### STRENGTHENING FRU'S PROGRAMME - EQUIP Enhancing Quality in Primary Care

### <u>Background</u>

Maternal mortality in the state is estimated at close to 440 per one hundred thousand live births- a distressingly high figure. The socio –economic determinants of high maternal mortality are well known and are not reiterated here. A significant reduction in such high levels of maternal mortality is possible even in the context of the current socio economic determinants. Current understanding of the reduction of maternal mortality and morbidity rests on improving access to good quality antenatal care through the sub-centers and increased access and resort to institutional delivery backed by emergency obstetric care within two hours journey time.

Risk stratification and safe home delivery for the majority with institutional delivery being resorted to only in high risk cases is not considered as technically sound and the Co-relation between such risk factors and complications at childbirth are too weak.

Public response is also weak because without being linked to an effective emergency care provision neither the health care provider nor the women sees any additional gain in institutional delivery. Unfortunately even in better equipped and staffed PHCs and CHCs institutional delivery is at a very low frequency and emergency care in the CHC is just not happening. There are gaps in infrastructure, equipment, manpower, skills as well as in health care provider motivation that underlie this failure.

To address the issues of service delivery with reference to essential and emergency obstetric care, one has to simultaneously address mismatches and gaps in infrastructure, equipment, manpower, skills, health care provider motivation as well as system design problems. To do so at the level of the state is almost impossible. The government of Chhattisgarh therefore decided to identify two blocks per district – a total of 32 blocks in all for a well-planned effort at closing these gaps. The programme that has been sanctioned under the EAG programme however addresses largely the hardware gaps- all the software components of motivation and team building had been de-emphasized.

It would be useful to see how much improvement of service delivery results from addressing the hard gaps and then what incremental improvements results when we move to soft gaps. In a context of an active programme at address all known gaps it would be useful to look at what are the demand side constraints and what are the remaining supply side constraints that continue to lead to underutilization of these essential services and contribute to high levels of maternal mortality and morbidity.

#### INTRODUCTION

Strengthening FRUs is a programme funded under the EAG scheme for improving maternal care and making emergency obstetric care available in 32 blocks of the state. The focus of this phase is in closing the gaps in infrastructure and equipment training of the medical officers for handling emergency obstetrics and Anaesthesia.

This EAG funded programme draws some elements of programme design from the EQUIP Approach (Enhancing Quality In Primary Care) that was proposed in the rationalization of health service study conducted by the SHRC study group. The main element of EQUIP that it has adopted is block by block planning to close gaps in infrastructure, equipment and skills. The other elements of EQUIP that will have to be included for converting this programme of closing infrastructure and skill gaps into the proposed EQUIP model are -- participatory planning, team building and leadership, motivational processes and linkage to quality norms.

#### **Strategy**

The immediate goal that was set were at

- CHC Making the CHC capable of comprehensive emergency obstetric care –
  including the ability to conduct Cesarean sections (also known as First referral
  Unit.). This requires not only surgical facilities but also facilities for blood
  transfusion, a basic laboratory and X-ray facilities. If the infrastructure,
  equipment, skills and motivation needed to achieve this is built up a wide variety
  of other surgeries and services also become possible with no additional
  investment..
- PHC Every PHC should be should be open 24 hours to conduct institutional deliveries. This requires a 24 hour functional facility with adequate infrastructure and paramedical staff supported by a medical officer and a basic laboratory facility. Even though the focus is maternal care-if this much is built up a 24 emergency care facility built around Para-medicals becomes available at the sector level.
- HSC At HSC level good quality antenatal care should be provided. This includes blood pressure, hemoglobin and urine testing. Cases with complications of pregnancy should be identified and timely referral should be done.

#### **Selection of blocks**

It was decided to upgrade 2 Blocks in each district in pilot phase. 32 blocks were chosen, as there are sixteen districts in Chhattisgarh. Based on the experience and evaluation of success of functionality every year 32 blocks can be upgraded each year. Thus a total of forty-six blocks would be covered in 5 years.

As it was the ministry's priority programme, the Health minister selected the blocks.

S. No	District	Blocks	
1	Raipur	Bhatapara	
		Tilda	
2	Surguja	Udaipur	
		Ramanujnagar	
3	Bastar	Makdi	
		Bakawand	
4	Dantewada	Beejapur	
		Sukma	
5	Jashpur	Jashpur	
6	Kawardha	Bodla	
		Sahaspur Lohara	
7	Raigarh	Dharamjigarh	
	Janjgir-Champa	Jaijaipur	
		Bamnidih	

S. No	District	Blocks	
9	Dhamtari	Kurud	
		Magarload	
10	Bilaspur	Masturi	
		Mungeli	
11	Mahasamund	Saraipali	
		Bagbahara	
12	Durg	Dondi	
		Balod	
13	Rajnandgaon	Dongargarh	
		Dongargaon	
	Kanker	Koyalibeda	
		Antagarh	
15	Koria	Sonhat	
		Khadgawan	
16	Korba	Podhi Uprora	
		Katghora	

#### **Planning Meetings:**

Programme implementation began with a planning meeting of attended by all district CMOS & the concerned BMOs. The secretary briefed them of the programme. Circulars had been sent to CMOs to identify gaps in infrastructure and equipment and manpower in these blocks and these were noted down. The CMOs were then asked to go back reassess each of the facilities with the programme goals in mind and draw up a detailed plan with budget for ensuring that all infrastructure and equipment gaps in these facilities are closed. Thus at the end of 100 days the CHCs should have at least all the equipment and infrastructure needed to do a cesarean section and every PHC should have all that is needed by way of infrastructure and equipment for conducting institutional delivery.

For closing gaps in manpower the first and foremost strategy was multi-skilling at all levels. Only if multi-skilling of existing facility failed to close the gap would the next options of transfers or recruitments be considered. Contracting in private specialists was to proceed in parallel where there were such possibilities.

Though the focus was on filling the hard gaps- infrastructure, manpower, equipment- it was recognized that motivation and leadership would play a major role. However this was to be taken up at the next stage – once the hard gaps were addressed.

After two weeks the meeting was reconvened. In a session that went up to 11 in the night all the plans for closing these gaps as presented by the chief medical officers were scrutinized, modified where necessary and approved along with the budget for the same. Infrastructure needs were sanctioned as three components- civil works, plumbing works to optimize water supply arrangements, and electricity and lighting needs. (See table)

For equipment however a model list of equipment was circulated and a 5 lakh grant given to each block to complete their equipment needs. This was done as it was apparent soon that almost all blocks could complete their requirements within this amount and it was too tedious and in accurate to work out the prices of all the minor equipment needed.

The required funds were released so that the work could be started immediately and the facility starts functioning as soon as possible.

#### **UNICEF Supply of Equipment**

UNICEF which had been involved in the process noted that one of the items needed was BP apparatus and stethoscopes and infant weighing machines for quality care at subcenters. Fortunately they had a budget available for this and they undertook to fill the equipment gaps estimated in these in the sub-centers of these blocks. They supplied following equipments according to the requirement in the blocks of all the districts.

## Multi-skilling of the Medical Officers for Emergency Obstetric care at CHCs –

The critical gap in making CHCs emergency obstetric care capable is specialist skills in obstetrics and in anesthesia. Most CHCs do not have these specialists and it would be impossible to provide specialists in all the blocks within a finite time frame. The proposal was therefore to sponsor medical officers from CHCs for undertaking a short term course in Anesthesia and in Emergency Obstetrics Care.

The three institutions were:-

- Pt J.N.M. Medical College, Raipur
- Chhattisgarh Institute of Medical Sciences, Bilaspur
- Sector 9 Hospital, Bhilai

Training	Raipur	Bhilai	Bilaspur
Emergency Obstetrics			
Ist Batch (Completed)	5	4	5
IInd Batch (Ongoing)	2	4	6
Anesthesia			
Ist Batch (Completed)	5	5	6
IInd Batch (Ongoing)	6	3	3

#### Multiskilling at PHC level

It was also decided to multi-skill the staff at PHC level. Soon the training course will be started to train one person from each PHC to provide basic laboratory services. This could be any of the male staff – dresser or compounder or sector supervisor or MPW – whoever is willing. The training would be on basic laboratory tests. A manual has been prepared and will be published for the staff undergoing lab tech training.

#### **Monitoring of the Implementation**

This Programme has been included in the 100 Days Programme of the state with various Programmes. Dr. Malani was appointed the Nodal Officer for the 100 days Programme and Dr Sundararaman, director SHRC is assisting in programme design, coordination and monitoring.

For the monitoring of the progress of the work a Monitoring team has been set up. Eight Coordinators have been appointed to monitor the Programme. Each coordinator has been assigned 2 districts. They are not only to visit the blocks and make progress reports but also to actively facilitate the implementation and intervene if there are any problems. They have to be in constant touch with the CMOs and be aware of the progress.

#### Annexure I

# MULTI-SKILLING OF THE MEDICAL OFFICERS FOR

#### EMERGENCY OBSTETRIC CARE AND IN ANESTHESIA AT CHCs

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As a first step three institutions were identified who could provide the training and the cooperation, indeed active participation, of the faculty was secured. The three institutions were -

- Pt J.N.M. Medical College, Raipur
- Chhattisgarh Institute of Medical Sciences, Bilaspur
- Sector 9 Hospital, Bhilai

As the next step a workshop was held that finalized the duration and syllabus of the course and evolved a plan to develop the course material.

The course material for anesthesia course had already been developed in the state with the cooperation of the AIIMS department for a pilot programme that was conducted by AIIMS the previous year.

The course material for emergency obstetrics care was taken from the WHO publication on emergency obstetrics care "Managing Complications in Pregnancy and childbirth" (this was downloaded from the site <a href="www.reproductivehealth">www.reproductivehealth</a> and limited copies were printed for the course).

The course material for anesthesia course is also being published.

It was decided to send medical officers in batches. Each batch in each institution would have 5 MOs at a time and the course would be of three months duration. A fourth month at a district hospital or an FRU is also being considered. The numbers of cases they must assist and must do independently under supervision were specified and a log book was also developed to monitor this. This would make them confident to deal with the emergencies in the CHC. Trainers who are medical faculty in these same institutions are also provided guidelines. Logbook is also maintained.

#### **Training of Ist Batch**

Truming of 150 Button	
The Short-term Anaesthesia course started on	10 <sup>th</sup> March.
The Short term course in Emergency Obstetrics started on	26 <sup>th</sup> April

#### **Training of Second Batch**

Short term course in Emrgency Obstetrics and Anaesthesia stated on -----24-11-2004 Detais of status of Training is given in Annexure - I

Training	Raipur	Bhilai	Bilaspur
Emergency Obstetrics			
Ist Batch (Completed)	5	4	5
IInd Batch (Ongoing)	2	4	6
Anesthesia			
Ist Batch (Completed)	5	5	6
IInd Batch (Ongoing)	6	3	3