the local or national government, with no cost as point of care. One example of this is in the United Kingdom, where ambulances are provided as of right, to anyone who requests one, with costs born centrally from taxation as part of the National Health Service.
- Privately funded service – The ambulance is paid for by the patient themselves, or through their insurance company. This may be at the point of care (i.e. payment or guarantee must be made before treatment or transport), although this may be an issue with critically injured patients, unable to provide such details, or via a system of billing later on.
- Combined system – Ambulances may be free of charge to those who cannot pay (such as those who receive government welfare payments), but chargeable to those who can afford it, or who are insured. It can be the case that a free government provided system may be charged for if the patient is not found to be in genuine need, or they already have insurance which covers them.
- Charity funded service – Ambulances may be provided free of charge to patients by a charity, although donations may be sought for services received.¹²

The current transport scheme in Bihar falls in the combined system group where according to DHS guidelines and Below Poverty Line (BPL) patient will have to pay nothing whereas an Above Poverty Line (APL) clients will pay according to a fixed per kilometer charge which is Rs.8/- per km. Costs differences to BPL/APL patients

According SHS/DSH guidelines an APL client will have to pay a s per km charge for using the PHC transport whereas a BPL client need not to pay anything. POL charges for the BPL clients visit will be made by the PHC itself on production of the POL voucher by the driver. BPL client will have to show their BPL cards.

This APL/BPL distinction in payment of charges was not apparent from the charges claimed as shown in Figure 7. Four of the APL (55) clients did not pay. While out of the 38 BPL users 32 had paid and only 6 were not paid the charges for the transport. Therefore, it seems that the DHS guidelines are not always followed properly.

Figure 8 : User of the Service BPL/APL by Payment.



Range of per kilo meter cost by PHC:

As per DHS guidelines outsourcing procedure had to be finalized by local member of RKS. But in SHS guidelines for 102 an Rs. 8/- per km charged was fixed. Average cost was calculated as Rs.11.67 with standard deviation of 2.06 and standard error of 0.57. Confidence interval (95%) therefore comes to 11.67 ± 1.14 which does not includes the standard cost Rs. 8/- per km. Hence there is a significant difference in charges claimed by PHC ($p < 0.01$).

Table 6: Average Cost Per Referral Per PHC

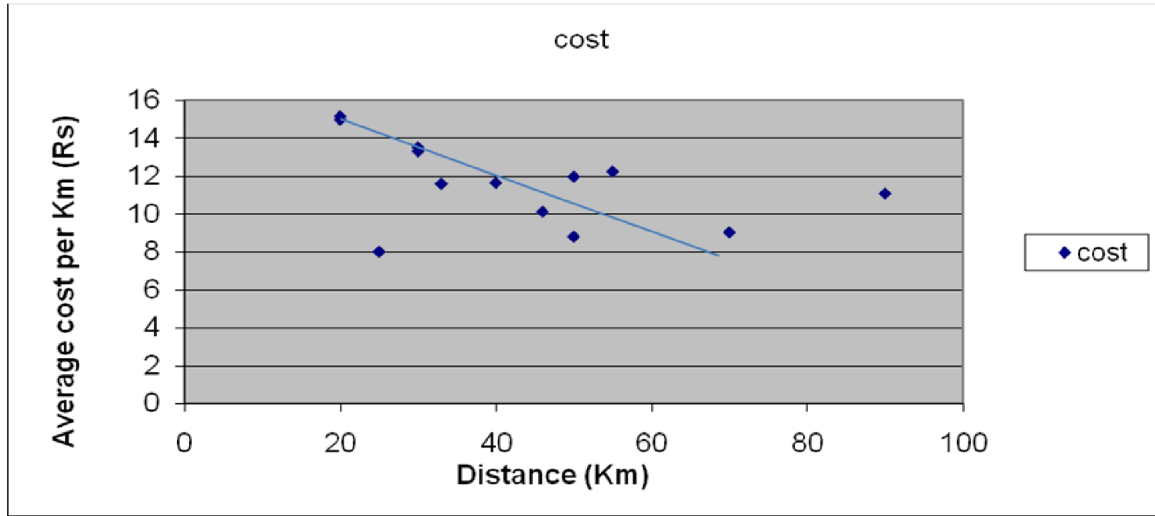
Name of PHCs	Distance	Average Cost per KM	Difference from the standard guidelines 8/KM
Phulwarisharif	25	8	3.67
Maner	30	13.55	1.88
Fatuha	30	13.33	1.66
Bakhtiyarpur	40	11.67	0
Dhanarua	50	8.8	2.87
Bihta	20	15.18	3.51
Mokamah	70	9.03	2.64
Punpun	55	12.27	0.6
Paliganj	33	11.62	0.05
Masaurhi	50	12	0.33
Naubatpur	90	11.11	0.56
Bikram	46	10.14	0.53
Pandarak	20	15	

$\sigma = 2.06$; S.E. = 0.57, ci = 11.67 ± 1.14

($p < 0.01$)

RELATION BETWEEN THE DISTANCE TO PATNA AND COST CLAIMED AT VARIOUS PHCs

Fig 10: Average Cost per km vs Approximate Distance to Patna Medical College

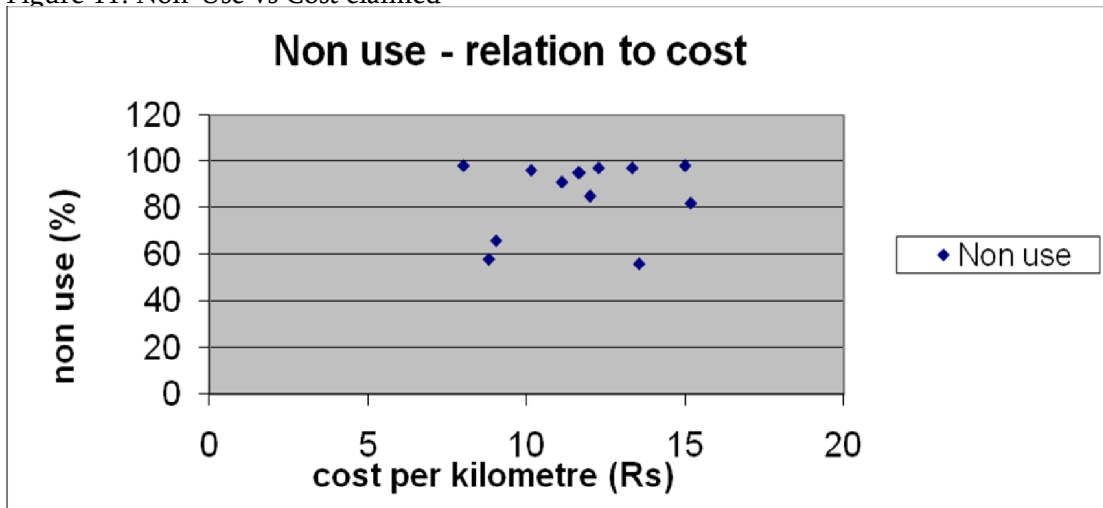


As per the above scatter diagram, there is a weak negative correlation ($r = -0.45$) between increasing distance and cost – which is contradictory to the belief that charge claimed is higher for greater distances. Also the scattered values indicate that charges claimed are arbitrarily fixed by individual PHC RKS.

Relation Between Cost Claimed and Non-Use of PHC Transport

As shown above in Fig 5, 7% of the non-users gave the reason for non-use was due to the high charges claimed by PHC transport. Fig 8 is a scatter diagram comparing average costs claimed by PHCs and the degree of non-use.

Figure 11: Non-Use vs Cost claimed



The above figure signifies no relationship between the two variables ($r = 0.15$: very weak).

5. Adequacy of coverage of the transport services:

No. of ambulances existing vs required

All PHCs are having single vehicle either outsourced or donated . In Danapur, Mokamah, and Bikram PHCs government ambulances were not functioning, were stationed them. One ambulance per PHCs did not fulfil the population norm (Range of Population 1.3 to 3.8 lacs). As per the report of Hospital Review Committee (K. N. Rao Committee 1968) 3 to 6 ambulances per PHC according to the population of the PHCs, no. of beds has been calculated as per WHO recommendation of 1 bed per 1000 population (table 8)¹⁴.

Table 7: No. of ambulance required per PHC

Name of the PHC	Blockwise population as of 2008	Beds per 1000 pop	Ambulance required
Phulwarisharif	228152	228	4
Maner	240503	240	4
Fatuha	350591	350	6
Bakhtiyarpur	206085	206	4
Dhanarua	208749	208	4
Bihta	251580	251	4
Mokamah	268833	268	4
Punpun	139030	139	3
Paliganj	254338	254	4
Masaurhi	242724	242	4
Naubatpur	203813	203	4
Bikram	289865	289	4
Pandarak	147564	147	3
Daniyawan			
Barh	334653	334	6
Danapur	388752	388	6

In the current scenario utilization of the ambulance per PHCs is also negligible as evident from Table 9. Highest rate is one referral in two days (25%) and in Mokama h and Bikram the rate of referral is as low as one in five days.

Patient transportation system encompasses not only ambulances but also wide range of mechanical systems to support the patient in the golden hour of emergency transport. It was observed only three ambulances namely Fatuha, Phulwarisarig and Danapur had an oxygen cylinder as only equipment for patient resuscitation.

Table 8: No. of referral in study period as in referral register.

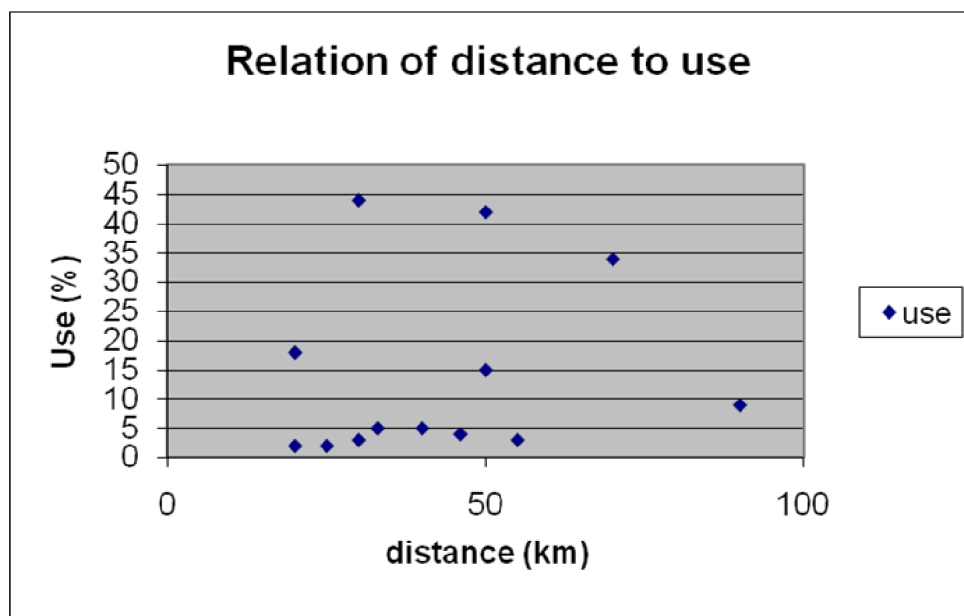
No. of referral per day	PHC Code	Percentage
1 ref. per 2 day	02,04,10,16	25
1 ref. per 3 day	05,06,15	18.75
1 ref. per 4 day	None	----
1 ref. per 5 day	07,12	12.50
No ref.	01,03,08,09,10(<29/9),13,14	43.75

* refer to page no.19 for names of the PHCs

Relation between use of transport and Distance from Patna:

As more than 90% referral found were to PMCH or NMCH in Patna an attempt was made to analyze whether the increasing distance from Patna prohibited the use of PHC transport (Figure 10).

Figure 12: Relation of Distance to Use of PHC Transport.



The above scatter diagram fails to show any correlation between use of PHC transport and distance to PMCH($r = 0.16$) - most PHCs show a use of 0-10% irrespective of distance from Patna.

There was no mechanism for monitoring and redresses of the transport services either at the PHC or at the DHS. Only feedback present was that of actual no. of services given per day from the control room of Dial an ambulance 102 to SHS Bihar.

Report of Focus Group Discussion

A. Adult Female

There is a huge need of transport facility in this district. They needed referral mainly for pregnancy and diarrhoea related problems. Accidents and elderly related problems are the other occasions of referral needed. Half of the FGD participants never used the PHC transport. The main reason of non-use of PHC transport was unawareness (even ASHA also doesn't know about it). Although they have seen the presence of the vehicle at the PHC but nobody inform the public that it is for all, but they think it is 'Bada Aadmi Ka Gadi' i.e. for the use of the doctor and VIPs. Those who knew about the ambulance prefer using private conveyance because it is difficult to call the ambulance and fear for delay in time response. One participant in Maner and one in Masaudhi had used the PHC transport for their patients who are referred to PHC itself to PMCH.

Private conveyance can be made available only when they reach a pakka road. Usually Khatiya is used to bring the patient up to the road. Expenditure depends on the time of the day exorbitant charges are claimed at night.

B. Adult Male

They feel great need of transport to refer patient of labour, snake bite, lakawa and other severe diseases. Unawareness is the reason for not using the PHC vehicle. In most of the times those who know about it are afraid of that they have to pay more if they call it. Some of them thought that it is only for doctors and nurses. No participant out of six FGDs is used the PHC ambulance. Three participants had an occasion when their patient was referred from the PHC itself and they show ambulance parked in the PHC but no health staff offered the services to them.

Thela (Push cart) and Khatiya (bed) are usually using to bring the patient to road side. From the road side rickshaw, tempu, tumtum are available to take the patient to the hospital. Some - times they use the nearby railway stations like Punpun, Masaudhi also. They have to spend any amount claimed during emergency especially in the night.

Figure 13 : Commonest Mode of Patient Transfer : Thela (Paliganj)



C. Opinion leaders

All participants are aware that PHC has ambulance facility. But they can get it by the help of some health staff in the PHC. They said that the service is unavailable to the public because most of the time it is away to CS office etc. Driver is also not available all the time. They feel the no. of ambulance should be more per PHC. Mukhiya at two FGDs strongly believe that there should be one ambulance parked at every panchayat for people convenience. BPL/APL differentiation is not made clear to the public.

Thela is the standard option from village to road side from there any combination from rickshaw to train is used. The pitiful breakdown of the ambulance once got one client of the PHC ambulance struck in the mid journey so most people are now scared of using it. Then also he was charged exorbitantly.

Secondary data from record and observation

1. All PHCs are having single vehicle either out sourced or donated. Danapur, Mokhama, and Bikram have government ambulance but all of which are not functioning.
2. DHS guidelines are available only in PHCs Phulwarisharif, Maner, Fatuha, Bakhtiyarpur, Bihta, Masaudi, Naubadpur, Daniyawa and Barh.
3. Referral register did not contain disease condition in any PHC.
4. All the PHCs have an outsource vehicle, fund for the scheme is under 'Bishesh Adayagi Mad' is provided to each of the PHC from the DHS and an amount of maximum upto Rs.500/- per month is given to the owner of the outsource vehicle. As per kilometer charge is taken from the APL client for POL, from which a certain amount is deposited in PHCs RKS which has been found to be very negligible.
5. Places where a donated or govt. transport exist the mechanism for financial management is that a rate is fixed for usual referral places in RKS meeting. It includes cost of petrol and maintenance from time to time.

5.1 Rate of referral transport as evident from table 8 is negligible. Highest rate is one referral in two days (25%) and in Mokamah and Bikram the rate of referral is as low as one in five days.

5.2 Those referral register which shown no referral in the study period were found to have following causes for non referral as shown in Table 3. Most of the vehicle are sent to flood relief, one is out of order and in PHC Paliganj although the ambulance was present in PHC there was no referral mentioned in referral register.

Table 3: Cause of no referral in study period

Cause of no referral	PHC Code	Percentage
Sent for flood relief	01,03,08,14	25%
Out of Order.	13	06.25%
No mention in referral register although vehicle present in PHC.	09	06.25%
Vehicle met with an accident on 29/9/08	05	06.25%

6. Selection process for outsourcing is under gone by local meeting of RKS of the PHC. For instance the vehicle Dhanarua had an accident on 29.9.08 and a new vehicle was outsourced by local meeting of RKS which started working from 1.11.08.

7. It is clear from the Table and Figure above that dial an ambulance services 102 is mainly working in the urban areas as the ratio of urban : rural referral is 25 : 1.

8. There was no defined redress and monitoring mechanism existing in any of the PHC.

Discussion

Non-awareness about the availability of the ambulance services is the main cause of non-utilization. In the Tamil Nadu Health Systems Development Project -II, financial support was given to districts for creating awareness about emergency ambulance services⁴. In the same way, there is a need to create public awareness about the PHC ambulance services in Bihar, for which funds should be made available to the District Health Societies. The services of 'Dial an ambulance 102' lack popularity due to the incompatibility of the telephone connection with the connection of other companies. It can receive only a call made from BSNL, while most of the telephone connection available at the periphery are Reliance or Airtel. Most of the clients to whom ambulance was not made available complained of non-response by the telephone receiver of 102 services as well health staff at the PHCs. A few complained that they could not get the services because contact person at PHC was not available. Favouritism was also raised as cause of non-availability in two of the FGDs. The rate of utilization of transport was far from satisfactory. Number of ambulances in each PHC as well as drivers was less than required number. One ambulance per PHC does not fulfil the population norm (Range of Population 1.3 to 3.8 lacs). As per the report of Hospital Review Committee (K. N. Rao Committee 1968) 3 to 6 ambulances are required per PHC⁵. While the post of one driver is sanctioned per PHC, in some PHCs the drivers were recruited on contract basis, at a nominal monthly remuneration of Rs.2000/- per month. In some PHCs, they were working on daily wage of Rs. 100 per referral. Two PHCs had no driver appointed at the time of study. Lack of life saving equipments also makes the PHC transport system unattractive to the clients. The time response as maintained by the control room of 102 ambulance services shows a grim picture. The mechanism of 102 services is that it uses the respective PHC transport (depending on availability) only after informing the medical officer in charge of PHC or the Health Managers. As a result, a considerable delay is involved in getting a transport during emergency, and thus making the system unpopular. The system was following an arbitrary cost structure. BPL clients availing the services as they may be asked to pay higher charges. Monitoring and redresses mechanism is miserably lacking in PHCs as well as DHS. The pitiful breakdown of the ambulance in the mid journey also makes the clients scared of using the ambulance services.

It can be recommended here that appropriate and effective strategy for public awareness campaign need to be adopted depending upon the target clients. Dial an ambulance 102 should be made compatible to respond to all the mobile connection instead of BSNL alone. Number of ambulances per PHC should be increased depending on the population coverage. At least 3 drivers are needed to work on shift basis (leave reserve) in a PHC. Ambulances outsourced locally or donated must be well equipped with life support mechanism. Referral transport charges should be standardized and made transparent to all inclusive of dial an ambulance 102 services. APL and BPL distinction should be strictly followed and evidence to categorize population as BPL should be standardized. Standard feedback format containing cause of referral, place of referral, time response, cost incurred, output of referral and similar important features of the referrals should be made available at PHCs.

CHAPTER IV

RECOMMENDATIONS

Based on the findings of the project “ An Evaluation of the Referral Transport System under NRHM in Block PHCs of Patna District of Bihar, following are the recommendation s for an improvement in the services.

Areas of concern	Recommendation suggested.
Lack of awareness about the availability of the services was the main cause of non-utilization. Dial an ambulance 102 lacked popularity due to non-response over telephone, which was only to be made by BSNL connection .	<ol style="list-style-type: none"> 1. A perfect public awareness strategy should be prepared depending upon the target clients, and then be implemented for a sufficient period of time based on literacy and socio-economic level of the target clients in different PHCs. 2. Dial an ambulance 102 should respond to all the mobile connection as well as BSNL.
Rate of service utilizations was far from the satisfactory. No. of ambulance as well as driver were less than required. Unavailability of life saving equipments also makes the PHC transport unattractive to the clients.	<ol style="list-style-type: none"> 3. No. of ambulances should be increased depending on the size of population. 4. Drivers should work on shift basis, therefore at least 2 + 1 (Leave reserve) should be made available per PHC. 5. Ambulances outsourced locally or donated must be well equipped with life support mec hanism.
Cost structure is highly arbitrary. BPL clients are afraid to avail the services because of the charges.	<ol style="list-style-type: none"> 6. Charging system should be standardized and made transparent to all inclusive of Dial an ambulance 102 services. 7. APL /BPL distinction should be strictly followed (Evidence for BPL to be shown should also be standardized.
Monitoring and redresses mechanism is miserably lacking in PHCs as well as DHS.	<ol style="list-style-type: none"> 8. Standard feedback format containing cause of referral, place of referral, time response, cost incurred, output of referral and similar important features of the referral make available at each PHCs. 9. A quarterly report should be sent to the DHS from the control room of PHCs and SHS and to be reviewed by supervisory officials.

LIMITATION OF THE STUDY

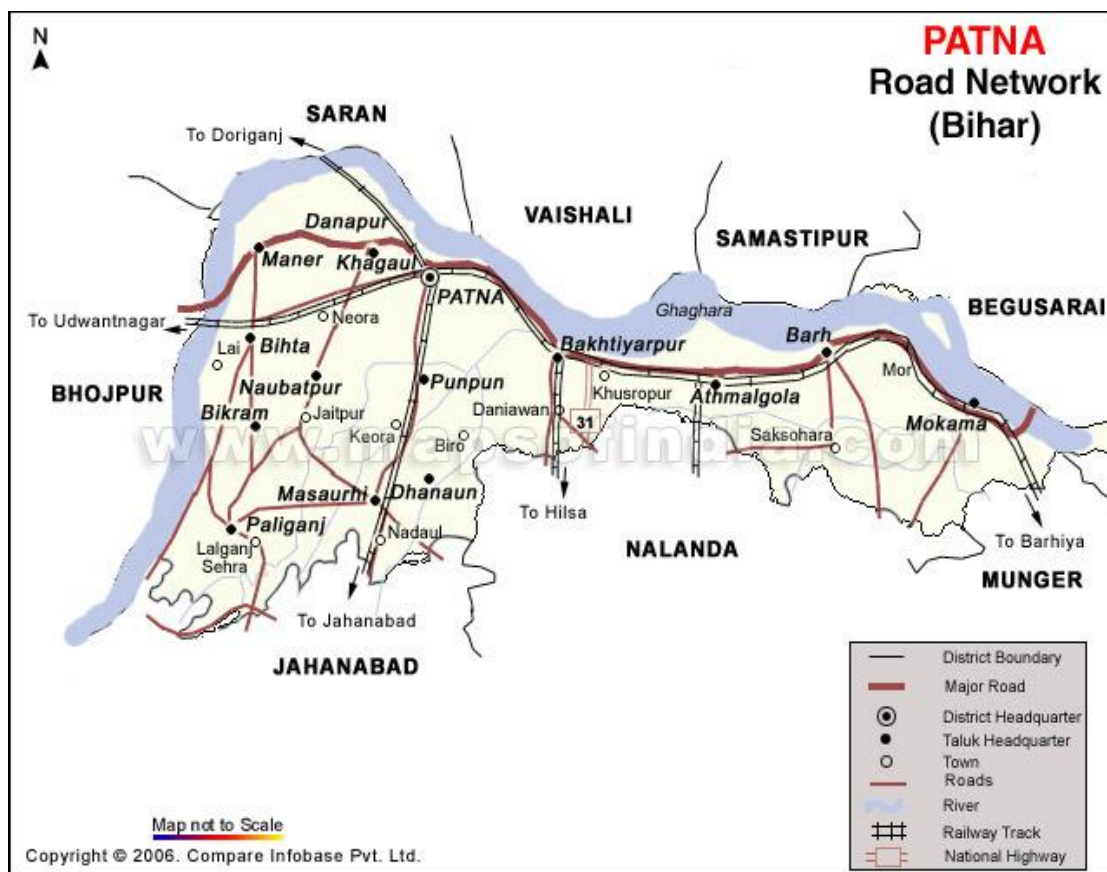
- Availability of outsourced referral transport was not universal. Both types of vehicle outsourced and donated had to be studied to have a moderately satisfactory outcome.
- The study duration was quite less therefore a large sample could not be attempted.

FUTURE DIRECTIONS OF RESEARCH

To create awareness among the people on the availability of services is the utmost necessity. The same study if repeated after a period of good IEC services can find out the fruits of this very well thought out scheme for referral transport under NRHM i.e. reduction in morbidity and mortality among emergency patients. At the same time the study may be replicated in other districts of Bihar.

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2. Government of India. National Rural Health Mission Document, Ministry of Health and Family Welfare. New Delhi; 2005.
3. Government of Bihar, Guidelines on Referral Transport System, Directorate of Health Services. Patna; 2006.
4. Government of Tamil Nadu. Tamil Nadu Health Systems Project – Phase II, Establishment of Emergency Ambulance Services, Department of Health and Family Welfare G.O (4D) No. 3 Dated 12.4.2007.
5. Quoted in Indira Gandhi National Open University. PGDHHM, Module -5, Unit 2.



Focus Group Discussion



Focus Group Discussion



Evaluation of the Referral Transport System under NRHM in Block PHCs of Patna District of Bihar

In-depth Interview Schedule of Consultant Referral Transport, SHS/DHS Bihar Patna

I. Identification Particular (PI collect the visiting card)

❖ Name of the Participant:

❖ Qualification:

❖ Designation:

❖ Full Charge/Addl. Charge:

❖ Date of posting from _____ to _____
(Tenure as a Consultant Referral Transport)

❖ Full Mailing Address:

❖ E-Mail:

❖ Fax:

II. General Questions:

❖ How long (no. of years) have you been working in this (State/District) system?

❖ What are your main responsibilities as a Consultant?

- ❖ Do you have any responsibility other than referral transport?
- ❖ Have you undergone any training as Consultant referral transport?
- ❖ If yes, specify.
- ❖ What are the set guidelines for out sourcing of referral transport scheme (Record verbatim – procure a copy of guidelines)

III. Knowledge and Awareness

- ❖ Is EMS 102 Scheme for referral transport different from this scheme?
Yes / No
If yes, What are the differences?
- ❖ If no, are the same sets of vehicles are being used for both the scheme s?
- ❖ The total no of vehicles are being used in the Patna District as ambulance?
- ❖ No. of District/PHCs having out sourced referral transport system.
- ❖ The PHCs, which are not having, outsource referral transport system. How are they managing? (Applicable to DHS)

IV. Management Aspects:

- ❖ Who has the control/supervision of the vehicles?
- ❖ Do you have any monitoring control over these vehicles?
If yes, how?

If No, why?
- ❖ Who does the monitoring of this referral transport system?
- ❖ Explain the mechanism of monitoring of this referral transport system.
- ❖ Do you face any problem/or situation arise when transport has to be stopped for want of allotment?

Yes / No

If yes,
❖ What steps do you normally take to sort out this problem?
- ❖ Do you get regular feedback from PHCs about referral transport?

Yes/No

If yes, what sort of feedback?
- ❖ How are you getting those feedbacks?

V. Effectiveness:

- ❖ Did you notice any improvement after introducing this system?
Yes / No
If yes, what type of improvement (Record Verbatim?)

- ❖ Did you ever received any complaints.
Yes / no
If yes, than record detail about the complain

- ❖ What is your opinion regarding:
 - The accessibility of referral transport system
 - The affordability of referral transport system
 - The equity of referral transport system
 - Patient's satisfaction

VII. Manpower Management:

- ❖ Did you face any problems while managing this referral transport system?
Yes / No
If yes, explain the problems (distri ct)
- ❖ Are the drivers of the vehicles are efficient and sufficient?

VIII. Suggestions / Words of Wisdom:

- ❖ Your comments on the scheme.
- ❖ What measures would you suggest to improve the adequate utilization of this service by the community?
- ❖ Improve the access to the community

Filled by:
Date:

Checked by:

An Evaluation of the Referral Transport System under NRHM in Block
PHCs of Patna District of Bihar

In-depth Interview Schedule of Civil Surgeon

I. Identification Particular

- ❖ Name of the Participant:

- ❖ Qualification:

- ❖ Full Charge/Addl. Charge:

- ❖ Tenure as Civil Surgeon

- ❖ Full Mailing Address:

- ❖ E-Mail:

- ❖ Fax:

II. General Questions:

- ❖ How long (no. of years) have you been working in this system?

- ❖ Do you know about the Referral Transport System under NRHM?
Yes / No
 - a. If yes, Kindly give detail about it.
 - b. Who has been deployed from your office to look after the transport system?
 - c. What is your responsibility in this regard?
 - d. What is the monitoring mechanism you are following for this?

❖ What are the set guidelines for out sourcing of referral transport scheme (Record verbatim – procure a copy of guidelines)?

❖ How much fund has been utilized since inception of the scheme?

❖ Did you notice any change after introducing this system?
Yes/No
If yes, in what way?

Comments on patients:

❖ Affordability

❖ Accessibility

❖ Equity

❖ What is your opinion regarding the utilization of this system – patients are increasing/decreasing?

❖ Are they getting the transport in time?
Yes/No

- ❖ What type of problem/complaints you normally received by you?

- ❖ How do you manage if you receive any complaint regarding transport or driver?

- ❖ Do you sent your feedback to DHS/SHS.

- ❖ Your comments on the service.

- ❖ Your suggestions for further improvement.

Filled by:
Date:

Checked by:

An Evaluation of the Referral Transport System under NRHM in Block
PHCs of Patna District of Bihar

In-depth Interview Schedule of Medical Officer Incharge of PHCs

I. Identification Particular

- ❖ Name of the Participant:

- ❖ Qualification:

- ❖ Full Charge/Addl. Charge:

- ❖ Tenure as I/C PHC

- ❖ Name of PHC:

- ❖ Full Mailing Address:

- ❖ E-Mail:

- ❖ Fax:

II. General Questions:

- ❖ How long (no. of years) have you been working in this system?

- ❖ What are the set guidelines for out sourcing of referral transport scheme (Record verbatim – procure a copy of guidelines)

III. Effectiveness:

- ❖ Did you notice any change after introducing this system?
Yes/No
If yes, in what way?

- ❖ What is your opinion regarding the changes of this system, the patients are spending more/less in comparison to earlier system?

IV. Utilization Pattern

- ❖ What is your opinion regarding the utilization of this system – patients are increasing/decreasing?

- ❖ Are they getting the transport in time?
Yes / No

- ❖ What type of problem/complaints you normally receive sitting at PHC.

V. Management:

- ❖ How do you manage if you receive any complaint regarding transport or driver?

- ❖ What is your role, as a PHC Incharge in running this system?

❖ Do you sent your feedback to DHS/SHS.

VI. Suggestions:

❖ Your comments on the service.

❖ Your suggestions for further improvement.

Filled by:
Date:

Checked by:

Evaluation of the Referral Transport System under NRHM in Block
PHCs of Patna District of Bihar

Focus Group Discussion of Adult Men/Adult Women/Community Leader

I. Need of Transport:

Do they feel the need for a transport for?

Cases that usually need referral

II. Knowledge of Transport facilities?

Whether they knew about it?

III. Views of Users – Availability

Availability to all the people .

Availability to referral services .

Response time.

Reaches to difficult areas.

Any incidence about the non availability.

Availability of the vehicle for important social purposes other than patient referral.

IV. Expenditure: Affordability

Money claimed for refer the patients .

It is expensive or reasonable .

What alternatives.

Comparison with free. Government own system .

V. Satisfaction

Satisfaction rate of the service .

Difference between earlier and this system .

Annexure 7
Evaluation of the Referral Transport System under NRHM in Block
PHCs of Patna District of Bihar

Interview Schedule for IDI of the Driver/Owner of the Vehicle

Name of the Driver/Owner -----

Address -----

Having driving license? Yes/No

Comment about the vehicle Date of first buy (Actual date from Owner book)

Km's travelled till date _____

Consumption of fuel/Km _____

Since when working in the scheme _____

What is the remuneration ? _____

For what common destinations
transport is used?

- 1- From PHC to Referred Hospital.
- 2- From client's home to PHC
- 3- From client's home to Private centre

Maintenance work done by

1. PHC
2. Owner

What is the cost per visit

(a) If a BPL client :

i. From Govt side

ii. From client side

(b) If an APL client

i. From Govt. Side

ii. From client side

Comment on behaviour of health staff

1. Very good

2. Good

3. So so

4. Not very bad

5. Bad

Comment on the behaviour of clients

1. Very good

2. Good

3. So so

4. Not very bad

5. Bad

Any problem faced?

Any suggestion?

PHC	Vill	Id

Evaluation of the Referral Transport System under NRHM in Block
PHCs of Patna District of Bihar

In-depth Interview Schedule of the Clients Availing Transport Service

Name of the Client/Attendant -----

Address -----

Was any member of your family needed transportation to hire medical centre in last two months time?

If yes, did you avail govt. transport from PHC/102. Yes / No

If no, why ? (Give details)

What is the cause of referral?	<ol style="list-style-type: none"> 1. Accidents 2. Complicated Labour 3. Sick New born 4. Emergency surgical cases 5. Emergency medical cases 6. Poisoning 7. Others
From where the referral has been Made	<ol style="list-style-type: none"> 1. From the PHC 2. by a pvt practitioner 3. On clients request
What is the Referred Place?	<ol style="list-style-type: none"> 1. PMCH / NMCH 2. To a pvt hosp 3. To a referral hosp.
What is the time response to To get the transport	<ol style="list-style-type: none"> 1. Instantaneous 2. Within 15 minutes

3. Within half an hour
4. More than half an hour.
5. Cost claimed by the driver
- a) In a BPL client -----
- b) In an APL client _____
6. Cost paid by the client
- a) In a BPL client -----
- b) In an APL client _____
7. Was counselling done by MO for referral?
- Y/N
8. Comment on the behaviour of the Health Staff
1. Very good
2. Good
3. So so
4. Not very bad
5. Bad
9. Comment on the behaviour of the Transport Staff
1. Very good
2. Good
3. So so
4. Not very bad
5. Bad

Signature of the Investigator

Evaluation of the Referral Transport System under NRHM in Block PHCs of Patna District of Bihar

Checklist for the Secondary Data

1. No. of vehicles are being used
2. Guidelines
3. Disease specific mortality rate
4. Government expenses to run the scheme
5. Column in the referral register
6. Selection process for outsourcing
7. Minutes of RKS
8. Redresses Mechanism
9. Monitoring Mechanism

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HEALTH-COMPL. DEPT. NO. 0612 2224608 P. 07

10/11/06-11-12-

पत्रांक ---/2005
बिहार सरकार
स्वास्थ्य एवं पौष्टिक विभाग ।

दीपक कुमार,
सरकार के सचिव ।

सेवा में,
सभी सिविल सर्जन ।

पटना, दिनांक 5 जनवरी, 2006

विभागीय पत्रांक 271(10) दिनांक 19-11-2005 के आलोक में प्राथमिक स्वास्थ्य केंद्रों तक एम्बुलेंस की सुविधा भी जानी है । इसमें यह प्राथमिक किया गया था कि यदि पहले से एम्बुलेंस नहीं हो तो भाड़े पर भी रखा जा सकता है जिसके लिए अधिकतम दर 500/- प्रति दिन होगा । इस संबंध में निम्नानुसार कार्रवाई की जाए ।

- (1) यह 500/- प्रतिदिन का दर उपलब्ध है, यह भी स्वास्थ्यकर्ता जब एम्बुलेंस बिल्टुल सुसज्जित भाड़े पर मिले । समय है कि इस तरह का एम्बुलेंस प्रत्येक प्रखंड में नहीं मिले । इस हालत में सामान्य एम्बुलेंस 'रूमी' एक सामान्य गाड़ी भी लिया जा सकता है । परन्तु उसके लिए दर काफी कम होगा जिसका निर्धारण निविदा के माध्यम से किया जा सकेगा ।
- (2) यह धर निर्धारण का कार्य रोगी कल्याण समिति को करना है । इस पर हुए व्यय की प्रतिपूर्ति सिविल सर्जन उपलब्ध आइटम से करेंगे जैसा कि उपरोक्त पत्र में निर्देश दिया गया है ।
- (3) जिला स्वास्थ्य समिति/रोगी कल्याण समिति एम्बुलेंस के लिए प्रति कि०मी० यूजर चार्ज का निर्धारण करेगी जो उपरोक्त चर्चे के रोगी कल्याण समिति को खाते में जमा करना पड़ेगा । यह यूजर चार्ज दो तरीके का हो सकता है- (1) गरीबी रेखा से नीचे के व्यक्तियों के लिए तथा (2) गरीबी रेखा से उपर के व्यक्तियों के लिए ।
- (4) जिला स्वास्थ्य समिति एवं रोगी कल्याण समिति यह भी निर्धारित करेगी कि भाड़े पर दिए गए एम्बुलेंस को प्रति कि०मी० 500/- एल० के लिए विगप्नी-सशि दी जानी है ।

कृपया तदनुसार कार्रवाई की जाए ।

विश्वरत्नाजन,
EO/-
(दीपक कुमार)

पटना, दिनांक 5 जनवरी, 2006
प्रतिलिपि सभी जिला अधिकारी को सूचनार्थ एवं आवश्यक कार्यार्थ प्रेषित ।

(दीपक कुमार)

मौखिक कार्य
तकालिक नं० 41/1
7-11-06

सं-10-विधि-17-56/2005
बिहार सरकार
स्वास्थ्य एवं प०क० विभाग ।

27/1(10)

(1)

31/9/05
17/1/05

प्रभक:
दीपक कुमार,
सरकार के सचिव ।

सेवा में,
सभी प्रमंडलीय आयुक्तों ।

वित्त विभाग
से प्रामर्शित

पटना, दिनांक 19 सितम्बर, 2005

विषय: स्वास्थ्य विभाग के आधारभूत संरचनाओं का सुदृढीकरण के सम्बन्ध में ।

महोदय,

राज्य की स्वास्थ्य संबंधी आधारभूत संरचनाओं को सुदृढ करने हेतु राज्य सरकार कटिबद्ध है । उपरोक्त आधारभूत संरचनाओं को बेहतर बनाने हेतु 12वीं वित्त आयोग की प्राप्त राशि से दवा/उपकरण क्रय करने तथा सरकारी कार्य करने वाली अस्पतालों में दवाएं खरीदना में फर्निचर उपलब्ध कराने, क्षेत्रीय उच्च विद्यालय से लेकर प्राथमिक स्वास्थ्य केंद्र तक आवश्यकतानुसार भाड़े के कार्यों करने का अनुमान, सभी अस्पतालों की सुविधा उपलब्ध कराने, सभी अस्पतालों में रिक्तिस्थान खतके की सुविधा एवं जलवायु प्रसूतिशाला पेंपर उपलब्ध कराने, साइड एवं अनुमंडलीय अस्पतालों में 24 घंटे आपतकालीन सुविधा को सुदृढ करने के साथ साथ रोगी कल्याण समिति का गठन करवाना एवं उसके माध्यम से निम्न कार्य कराया जाता यथा विहित प्रक्रिया अपनाते हुए भाड़े पर एन्वेलॉप की व्यवस्था रखना, सभी अस्पतालों में रख रखाव, साफ-सफाई/बिजली की व्यवस्था तथा वेडस आदि की व्यवस्था को आउटसोर्स करने का प्रस्ताव है । इसपर वारहवीं वित्त आयोग से प्राप्त राशि के लिए उच्च स्तरीय अनुश्रवण समिति द्वारा दिनांक 5.9.05 की बैठक में सहमति दी जा चुकी है । इसके अतिरिक्त योजना मंत्रालय सृजित रिलीफ में एवं नए सृजित प्रखंडों में नये अस्पतालों के निर्माण हेतु राशि भवन निर्माण विभाग को शीघ्र ही आवंटित करने का प्रस्ताव है । इस तरह प्राप्त राशि का यदि उचित मॉनेटरिंग के साथ सदुपयोग किया जाता है तो स्वास्थ्य से संबंधित आधारभूत संरचनाओं की स्थिति में संतोषजनक प्रगति हो सकती है ।

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इसी परिप्रेक्ष्य में यह अपेक्षा की जा रही है कि प्रमंडलीय आयुक्तों इसके कार्यान्वयन में महत्वपूर्ण भूमिका निभाते हुए अपने क्षेत्रीय प्रशासनिक कार्यों में समुचित ध्यान देने वाले कार्यों की एक रूपरेखा भीसे दी जा रहे है ।

1- सभी प्राथमिक स्वास्थ्य केंद्रों के भवनों का उत्कृष्ट किया जाना है ताकि उसमें औ०पी०सी० की व्यवस्था हो एवं एक्स-रे एवं पथोलॉजी यूनिट की व्यवस्था हो । इसके लिये राशि भवन निर्माण विभाग को शीघ्र ही दी जा रही है । भवन निर्माण विभाग द्वारा एक मोडल प्राकल्पन बनाया गया है जिसकी अनुमानित राशि 23.00 लाख (तेईस लाख) रु० है ।