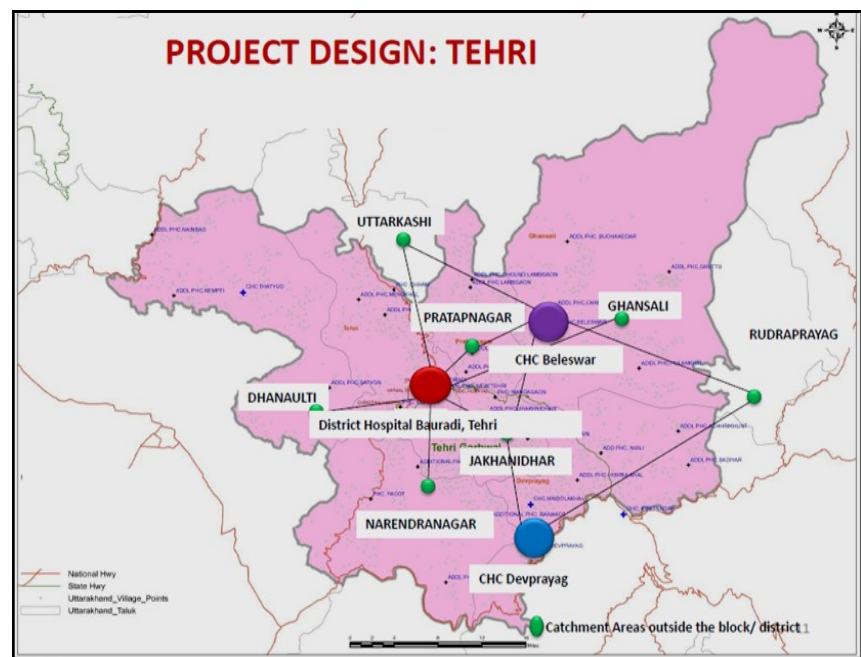
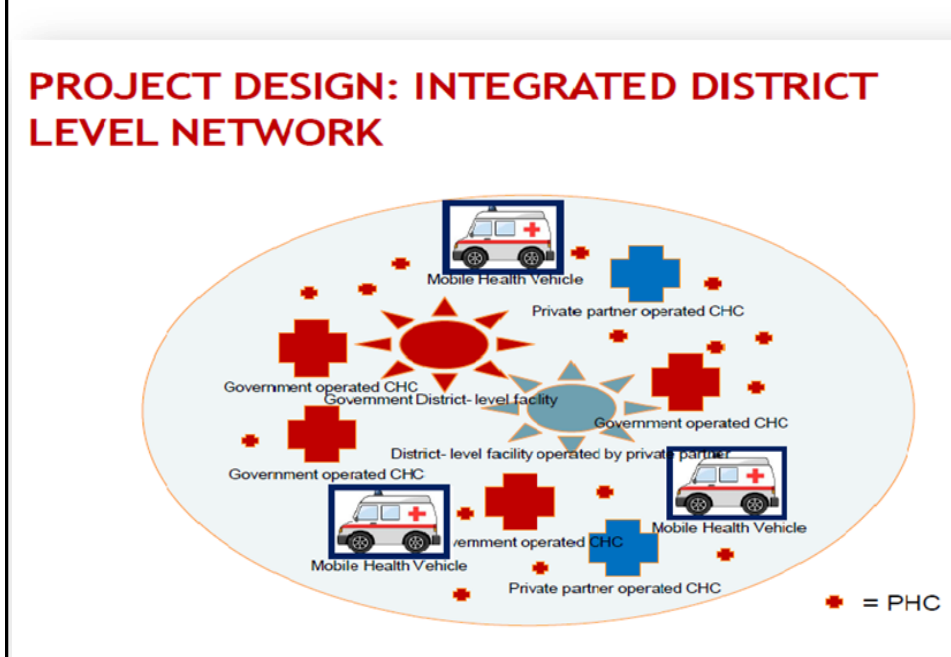




INTRODUCTION:

The challenge of expanding access to treatment and medicine for chronic diseases in emerging markets is both a public health imperative and a commercial opportunity. Cross-sector partnerships (PPP) can address this challenge. In order to achieve the aforementioned objectives, **Government of Uttarakhand** in collaboration with **World Bank** (funding agency) has mandated the **Uttarakhand Health and Family Welfare Society** (the “Authority”) to undertake an **International Competitive Bidding (ICB)** for selection of Service Providers and award of the Project for the augmentation, development, operation and maintenance of integrated Healthcare Facilities and provision of Healthcare Services on a **pilot PPP basis** in:

- District Hospital at Borari, New Tehri;
- 2 community health centers (CHC) at Beleswar and Devprayag; and
- 3 mobile health vans to be deployed in Tehri district



OBJECTIVES:

- Conducting a brief yet comprehensive assessment of compliances and operating protocols Involving all aspects (i.e. space, manpower and infrastructure) of a hospital setting.
- Identify scope for improvements and make suitable recommendation to the management.

METHODOLOGY:

The study design was mainly observational in nature, carried out in the Corporate Office of Manipal Health Enterprises Pvt. Ltd., Bangalore. in the month of March and April, 2015.

Primary data was collected via Unstructured and structured interviews (face to face and telephonic), Communication via electronic mail and Direct Observation from Department of Clinical Services, Manipal Ambulance Response Services, Human Resource Department, and Quality Department, Manipal Hospitals (Bangalore)

Secondary data was collected from Request for proposal document provided by the government of Uttarakhand, Documents on IPHS Guidelines by NRHM, Due diligence reports prepared after the site visits, Various case studies and publications on commissioning of hospitals in India, and various online sources

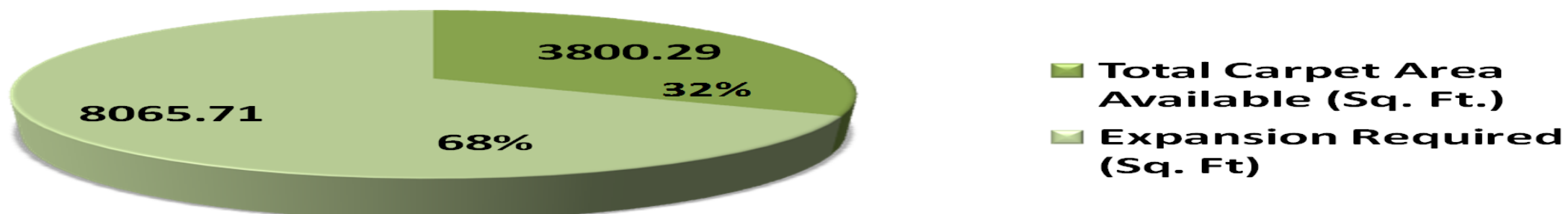
FINDINGS & RECOMMENDATIONS

DISTRICT HOSPITAL, BARAUDI

The Boradi District Hospital is currently a **40 bed facility** situated in Pratapnagar block of Tehri Garwal district. The facility was upgraded to District Hospital in the year 2001. The District Level Facility building is approachable by motorable road and is 0.5 km from Bauradi bus stand. As Per the requirements put forward by the Government of Uttarakhand this health care facility needs to be scaled up to a **70 bedded hospital**.

A. WARDS			
1.	Female ward (General + Surgical) & pedeatric ward	24 beds	
IDEAL (Sq. Ft.)	EXISTING AREA (Sq. Ft.)	18 BEDS	GAP ANALYSIS/ RECOMMENDATIONS (Sq. Ft.)
Space / Bed	368.92		Bed Space
100	—		Female surgical (15 beds)
			Female general (5 beds)
			Pediatric (4 beds)
			Nursing Station
			Bio medical Waste
Total Space required	124.03		Nusing Store
	5.04		Washrooms
			Equipments
100 * 24 = 2400			
	Total = 498		Total
	Space / bed = 27.67		Space / bed
			3105
			129

DISTRICT HOSPITAL (70 BEDS) - AREA ANALYSIS



- Common ward for surgical and non surgical cases with earmarked beds for each category in male and female ward i.e. Surgical, Medicine, Paediatric etc.
- Highest infection control protocol to be followed within the wards irrespective of the type of the patient.
- All paediatric patients below 10 yrs of age can be admitted in female ward, irrespective of their sex.
- No separate NICU, 2 beds to be reserved in ICU for paediatric patient.
- Instead of paediatric beds, adult beds could be used .
- In case of lack of adequate space for nursing stores there can be separate fixed/ movable cabinets located in corridors/ outside wards to store Bio medical waste/ soiled linens/ clean linens etc.
- There can be a common nursing station between two wards if space is inadequate.
- There can be a separate setup for CSSD for the entire hospital.

B. MANPOWER ANALYSIS:

DISTRICT HOSPITAL (70 BEDS) - HUMAN RESOURCES					
CADRE	IPHS GUIDELINES	Number	RFP (FINAL) Qualification/ Experience	MHB	RECOMMENDED
Medical Consultants	10 +3*	11	PG Degree/ diploma/ DNB 3 Yrs & above	22	9
MO	9	1: 10 Doctor Patient Ratio	MBBS 1 Yr & above	10	8
Nurses		1 (Matron/ Head Nurse)	GNM/ B.Sc. 5 Yrs & above		
	45	Staff Nurse 1:7 nurse Patient Ratio	GNM Nursing 2 Yrs & above	54	43
Para medical Technicians	18	—	DMLT/ Diploma in radio or allied serves 1 Yr & above	19	8
Dietician	5+1*	— (Pharmacy & stores)	D paharm/ M pharm 1 Yr & above	6	4
Physiotherapist	1	1	Master in Physiotherapy 1 Yr & above	2	1
Social worker	2	—	—	—	—
Counsellor	1	—	—	—	—
Rehabilitation Therapist	1	—	—	—	—
Non Medical Aministrative					
Hospital Administrator	1	—	DHA/ MHA 1 Yr & above	—	1
Managerial Staff	1	1	—	—	10
Medical Recor officer	1	—	—	—	—
Medical Record Asstt.	1	—	—	—	—
Accounts/finance	2	—	Graduate in Accountancy/ Computers 1 Yr & above	15	8
Admn. Officer	1	—	—	—	—
Office asstt. Gr I	1	—	—	—	—
Office asstt. Gr II	1	—	—	—	—
Ambulance Services(1 driver + 2 Tech.)	1	—	—	—	—
Others					
Security	— #	—	1 Yr & above	21 #	13
Housekeeping	— #	—	—	—	—
Maintenance etc.	— #	—	—	—	—
TOTAL	107			146	105

DISTRICT HOSPITAL - DOCTORS				
SPECIALITY	IPHS GUIDELINES	Number	RFP (Final) Qualification/Experience	RECOMMENDED
Consultants			ALL DEGREES TO BE MCI RECOGNIZED	
Medicine	1	1	PG degree/ diploma/ DNB in General med. 3 Yrs & above	1
Surgery	1	1	PG degree/ diploma/ DNB in General surg. 3 Yrs & above	1 + 1(Replacement)
Obstetric & Gynae	1	1	PG degree/ diploma/ DNB in Ob & G 3 Yrs & above	1 female MO (10+ experience in OBG)
Pediatrics	1	1	PG degree/ diploma/ DNB in Pediatrics 3 Yrs & above	1 (Diploma)
Anaesthesia	1	1	MD/ DA/ LSAS trained MO or DNB in Anaes. 3 Yes & above	1 (ICU background)
Ophthalmology	1	1	PG degree/ diploma/ DNB in Opth. 3 Yrs & above	1 - Elective/ Locum (Weekly twice)
Orthopaedics	1	1	PG degree/ diploma/ DNB in Ortho 3 Yrs & above	1
Radiology	1	1	PG degree/ diploma/ DNB in Radio 3 Yrs & above	Tele radio/pathology
Pathology	1	1	PG degree/ diploma/ DNB in Path 3 Yrs & above	(once in 15 days) # technician
Dialysis	—	—	—	—
Intensivist	—	—	—	—
ENT	1	1	PG degree/ diploma/ DNB in Path 3 Yrs & above	1 (clinic twice a wk)
Dental	1	1	BDS 3 Yrs & above	1 (BDS) - Locum/ elective (Twice Weekly)
Psychiatry	1	—	—	—
Dermatology	1*	—	—	—
Microbiology	1*	—	—	—
Forensic Specialist	1*	—	—	—
AYUSH Doctors	1	—	—	—
TOTAL	10+ 3*	11		9
MO	9	Doc:patien ratio 1:10. Atleast 2 lady doc. With PNDT cert.	MBBS 1 Yr & above	7+1 (Replacement)

PNDT : Post Natal Diagnostic Test

MOBILE HEALTH VEHICLE (MHV)

The State of Uttarakhand is characterized by mountainous and geographically hostile terrain having sparse and scattered population. Communities living in the remote and disadvantaged areas, especially the BPL (Below Poverty Line) population and women are generally unable to access reliable and cost effective healthcare services. Taking health care to the doorsteps is the principle behind this initiative and is intended to reach underserved areas.

MOBILE HEALTH VEHICLE - SERVICES				
SERVICES	NHM SUGGESTIONS	RFP (FINAL)	MHB (MARS)	RECOMMENDED
EMERGENCY	Disaster Epidemic Accidents Other Medical Emergencies	Yes Yes Yes —	Yes Yes Yes Yes	Yes Yes Yes * Cardiac & stroke included
DIAGNOSTIC	Laboratory services X- ray Ultrasound ECG	Yes Yes, connected through tele-radiology Yes, connected through tele-radiology —	No No No Yes	Yes *with tele-histopathology Yes, connected through tele-radiology Yes, connected through tele-radiology * Bone marrow density, Mammography also
CURATIVE	Minor surgery and suturing Screening & detection of diseases Referral of complicated cases Specialist services (Obs & gynae, paediatrician, Physician)	Yes Yes Yes Yes	No No No Yes(Tele-medicine)	Yes Yes Yes Yes (connected through tele-medicine)
PREVENTIVE	A. MATERNAL & CHILD HEALTH Immunization clinics Anti & Post- natal check up Treatment of common childhood illness B. FAMILY PLANNING Distribution of contraceptives IUD insertion Counselling for spacing & permanent method	Yes Yes Yes Yes Yes — Yes Yes Yes	No No No No No No No No No	Yes *To be coordinated with SC, PHC Yes Yes Yes Yes Yes Yes Yes Yes *IVF Counselling

B. MANPOWER ANALYSIS:

MOBILE HEALTH VEHICLE - HUMAN RESOURCES					
CADRE	NHM SUGGESTIONS	RFP (FINAL)		MHB (MARS)	RECOMMENDED
		Number	Qualification/ Experience		
MEDICAL					
Specialist	Radiologist Obs & Gynae Paediatrician Physician	—	—	—	NO.* Experienced MO connected to specialist through Tele-Communication
Medical Officers	2 (1 Lady Doc.)	2	MBBS (1 Lady doc. with PNDT Act cert) 1 Yr & above	As an when required	1 MBBS 1 Yr & above 1 additional or more in case of Camps (1 Lady doc. with PNDT Act cert)
Nurses	1	1	GNM 1 Yr & above	1 GNM	2 GNM 1 Yr & above
TECHNICIANS					
X Ray technician	—	1	DMRD/ Equivalent Fresher/ Experienced	—	1 Diploma in Imaging Technology Fresher/ Experienced
Lab Technician	1	1	DMLT Fresher/ Experienced		1 DMLT Fresher/ Experienced
OTHERS					
Pharmacist	1	—	—	—	1
Driver	3	2	Heavy Vehicle Commercial Liscence Fresher/ Experienced	1	3 Heavy Vehicle Commercial Liscence Fresher/ Experienced
Helper	1	1	Fresher/ Experienced	1	1 Fresher/ Experienced *1 Coordinator (Additional ones during camps)
TOTAL	13	8		3 + 1*	10 + 2*

C. COMPONENTS:

MOBILE HEALTH VEHICLE - INFRASTRUCTURE					
VEHICLE	NHM SUGGESTIONS	RFP (FINAL)		MHB (MARS)	RECOMMENDED
		Number	Description		
PASSENGER CARRIER	A 10 seater vehicle for medical & paramedical personnel	1	7 Seater mobile van to carry MHV Personnel	–	A 7 Seater vehicle for medical & paramedical personnel
EQUIPMENT CARRIER & LABORATORY	A van with equipment/ accessories. Basic lab facilities. Also as a carrier to transport referral cases	1	AC Vehicle, GPS enabled and with portable generator	AC Vehicle,GPS & bluetooth enabled.With cameras & equipments for advaced cardiac life support.Carrier to transport patient to nearest hospital	*Van. GPS enabled. *Basic Lab facilities. *Carries equipment/ accessories. *Space for minor procedures. *Acts as carrier for referral patients
DIAGNOSTICS CARRIER	A mobile van with diagnostic equipments (X ray, ultrasound, portable EGC) and generator	–	–	–	*Van with power backup. *with specified diagnostic equipments.
TOTAL	3	2		1	3

INCENTIVES AND DEDUCTIONS:

FEE STRUCTURE

Performance KPI incentives : Maximum incentives/ month: +10% of volume adjusted service fee Maximum reductions/ month: -10% of volume adjusted service fee
Volume based adjustments: +20% of base service fee (max./ month)
Base Service Fee (Quote for 1 year-inflation adjustment @ 10% @ end of 2 years)

Availability KPIs : Maximum reduction for un-availability/month: -60% of volume adjusted service fee

OTHER PROJECT: PPP Request for proposal: Response for Qualification, Technical & financial bid (Jharkhand)

ACKNOLWDGEMENT

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