

# District Health Action Plan

A Vision document for enhancing effectiveness of sub centers and primary health centers at Medak

2014-2015

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## **Model Districts Health Project**

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## List of Abbreviations:

CGC  EI	Columbia Global centres   Earth Institute
AH	Area hospital
ANA	Accredited nutrition activist.
ANM	Auxiliary nurse and mid-wife
APVVP	Andhra Pradesh vaidhya vidhana parishat
ASHA	Accredited social health activist.
AWC	Anganwadi centre
AWW	Anganwadi worker
AYUSH	Ayurveda, Unani, Siddha, Homeopathy
BB/BSU	Blood bank / blood storage unit
BEmOC	Basic emergency obstetric care
CEmOC	Comprehensive emergency obstetric care
CH	Civil hospital
CHC	Community health centre
CHNC	Community health and nutrition cluster
DEO	Data entry operator
DH	District hospital
DHAP	District health action plan
DM&HO	District medical and health officer
DP	Delivery point
FRU	First referral unit
GA	Gap Analysis
GoI	Govt. of India
GoT	Govt. of Telangana
HRC	High risk condition (in pregnancy)
HRP	High risk pregnancy
IMR	Infant mortality rate
IPHS	Indian public health standards
LHV	Lady health visitor
MCH	Maternal and child health
MDG	Millennium development goals
MDHP	Model district health project
MMR	Maternal mortality ratio
MNH	Maternal and New-born health
MO	Medical officer
MoHFW	Ministry of Health and family welfare
NHM	National Health Mission
NRHM	National rural health mission
NUHM	National Urban health mission
PHC	Primary health centre
PIP	Programme implementation plan
RCH-II	Reproductive and child health – phase II
RI	Routine immunisation
RMNCH+A	Reproductive, Maternal, New-born, Child health and Adolescent health.
SC	Sub-centre
SDH	Sub district hospital
TFR	Total fertility rate.
UHC	Universal health coverage.

# Summary:

## What we know

- 1) Accessible health services are those that are physically available, affordable (economic accessibility), appropriate and acceptable. Health services can be inaccessible if providers do not acknowledge and respect cultural factors, physical barriers and economic barriers, or if the community is not aware of available services.
- 2) The vast health infrastructure and resources in the district are significantly underutilised mainly due to the problems relating to,
  - a. Access
  - b. Lack of an 'appropriate' place for conduct of services such as ANC, FP etc.
  - c. Poor supervision and stewardship of the Sub-district health office.
  - d. Lack of electricity, running water and clean toilets at the SC and PHC levels.
  - e. Absence or poorly coordinated efforts with other related government wings.

## What works?

Few evaluations have been set up to specifically assess accessibility. Even so, a rich body of research and documented practice experience suggests that health services can effectively promote the facets of accessibility.

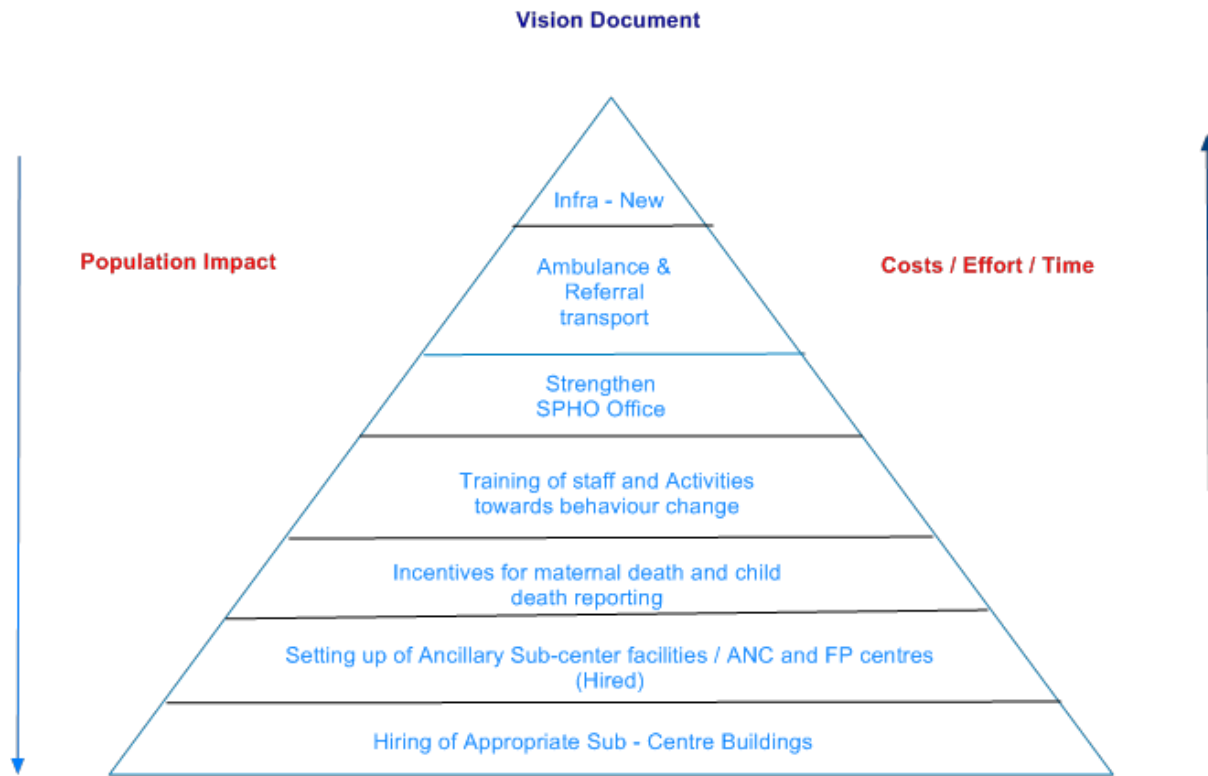
- 1) Addressing physical and economic barriers through strategies such as:
  - providing services locally
  - providing transport to health services
  - using home visitation as part of a multi-faceted engagement strategy
  - Improving access to private health insurance and private health services.
  - employing Indigenous health professionals and health workers to promote culturally safe service delivery
  - Providing services in non-traditional settings.
- 2) Staff encouragement through skill based continuous efforts and appreciations.
- 3) Enhance the utilisation by generating demand from the field through locally acceptable media and language.
- 4) Sustained coordinated efforts at the PHC / SPHO & DMHO levels with related departments (PRI, Transport, social welfare etc.)

Hence the strategy has been depicted in the figure below (pyramid). At the bottom of the pyramid are the interventions which have got minimal cost implications but a wide reach. As we progress to the top of the pyramid the interventions are more reliant on resources and can be considered in a long term ideal setup.

We advocate a state of strengthened SC and PHC, as up to 85% of clients can be dealt here. The rest can be referred to higher centres. We recommend strengthening of higher centres to deal with such complications, but also suggest that these high risk cases be covered with adequate insurance, so that the choice of seeking higher care is best decided by the client. One more reason to suggest the

out sourcing to private establishments is to decongest the DH and SDH which are already functioning to the brim.

In order to address the accessibility constraint, we suggest positioning of 108 services at most populous areas in the block and not at the block level alone. If this is not possible then other indigenous methods need to be explored including hiring of the private sector vehicles.



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Strengthening of the SPHO at the block level with logistics, budget, transport and trained supervisory staff will go a long way in enhancing the health care. This is one of the most significant aspects which needs to be addressed at the policy level, as we believe that the SPHO is uniquely positioned at the sub district level as a mentor and a monitoring officer. Additionally we advocate that the SPHO be granted administrative powers over the MO's at least in matters of daily affairs and petty finances including the ASHA honorarium which are normally addressed by the district office.

Finally the system of maternal death and child death reporting needs to be streamlined not for the purpose of reporting itself but the data to be used for directing efforts and available resources to ensure remedial measures are taken to address. Death reporting may be encouraged by the private players and citizens, who may be reimbursed. This will ensure greater inflow of data. (*\*Rajasthan is reimbursing individual informants with a mobile talk time of ₹ 200.00, after validation.*)

# Introduction

Even though a wide range of health services exist in most urban and regional centres, they are not necessarily accessible. Accessible health services are physically accessible, affordable, appropriate and acceptable (that is, culturally competent and non-discriminatory) (ATSISJC 2009a; Scrimgeour & Scrimgeour 2008).

There are several key themes in the literature on access to health services for Indigenous people:

- Accessible health services are critical given the complex health conditions that many Indigenous clients suffer.
- Strengths-based community development approaches represent a sound starting point for improving the physical and economic availability of services, and the willingness of individuals to use them.
- Additional access challenges such as physical distance from a service, the difficulties of attracting appropriate staff to remote work locations.

Despite poor health indicators, government spending on health care in most low- and middle-income countries is well below what is needed. A recent analysis suggests that while low-income countries need to spend \$54 per capita for a basic package of health services, the average actual per capita health expenditure in these countries is only \$27 (*Stenberg and others, 2010*). Low revenue collections, competing demands for revenues, and relatively low spending priority contribute to this insufficient spending.

Consequently, limited access to public health care facilities forces people to go to private providers, resulting in substantial out-of-pocket (OOP) spending, especially for the poor (WHO, 2004).

The Millennium Development Goals have helped to draw the attention to the need for ensuring universal coverage in many low- and middle-income countries.

The health sector challenges in India, like those in other low- and middle-income countries, are formidable. Public spending on medical, public health, and family welfare in India is much below what is required. Further, the gap between the actual spending and the required amount is larger in the relatively low-income states and this results in marked inter-state inequality. The low levels of spending have had an adverse impact on the creation of a preventative health infrastructure. With over 70 percent of the spending on health being OOP, the low level of public spending and its uneven distribution have been a major cause of the immiserating of the poor. Public spending on health in India has been stagnant and hovering around 1% of the GDP. (*Health care financing reforms in India – Govind Rao and Mita Chaudhary 2012*)

While the economic development in India has been gaining momentum, our health system is at cross roads. Even though government initiatives in public health have recorded some noteworthy successes over time in establishing infrastructure capacity and referral support, the Indian health system is ranked 118 among 191 WHO member countries on overall health performance. The major hurdle being accessibility to the prevailing services.

Building health systems that are responsive to community needs, particularly for the poor, requires politically difficult and administratively demanding choices.

# Background

In the wake of the 'call to action' conference at Mahabalipuram in February 2013, the MoHFW developed an action plan to strengthen the maternal and child health services through the 'life cycle approach' under the flagship programme of the national health mission (NHM), the RMNCH+A strategy to focus on all aspects of the life stages of reproductive, maternal, new born, child and adolescent health to achieve the millennium development goals of MDG 4, MDG 5 & MDG 6 with an intention of having an immediate and long term impact aimed at reducing the Maternal and childhood mortality rates.

The Earth Institute at Columbia University collaborated with the MOHFW to work towards the Model Districts Health Project to provide technical support in implementing the recommendations from the mid-term evaluation of NRHM, conducted by the Earth Institute. More specifically the focus was on the Millennium Development Goals 1, 4 and 5: improving the nutrition status of women and children and reducing maternal and child mortality by 2015. Currently Earth Institute supports three states- Rajasthan, Telangana and Jharkhand. Within these states EI works in two districts. In Telangana, Mahbubnagar and Medak were selected for implementation of Model District concept.

The Model Districts Project focuses on health systems strengthening through implementation research, strategic technical advice, monitoring and evaluation, and policy advocacy to help ensure the successful scaling up of services. It is ultimately the district governments and district health units that are responsible for implementing the quality improvements, best practices, and innovations based on the situational analysis. State governments and NRHM offices have a key role to play in driving innovations at a district level, and providing additional funding on evidence based need.

The vision document is an attempt to bridge the gap by laying down a multiyear approach towards closing the gap in the access and utilisation of health services. We bank upon simple, credible, cost effective and efficient interventions which have the potential to affect a large number of pregnant women and children. Further we recommend cost resource recommendations which need to be undertaken in terms of infrastructure, infrastructure support and referral transport systems. The document lays special emphasis on the maternal and child health services as it is widely known that the MCH service parameters are a sensitive indicator for the utilisation of services and are in line with the current intervention areas of MDG's 4 & 5.

The Approach has been to collect the primary data through field survey of the primary health centres and sub centres in the block, both qualitative and quantitative. Secondary data, which is complimentary, has been taken from the public domain of HMIS. In this document we look at various possible solutions within the ambit of the opportunities and limitations in the CHNC.

We also explore some unconventional approaches as an interim to mid-term solution to address MMR and NMR till the time the health infrastructure is completely functional.

# Acknowledgements

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The Earth Institute team in Telangana is led by State Technical Consultant, Dr Chetan Purad based in Hyderabad, two District Project Co-ordinators Mr Rajesh Kumar and Dr Vikram Reddy based in Medak and Mahbubnagar respectively.

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# Barriers and facilitators to adequate health service access

From a health systems point of view we try to understand the barriers to adequate health services, by which it is understood that the services offered or provided need to be efficient and effective.

As is well known the health structure is at three levels in the country. Attempt has been made to understand the not so enabling factors at the sub centre and primary health centre levels.

## 1.1 Sub centre:

The lowermost yet arguably the most important health post is the Sub –centre located at a population of 5000 in plain areas and at 3000 in difficult to reach areas. The SC is managed by two health functionaries who are the auxiliary nurse and midwives.

The sub centre is not only the foremost health post, but also the most important for the MCH service delivery as the bulk of preventive and contributive efforts are expected to be done here. For the rural pregnant women and children the Sub centre is usually the first and last point to seek MCH services. Hence it would not be audacious to say that, where ever the Sub centre is not functional optimally, the MCH services do not get addressed and may culminate in preventable deaths.

Activities expected to be conducted at the sub centre are (a) Counselling on Family planning (b) Family planning services (c) Antenatal care (d) Referral of at risk cases who need higher management (e) Home deliveries in mobility restricted areas (f) Post Natal and Home based new born care (g) Immunisation and outreach services. In addition to the above primary care for minor illnesses is provided.

Analysis of the primary data collected during the field survey as part of the '*an approach paper for the district and state-wide scale up – case studies of Medak and Mahbubnagar*' and the '*Block public health strategies*' documents, shows that the Sub centres do not have full structural capacity. Compounding to this is the lack of knowledge, skills and confidence of the available ANM's. What exactly hinders the operationalization of SC's is well acknowledged but a debated fact.

### 1.1.1 Reference to the Tables below, (discussion)

- a) The SC buildings are accessible and located within the habitation.
- b) Less than 50% of the SC buildings belong to the government and less than 50% of all SC's are in good condition.
- c) As per the rural health statistics (March 2014), 65% of all SC buildings are rented in the state of Andhra Pradesh.
- d) Less than 10% of the facilities have electricity with or without power back up, running water and clean toilets. In other words these are just nominal physical infrastructures which are minimally functional, as depicted in Table 1.1 & 1.4.
- e) There are minimal HR (ANM) vacancies at the SC's, no SC is without an ANM.
- f) The data obtained from the field survey suggests that there is no significant shortage of total equipment. However there is shortage of total functional equipment.
- g) There are no significant logistics / drugs deficiencies, however we noted the way the logistics are handled need to be more systematic.

**1.1.2 Problem Statement:**

Hence in light of the above we may conclude with reasonable judgement, that the actual problem is not in the HR or equipment, but,

1. The absence of a proper place with electricity, power back up, running water, clean toilets and privacy where the ANM can deliver the minimum expected services of ANC, PNC, FP and Immunisation.
2. Reference to Figure 1.3, there is a need to boost the confidence for rendering the services with reasonable skill.

**1.1.3 Recommendations - 1:**

The long term plan to have the sub centres as per the IPHS is to build them, but that would mean significant resources in terms of time, effort and finances. However having a govt. building in itself is no guarantee of the utilisation of services if, (Ref table 1.4)

- It is located in an inaccessible area
- Accessibility is a constraint.

As such in order to prevent the culmination to preventable deaths, there is an urgent need to provide a fully functional SC, (as per the above discussed criteria) that is accessible and manned by an optimally confident and competent ANM. And the best way to do it on immediate basis is to,

- Hire buildings, which meet the above criteria.
- Invest / coordinate with the concerned departments for the supply of water and electricity.
- Continuous hands on skill building of the ANMs at the PHC level by a pool of peer trainers which has district / block officer representation. (*Ref – Onsite training at Mahbubnagar*)
- Streamline the process of hire for rent buildings, by issuing guidelines for hire, making for rent provision in the united funds\*, and empowering the MO – PHC with this responsibility.

**1.1.4 Recommendations – 2**

With reference to Figures 1.1, 1.2 & 1.4, we can understand that for most of the people seeking MCH services the SC is the first and the last point of contact mainly due to lack of access to the primary health centres. Hence in order to address this issue we suggest,

- 1) In addition to equipping the SC s with all facilities and HR, where ever possible new SC's may be established.
- 2) Where this is not possible '*satellite SC*' may be planned in relatively populous locations of the SC area which function as nodal points for ANM service delivery.
- 3) Such satellite centres may be visited by the ANM during the fixed tour programme, and may be customised to the region.

**1.1.5-Recommendations – 3**

Skill and Confidence of the ANMs needs to enhance. This is possible by a system of peer trainers who work on developing the skill and confidence for service provision, which is quality assured. This activity focuses on practical aspects and is a continuous activity. (*Ref – Onsite training at Mahbubnagar*)

### 1.1.6 Recruitment

Currently sufficient HR has been sanctioned compared with the population norms. But the vacancies are in wide range for the 1<sup>st</sup> ANM and 2<sup>nd</sup> ANM. The available resource of 2<sup>nd</sup> ANM is comparatively better. If recruitment is not immediately possible then ASHA's in areas of deficient ANM may be empowered to ANM functions and appropriate work compensation to be provided.

**TABLE –1.1** Sub centre Related activities – Performance <sup>(HMIS 2014-15)</sup> – Proportion (ANC & Deliveries)

Sl.No.	Indicator	2013-14	2014-15
1	Population	3074958	3074958
2	Total number of pregnant women Registered for ANC	64,249	68,513
3	Estimated Pregnant women	58,855	58,855
4	% 1st Trimester Reg	58%	58%
5	% 3 ANC Check ups	111%	177%
6	% TT2 /Booster	81%	71%
7	% 100 IFA	92%	90%
8	% Hb < 11g%	53%	50%
9	% Hb<7g%	1%	0%
10	# of home deliveries	832	0%
11	% of home deliveries	2%	0%
12	% By SBA	9%	0%
13	% By Non SBA	91%	0%
14	% Del at Public Inst.	64%	100%
15	% Del @ Pub + Pvt Institution	98%	100%
16	% Del at Pvt (proxy)	34%	0%

Source: HMIS data, for illustration purposes only

**Table 1.2** – Physical Infrastructure and Human Resource.

Medak – Sub Centres	N=51	N=20
<b>Infrastructure</b>	BHS	AP
Sub centre located near a main habitation	100%	90%
Functioning in Govt building	43%	60%
Building in good condition	57%	75%
Electricity with functional power back up	0%	10%
Running 24*7 water supply	0%	15%
ANM quarter available	0%	10%
ANM residing at SC	0%	35%
Functional labour room	0%	40%
Functional and clean toilet attached to labour room	0%	10%
Functional New Born Care Corner (functional radiant warmer with neo-natal ambu bag)	0%	5%
General cleanliness in the facility	88%	40%
Availability of complaint/ suggestion box	0%	5%
Availability of deep burial pit for waste management / any other mechanism	0%	30%
<b>Human resource</b>		
1 <sup>st</sup> ANM	57%	90%
2 <sup>nd</sup> ANM	80%	85%
MPW - Male	0	25%

Source: Field survey data (Strategies for public health scale up Approach paper and Block public health strategies)

**Table 1.3** Showing the status of SC buildings in the state of Andhra Pradesh – up to March 2014 (Source – Rural Health statistics-2014) (65% are in rented buildings)

Statement 2.										
BUILDING POSITION FOR SUB CENTRES										
S. No.	State/UT	2005				2014				Buildings under construction
		Total Number of Sub Centers functioning	Sub Centres functioning in			Total Number of Sub Centers functioning	Sub Centres functioning in			
			Govt. Building	Rented Building	Rent Free Panchayat / Vol. Society Building		Govt. Building	Rented Building	Rent Free Panchayat / Vol. Society Building	
1	Andhra Pradesh	12522	4221	8301	0	12522	4397	8125	0	846

**Table 1.4** the comparative costs for a new building and rented building. (Hypothetic)

New	Requires	Finances	Time for construction	Life of building
1- SC	Land (Accessibility issues)	₹ 16 L*	1 year	30 years
Rent	Monthly rent	Annual rent	Rent for 10 years	Total for 10 years (20% inflation)
1-SC	₹ 2500	₹ 30000	₹ 300000	₹ 360000

**1.2 Primary Health centre:** Primary health centres are the first point where a qualified doctor is available for health services including laboratory investigations and where needed appropriate referral to higher facilities.

Although the HR at the PHCs does not entirely confirm to the IPHS, never the less there are very few vacancies across the PHCs in the district. The PHCs function in a well-designed buildings owned by the government. However there are wide variations in the availability of electricity, power back up, running water and clean toilets.

Figures 1.1, 1.2 & 1.4 show that the major problem could be related to access to these facilities. For people who make the decision of visiting these facilities, they are greeted to poor infrastructural support facilities and non-availability of staff, as the majority of them spend most of the office time in transit from their place of residence owing to the lack of habitable quarters nearby.

**1.2.1 Problem statement:** The issue therefore stems from the following interlinked aspects,

- 1) Accessibility to the PHCs.
- 2) Non availability of staff / chronic absentees.
- 3) Non availability of conveniences for service provision esp. electricity, water and toilets.
- 4) Currently the operational PHCs need to be made functional by enhancing demand from the field.
- 5) Significant number of home deliveries, often which are unreported or reported as institutional deliveries.

**1.2.2 Recommendation -1: PHC essential facilities**

- Identification and provision of electricity, power back up, running water and clean toilets. This intervention needs sustained coordinated effort with the other government departments namely the PRI, electricity departments.
- This activity has to be pursued at the highest level, headed by the District chair. If need be a separate ‘task force’ be set up for this purpose which has heterogeneous group.
- Time line of the deliverables and responsible person has to be identified. The nodal person needs to be delegated the responsibility and empowered to take suitable decisions or escalate it to the highest authority.

**1.2.3 Recommendation -2: Enhance demand for service**

- Once the essential facilities for the PHCs are addressed or in process, efforts are to be made towards enhancing demand from field through effective communication strategies which are locally understood and acceptable.
- Such communication has to be synchronised with the PRI and certain funds may be mobilised from the PRI for this purpose.
- The onus of communication for behaviour change may be delegated to local NGO’s, youth organisations and monitored jointly by the PRI and health staff. The confidence of the village elders needs to be considered. This will generate employment for the local people and build confidence among people.

**1.2.4 Recommendation -3: Bridging the gap towards access.**

- Data has shown that (refer fig 1.1, 1.2, 1.4) the physical barrier to accessing the services are great with 54% of the villages in the district at > 10 km distance from the PHC. In rural terms this is significant as this translated to > 1 hour transit time to the PHC. In the context of time to care approach this needs to be addressed.

• <b>Current strategy</b>	• <b>Position 108 ambulances at CHNC</b>
	• 104 ambulances visit 1 village / month.

- 108 ambulances cater to emergency cases / on call cases only. This does not address the constraint of the average health seeker.
- Hence there is a need to make the services accessible on a daily basis.
- We recommend that as part of the rural employment for youth, provisions may be made from the social welfare department to provide simple four wheelers on a subsidy to encourage pick and drop to the PHC.
- Talks may also be held with the transport department or private vehicles association to encourage plying of vehicles on the roads leading to PHC.
- For the MCH services more number of 108 ambulances need to be put into service especially at the populous villages and not at CHNC level alone, so as to minimise the respond time.
- Were none are possible certain local innovations such as depicted in the figure 1.5 can be tried.

- There is need to seriously think about the way access can be addressed. A task force may be set up at the state level to look into the matter and consider innovative PPP or schemes approach.

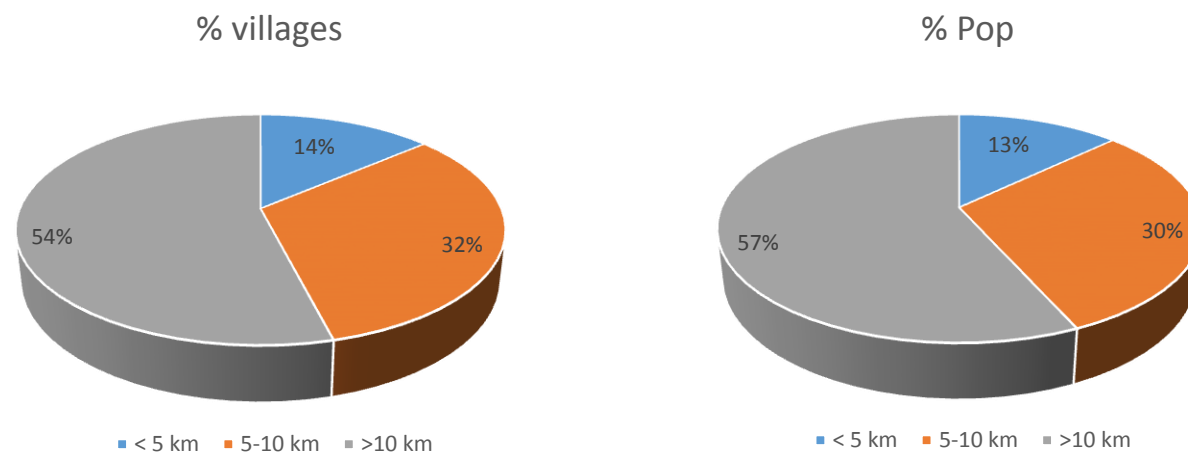
**Table 1.5 Family Planning (IUCD)**

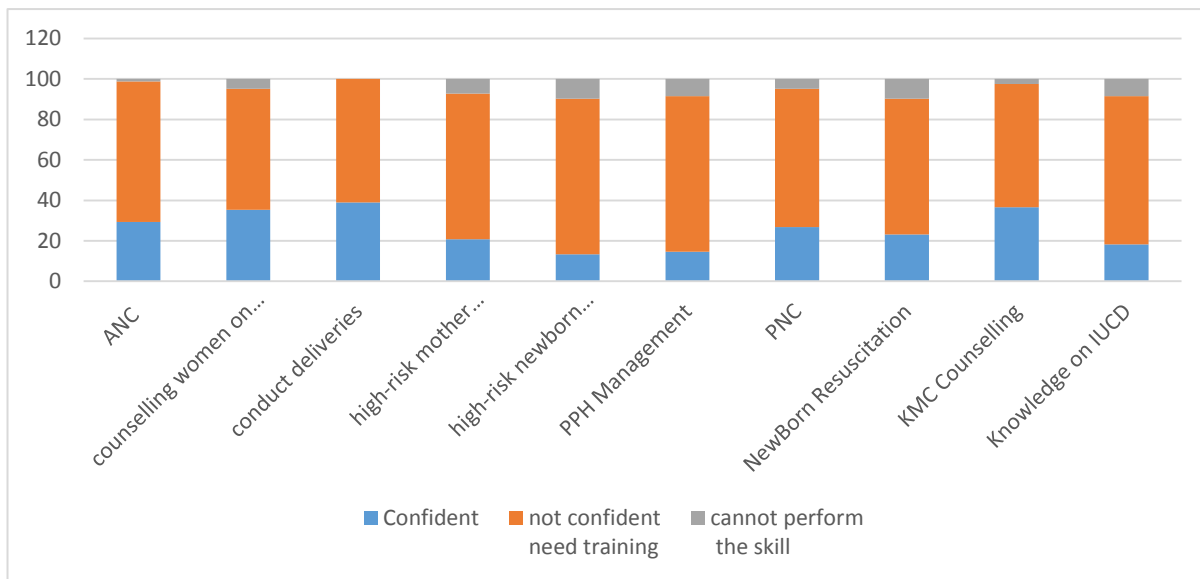
	IUCD – Medak <sup>HMIS 2014-15</sup>	Dist.	Dub	Gaj	Jog	Koh	NKD	Nar	Pat	Ram	Sad	Sid
9.5.1.a	Number of IUCD Insertions conducted at SCs											
9.5.1.b	Number of IUCD Insertions at PHCs	4745	103	385	536	725	208	266	351	637	559	975
9.5.1.c	Number of IUCD Insertions at CHCs	927			34	369	158	194		172		
9.5.1.d	Number of IUCD Insertions at SDHs or DHs	1525				74			1	76	1261	113
9.5.1.e	Number of IUCD Insertions at other State owned public institutions											
9.5.1.f	Total Number of IUCD Insertions at Public facilities	7204	103	385	570	1168	373	460	352	885	1820	1088
9.5.1A	Out of above total, PPIUCD (< 48 hours of delivery)											
9.5.2	Number of IUCD Insertions conducted at Private facilities											

Source: 2014-15 HMIS data, for illustration purposes only.

Pie charts (Fig 1.1 & 1.2) showing the distances of Villages & population from the nearest Primary health centre in the district.

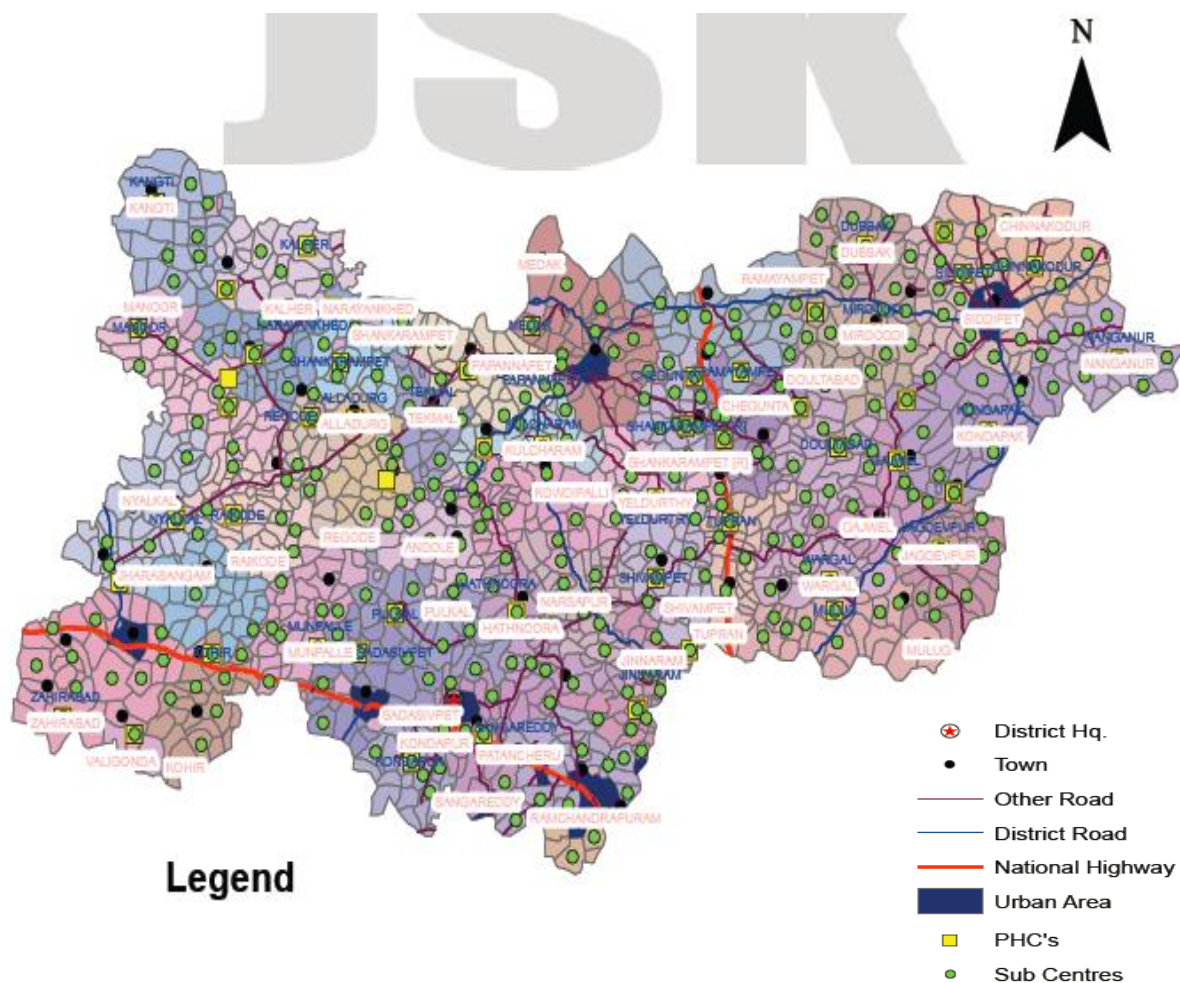
Source: jansankhya sthirtha kosh (jsk.gov.in)





**Figure 1.3** Bar chart showing the confidence of ANMs in conducting the routine activities. Source: Data from Onsite assessment conducted in select facilities at Mahbubnagar – n=81 ANMs

**Figure 1.4** Map of Medak showing the location of Sub Centres and Primary Health Centres  
Source: jansankhya sthirtha kosha (jsk.gov.in)

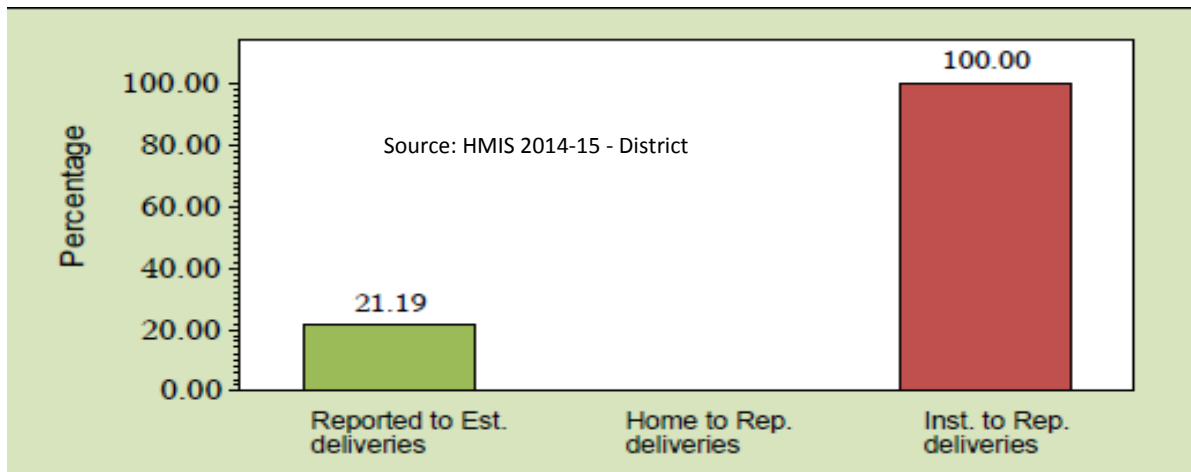




**Table 1.6 Status of 108 Ambulances and 104, MMU vehicle status in the district**

1	Alladurga	Alladurga, & Shankarampet - A	<b>Total Segments</b>	<b>27</b>					
2	Jogipet	Jogipet,	<b>Total Ambulances</b>	<b>29</b>					
3	Kanthi	Kanthi, Kalher	<b>On road</b>	<b>27</b>					
4	Munipally	Munipally, Kohir	<b>Off road</b>	<b>2</b>					
5	Narayankhed	Narayankhed, Manoor	<table border="1"> <tr> <td><b>Required</b></td> <td><b>46</b></td> </tr> <tr> <td>Total Mandal's</td> <td>46</td> </tr> <tr> <td>CHNCs</td> <td>10</td> </tr> </table>	<b>Required</b>	<b>46</b>	Total Mandal's	46	CHNCs	10
<b>Required</b>	<b>46</b>								
Total Mandal's	46								
CHNCs	10								
6	Pulkal	Pulkal							
7	RC Purum	RC Purum							
8	Regode	Regode							
9	Patancheru	Patancheru							
10	Raikode	Raikode, Nyalkal							
11	Sangareddy	Sangareddy, Kondapur							
12	Sadasivpet	Sadasivpet		<b>Medak 104(FDHS) Vehicles</b>					
13	Zaheerabad	Zaheerabad, Jharasangam							
14	Mirdoddi	Mirdoddi, Dubbak	<b>Sl.No</b>	<b>Cluster Name</b>	<b>No of Vehicles placed</b>				
15	Daulatabad	Daulatabad	<b>1</b>	<b>Siddipet</b>	<b>2</b>				
16	Gajwel	Gajwel, Jagdevpur, Wargal	<b>2</b>	<b>Dubbak</b>	<b>1</b>				
17	Kondapaka	Kondapaka	<b>3</b>	<b>Gajwel</b>	<b>3</b>				
18	Kowdipally	Kowdipally, Kulcharam	<b>4</b>	<b>Ramayampet</b>	<b>3</b>	1- off road			
19	Medak	Medak, Papannapet	<b>5</b>	<b>Narsapur</b>	<b>2</b>				
20	Nangnur	Nangnur, Chinnakodur	<b>6</b>	<b>Patancheru</b>	<b>1</b>				
21	Narsapur	Narsapur, Hatnoor, Shivampet	<b>7</b>	<b>Jogipet</b>	<b>2</b>				
22	Chegunta	Chegunta, Ramayampet, Shankarampet R	<b>8</b>	<b>Narayankhed</b>	<b>3</b>	1 - off road			
23	Siddipet	Siddipet	<b>9</b>	<b>Kohir</b>	<b>2</b>				
24	Toopran	Toopran, Yeldurthi	<b>10</b>	<b>Sadashivpet</b>	<b>2</b>				
25	Jinnaram	Jinnaram		<b>Total No.</b>	<b>21</b>				
26	Mulugu	Mulugu		<b>MMU</b>	<b>0</b>				
27	Tekmal	Tekmal	<p>Note: In Medak district there is no Mobile Medical Unit Functioning, Even though Budgets are available, due to HR issues, it is not functioning since a year.</p>						

**Figure 1.5 Innovative Transport Mechanism**



**1.2.5 Recommendation -4: Encourage Home deliveries by SBA. (Figure 1.6)**

Analysis of the data from Narayankhed block shows that, *(used as an example)*

1. 94% (5239) OF pregnant women are registered for ANC.
2. 51% (2657) of ANC registrations are registered in the first trimester.
3. 76% (3829) of the estimated pregnancies (5057) are delivered in the public health facilities.
4. As per the delivery load analysis, the bulk of deliveries are conducted at Narayankhed CHC, Kangti and Manoor PHC's. There is a significant opportunity for enhancing the services at other PHC's.
5. There are no home deliveries or private sector deliveries reported from the CHNC. Hence the fate of 24% (1228) pregnant women is not clear.

The next logical assumption is that these pregnant women may get delivered in the nearest or neighbouring PHC / CHC. Following is the estimated distance of facilities from Narayankhed,

- i) Zaheerabad – nearest FRU – 46 km
- ii) Bidar – 60 km (Karnataka)
- iii) Scattered Hamlets (Thandas) in a radius of 20 km with poor transport.
- iv) Hyderabad – 100 km.

In light of the above it would be unfair to assume that all pregnant women have the resources, accessibility or family support to undertake such a journey, however that's not to say that no pregnant women approach the above mentioned facilities, which we believe they do, but the proportion of such women may be small.

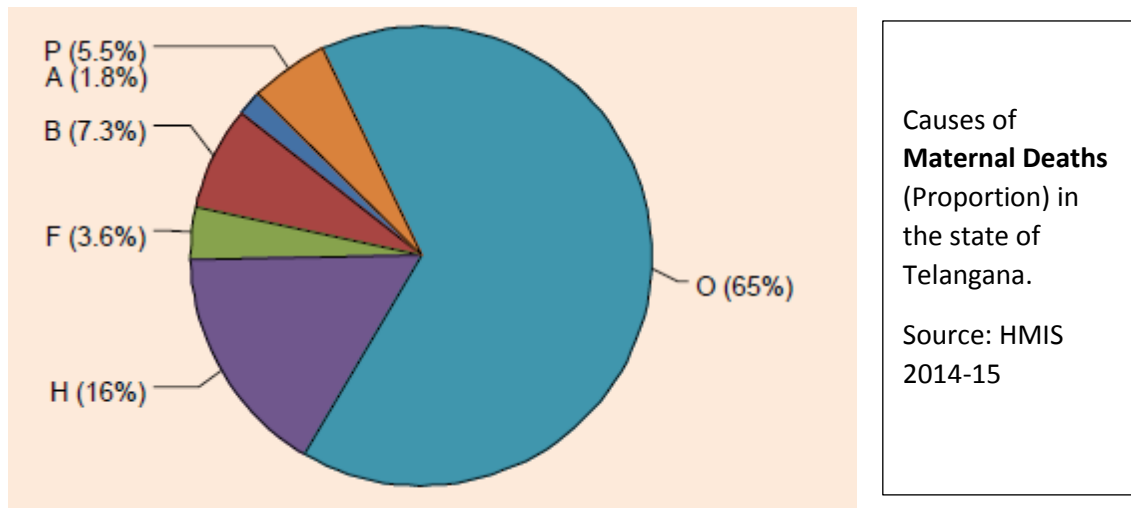
The next most feasible thing to do is to approach the private health provider.

	Type of private provider	Implication – Health	Implication - OPE
1	Qualified and registered medical professional – MBBS and above	↑ Quality, minimal morbidity and mortality.	↑ expenditure
2	AYUSH qualified	Minimal morbidity and mortality	↗ moderately high
3	Untrained SBA	↑↑ Morbidity, mortality	↗ OPE is present
4	Trained SBA	↔ MMR may not increase	↔ OPE mild to moderate

More than the need, affordability is the biggest factor while choosing health care services and naturally , except the few who can afford qualified private care, the choice is for the birth attendant's (trained / untrained). Hence there is reason to believe that in rural Medak, significant number of deliveries are conducted at home and are often unreported.

As the public health sector is currently unable to provide services close to the patients home and in view of a high maternal mortality rate due to preventable causes as shown in the *figure 1.8* below, we are left with no option but to recommend for safe home deliveries till the time there is demand and service provision enhancement in the PHC s of the CHNC.

**Figure 1.7 Maternal Deaths - Causes**



A: Abortion, B: Bleeding, F: High Fever, H: Hypertension, O: Other, P: obstructed/Prolonged Labour

**Encourage home deliveries by trained SBA:**

- Identify amongst the ASHA pool that are eligible and committed to conducting deliveries.
- Train the ASHA and other eligible CV in SBA, HBNC.
- Provide safe delivery kits well in advance, prevent stock outs.
- More than one person can be trained in each village.
- The trained SBAs should display their certificate on request to the pregnant women so that the untrained BA's are not encouraged.

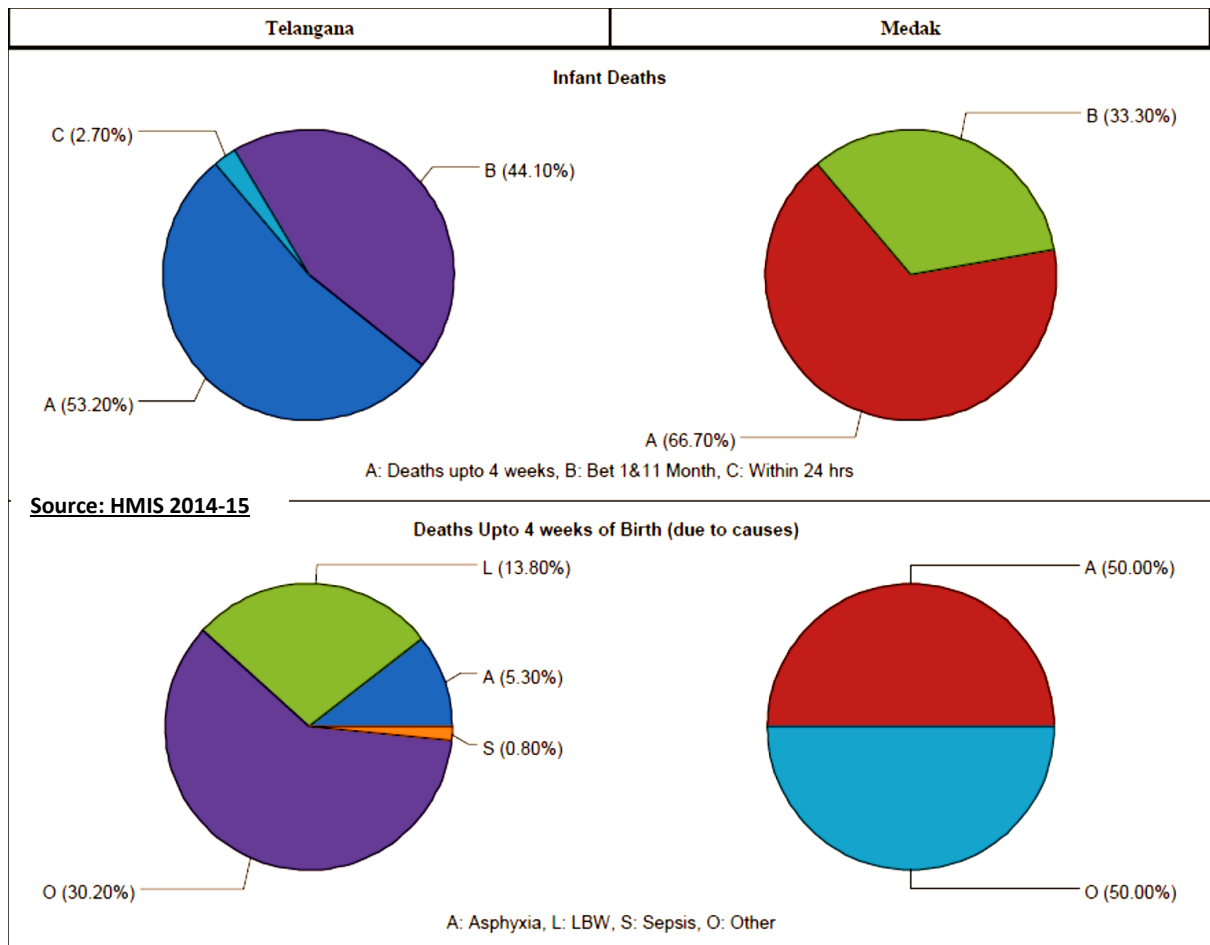
- The SBA and HBNC trained volunteers are to be monitored by the PRI.
- An exclusive honorarium is to be paid for the SBA conducting SBA and HBNC. This honorarium to be ideally delegated to the SPHO office for efficient payment.

**Encourage private facility reporting:**

- Steps are to be taken to ensure monthly reporting of the deliveries and sharing of relevant demographic details of the mother with the health authorities.
- This activity needs thrust from the district and where needed from the state health authorities.

Delivery by a trained person not only improves the maternal health indicators but also child health mortality indicators mainly the Infant mortality rate, but more importantly the now stagnant Neonatal mortality rate (NMR) for which the main causes are asphyxia, sepsis. Deaths due to Asphyxia and sepsis are due to prolonged labour and faulty delivery techniques. (Ref Figure 1.8)

Additionally the trained SBA can identify any complications of labour and promptly refer them to the FRU or nearest PHC for further management and can function as a liaising person for this purpose. A trained person can also conduct home visits post-delivery for PNC and HBNC and refer promptly when needed. We believe that the above intervention has the potential to reduce MMR and NMR quickly and sustainably till the time institution facilities are available.



**Infant Deaths – Figure 1.8**

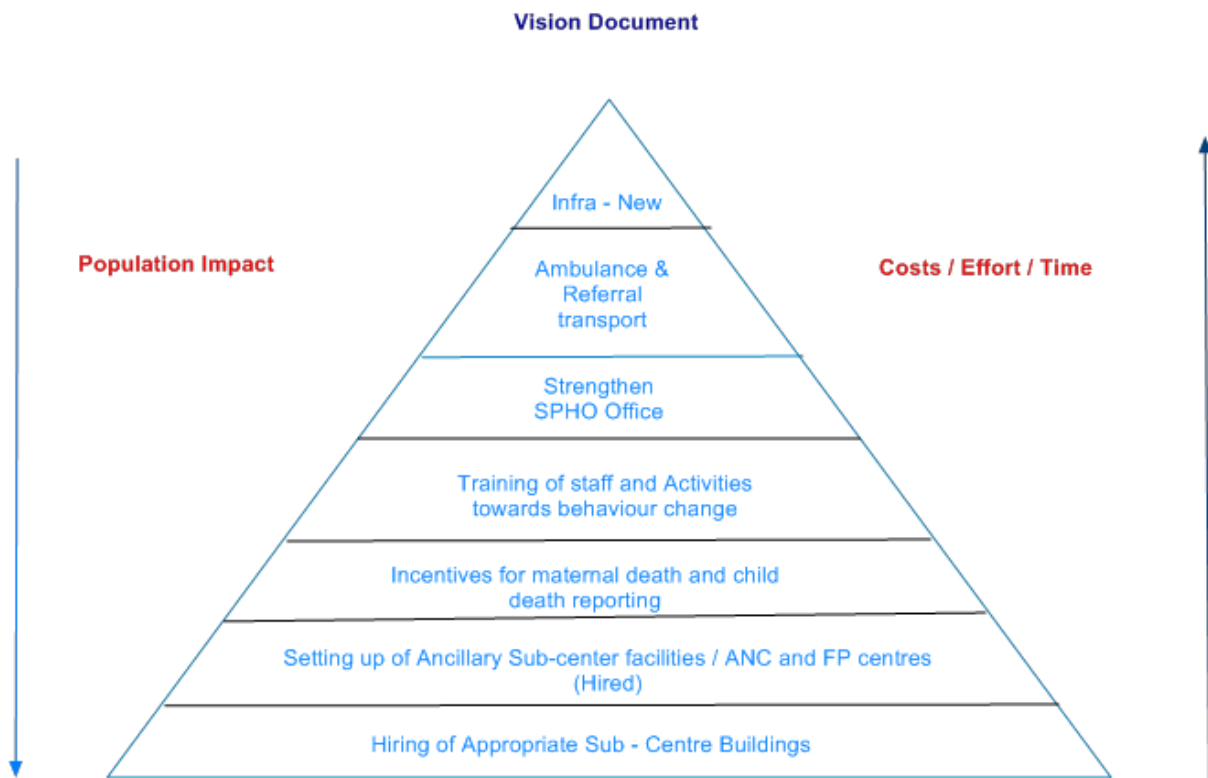
# Scope of PPP (Public – Private or Public – Public mix)

*Ref: Strategies for scale up of public health (Approach paper)*

In context of the multiyear DHAP we recommend that the state can explore PPP in the below Mentioned areas,

1. IT enabled planning, decision making and service services which would Information Technology can be used in at least four different ways to improve health care and systems:
  - a. Support public health decision making for better management of health programmes and health systems at all levels.
  - b. Support to service providers for better quality of care and follow up.
  - c. Streamline of data and other IT enabled systems of training, logistics, finances.
  - d. Supporting education, and continued learning in medicine and health.
2. Electricity and power back up through renewable energy sources for the critical health centres initially.
3. Annual maintenance / repair contract for various types of equipment.
4. Ensuring water supply (ground water) where ever the running potable water through other sources is not possible within the stipulated time.
5. Supply of drugs, vaccines and other logistics to the health centres from the district / state stores with a view towards achieving promptness in the drug stock replacements.
6. Hiring of locally available means of transport at the periphery (ambulance and other means) for the pick-up and drop services to patients and for the pregnant mother.
7. Hiring of qualified doctors at government facilities on an ad hoc basis or during vacancies where no MO is available for a prolonged duration. The private doctor can be reimbursed on a case basis.
8. At higher levels (DH and SDH) we advocate that the sanitation and waste management activity be out sourced to a professionally competent firm.
9. Private participation needs to be encouraged for family planning services including PPIUCD.
10. Reporting of deliveries from private establishment's needs to be implemented.

**Figure 1.9**



**HEALTH INTERVENTION AND IMPACT PYRAMID**

Earth Institute, Columbia University. Model District Health Project

## Interim Engagement Plan – for illustration

Theme	Activity -1	Lead role	Time line	Activity -2	Lead role	Time line	Activity -3	Lead role	Time line	Activity -4	Lead role	Time line
1 Rented Buildings for Sub centres.	1. Sensitise the DC regarding the need to have a fully functional SC.	DMHO	1 M	1. District policy and guidelines for hiring rented buildings.	DMHO / SPHO	1Q	1. Analysis of all functional SC's	MO - PHC, SPHO	1Q	1. Execution of,		
	2. Constitute a district level task force under the chairmanship of the DC.	DC , DMHO	1 M	2. Document Process for obtaining water and electricity.	DMHO /Other department officers		2. List of SC's which do not have any or all of the following - Electricity, Power back-up, water, space and privacy.			a)Water supply	PRI / MO	2 Q
	3. Involve members from ZP (PRI), Electricity, Water Dept., and social entrepreneurs.			3. Document Process for power back-up. (Solar)	DMHO		3. How many of the above listed in Sl.No 2 are functioning in Govt. buildings and how many in rented buildings.			b)Electric connection	MO	2Q
				4. Guidelines for meeting the rental expenses from the 'untied funds.	DMHO / DPMU		4. For rented buildings, how many are OPE for ANM?			c)Solar Power backup	DM HO /MO	2Q
Finances for,												
1. Electricity connection		DMHO / SPHO			<i>For, PHC infrastructure support of Electricity, water, toilets. - Plan similar to the Sub centre one may be worked out.</i>							
2. Power backup		Subsidy from electric dept.										
3. Water connection		PRI										
4. Rent free building		PRI										
5. Rent for building		MO-PHC										
* renting the buildings is cost efficient.												
* Staggered approach is not recommended as these are basic & essential, * Do not involve huge costs to the Govt.												

2	Satellite SC's	Identify villages within the SC area which are in accessible and have significant population	MO /ANM	1M	Hire a building for delivering the services of ANM (Client privacy)	MO / ANM	1Q	Fixed days visit to the satellite SC, at least 4 /m	ANM /MO	1M	Execute the field visits	AN M / MO	continous
3	Skill based hands on training at PHC	Policy stating the need for continuous skill up gradation and honing.	DC/D MHO	2M	Training calendar, usually on a fixed day in a month	MO	1Q				Execute the training plan	MO /SPH O	continous
		Identify peer educators and from NGOs in the CHNC area.	DMHO		District / SPHO representatives to attend.	MO							
		Identify SPHO / district representatives.			Contents of the training per session (month) to be listed.								
4	Encourage Home deliveries by SBA	List the pockets with high home deliveries	DMHO / SPHO	1Q	Work out the modalities of payment to SBA's	DC/DM HO	1Q				Enhance the visibility of SBA's by IEC	MO / SPH O	continous
5	FP - IUCD by CV's	List the pockets with poor access and transport facilities			Delivery kits to be procured								
		Identify ASHAs or local educated and willing people											
		Train these in SBA & HBNC											
		They may also be trained in IUCD & IPC											
6	FP - PPIUCD at private Institution	Encourage private providers accreditation	DMHO	2Q									
		Training of nodal persons in PPIUCD											
7	Encourage transport to PHCs	Talks with the private transport associations for plying of buses / vehicles along the PHC route	DMHO /SPHO		Ticket reimbursement procedure at the PHC on production of ticket for MCH services	DMHO /SPHO/ MO							



Talks with the Govt. transport department for deployment of buses	DMHO /DC	MCH services to be ferried of cost within the hospital distances - MCP card holders may be exempted.	Transport department.
Hold discussions with NGO / CSR for providing vehicles or transport services	DMHO 2Q	Appropriate schemes may be worked out	

### Multiyear DHAP (Plan Vision)

ACTIVITY	LEVEL OF FACILITY	SUB ACTIVITY	PLAN* PRIORIT Y	PLAN DURATIO N	PRIORITISATION CRITERIA	REMARKS
*1-IMMEDIATE PRIORITY, 2-MIDTERM PRIORITY, 3- LONG TERM PRIORITY				Months		
<b>INFRASTRUCTURE STRENGTHENING</b>	Sub-centre	Hired building	1	6	Inhabitable, No space / privacy /access	These interventions will bring the services closer to the people.
		Power backup	1	6	SC's with no power backup and high potential	
		Running water	1	6	SC's with no water supply and high potential	
		ANM Quarters	3	36	50% of SCs with high potential for improvement 25% of SCs with medium potential 25% of SCs with medium potential and additional new SCs	
	PHC-L1	MO Qtr.	2	36	50% of PHCs with high potential for improvement	
		SN Qtr.	1	36	25% of PHCs with medium potential	
		Other Qtr.	3	36	25% of PHCs with medium potential and additional new SCs	
	PHC-L2	MO Qtr.	2	36	50% of PHCs with high potential for improvement	

		SN Qtr.	1	36	50% with medium and low potential including new
		Other Qtr.	3	36	
CHC-L2		MO Qtr.	2	36	50% of CHCs with high potential for improvement
		SN Qtr.	1	36	50% with medium and low potential including new
		Other Qtr.	3	36	
L-3		MO Qtr.	2	36	50% of L-3s with high potential for improvement
		SN Qtr.	1	36	25% of L-3s with medium potential
		Other Qtr.	3	36	25% of L-3s with medium potential and additional new Const.
		Repairs / Renovations			
All levels		Toilets M/F	1	12	L2-PHC to be prioritised for all the interventions.
		24*7 water	1	6	The range for M/F toilets is 0-30%
		power backup	1	6	The range for power back up is 10-50%
		Wards M/F	1	3	Most of the health facilities function in the govt bldg.
		Toilet in LR	1	6	New buildings may be considered as per the population norms
		Labor room	1	9	
		Comp / Sug box	1	3	
		NBCC	1	3	
		NBSU	1	3	
		SNCU	1	3	
<b>EQUIPMENT PROCUREMENT</b>	All levels	General	1	9	Prioritise L-3 and L-2 facilities for all kinds of equipment
		Laboratory	1	6	L-1 and SCs can be supplied the field

					equipment as a priority
		OT	1	9	Including equipment for ANC, PNC & INC.
		Blood bank	1	12	
<b>REPAIR / MAINTENANCE MECHANISM OF EQUIPMENT</b>	All levels	All equip	1	3	Critical for all equipment to have a seamless service delivery
<b>LOGISTICS, SUPPLY AND DEMAND FORECAST</b>	All levels		1	9	LOGISTIMO may be implemented.
		Induction	1	6	ANMs , SNs and MOs To be planned within one month of recruitment
		Re-training			Decentralised cyclical approach
		Assessment of Training needs	1	3	Front line health workers training needs to be assessed on a priority
	All levels	# Identification of district and sub-district level trainers	1	3	Peer, well qualified trainers among ANMs and SNs to be identified
<b>TRAINING</b>		Sub-district training calendar	1	3	To be aligned with the monthly meeting calendar. Post training results can be used for continuous assessment.
		Initiation of sub-dist. Trainings	1	3	SPHO can be the nodal person. Dist. and state representatives can be a part of the quality control.
		Training management information system	1	6	Electronic and real time system may be considered Private public partnerships can be explored.
	SC	ANM	1	12	Recruitment of ANM 1st and 2nd To achieve 100% filled positions.
<b>HUMAN RESOURCE</b>	PHC - L1	SN	2	6	Recruitment
		MO	2	6	MO's from low potential PHCs may be relocated Current 58-75% of MO's are filled
	PHC-L2	SN	1	6	Current 45-60% of SNs are filled

		MO	1	6	
		Lab tech.	1	6	
		Pharmacist	1	6	
	CHC-L2	Specialist	2	6	
		MO	2	6	
		SN	2	6	
		ANM	2	6	
	L3	Specialist	1	3	
		MO	1	3	
		SN	1	3	
<b>REFERRAL SYSTEM</b>	All levels	Pick n Drop			PPP can be explored.
		H2F	1	6	Partnerships to be explored on a priority
		F2F	1	6	Innovative and prompt on spot reimbursement of OPE will enhance demand.
		F2H	1	6	PRI can be empowered to purchase vehicles.
		Real time system	2	6	To be able to forecast the delivery dates for pick up n drop.
<b>IEC</b>	All levels	Interactive	2	12	FM radio, text messages through phones, call messages etc.
<b>MONITORING &amp; SUPERVISION</b>	CHNC	Strengthen SPHO	1	9	

# Conclusion:

Universal health coverage is determined by many factors and perhaps the one which determines the most is the access to available health care services and facilities. Historically it is known that the best of the interventions and infrastructures have failed or are grossly underutilised if the barriers to access are not addressed.

The barriers to access may be physical, economical or cultural. Our health system is now at cross roads with the NHM strengthening the infrastructure and human resource. There has been a greater inflow of finances in the last decade compared to any other. However these interventions have met limited successes as the barriers to access have not been fully addressed.

In the course of the discussions we have tried to address the constraints to access in the current existing system, without much emphasis on the construction of new buildings or not so cost efficient interventions.

An attempt has been made to make the current systems functions more effectively by suggesting cost effective means and delivery of services closer to the client's homes.

Thrust has been given more to strengthening of the services provided at the Sub centre level as without a strong pillar there is no future. Also because most of the MCH beneficiaries are seen at the SC level and can be addressed if sufficient infrastructure and HR is made available.

The budgetary implications are also minimal when compared to the health benefits which the interventions would allow. Hence what is needed is the will to act on these recommendations with a consistent and proactive zeal.

Recommendations have also been made for banking the support from other health departments namely, the Panchayat raj, and electricity and water departments.

Efforts are required to enhance the demand for services from the field through interventions such as employing local health activists and the PRI towards making the people aware of the available services at the primary health centres by employing means which are locally acceptable and understandable. There is a need to be culturally sensitive and enlist the support of the opinion leaders.

Certain policy level recommendations are also advocated for instance, the setting up of a heterogeneous task force at the district level to oversee the process of hiring the buildings, making the available facilities functional with electricity, water, power backup , clean toilets, transport facilities and budgetary head provisions for payment of rents.

Finally the process would be incomplete if we do not encourage private participation through local service provision E.g.: home deliveries by SBA, reporting of deliveries at private facilities, encouraging the PPIUCD at private facilities. Private sector also has a role to play in providing efficient transport services to the clients. What we need is to think out of the box and make a concentrated concrete effort to involve the private sector through efficient schemes and prompt, adequate reimbursements.

As done in the state of Tamil Nadu, MO of the PHC may be allowed to engage in a partnership with other public or private players. Today's need is to have a collective responsibility without which UHC may be just a mirage.