

Guidelines for Operationalising a Primary Health Centre for Providing 24-Hour Delivery and Newborn Care Under RCH-II



MATERNAL HEALTH DIVISION
DEPARTMENT OF FAMILY WELFARE
MINISTRY OF HEALTH & FAMILY WELFARE
GOVERNMENT OF INDIA
NEW DELHI
2005

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Preface

India is committed to achieve the reduction in maternal and infant mortality rates set for National Population Policy-2000. The Maternal Mortality in India continues to remain unacceptably high. The first few days and weeks of life of a newborn are the most risky. Research shows that a quarter of under-5-child mortality occurs by day three. There is enough evidence globally to demonstrate that an effective package of obstetric and child health services provided within reach of the communities and families can successfully reduce maternal and childhood mortality.

In this context, Government of India had initiated the Child Survival and Safe Motherhood Programme in 1992 to upgrade the existing Community Health Centres and sub-district hospitals into First Referral Units (FRUs), to be equipped for providing delivery of emergency obstetric care to pregnant women with complications.

To augment these efforts, Government of India through its recently launched National Rural Health Mission (NRHM) aims to improve the availability of and access to quality health care for safe motherhood and child survival through operationalisation of 50% of Primary Health Centres to provide delivery and emergency obstetric and child health services close to the client's home 24-hours a day, all seven days a week within the next five years until 2010.

In this endeavour, Ministry of Health and Family Welfare has prepared the 'Guidelines for Operationalising a Primary Health Centre for Providing 24-hour Delivery and Newborn Care Under RCH-II' with the intention to assist the States to plan for and operationalise at least 50% Primary Health Centres as 24-hour functional units in a phased manner. These PHCs will be responsible for providing round the clock delivery services including the management of common obstetric complications, emergency care of sick children and referrals. This document will also serve as reference material for the District Programme Managers and the Medical Officers In-charge of 24-hour PHCs to implement the provision of normal and emergency obstetric care, neonatal care services including referring patients to a higher appropriate facility as and when required.

I would like to acknowledge the efforts put in by the Maternal Health Division of this Department in preparing these guidelines.



(P. Hota)

Secretary (Health & Family Welfare)

Acknowledgements

Global evidence suggests that access to high quality care during delivery, child birth and early childhood period goes a long way to reduce maternal, infant and under-5-child mortality and morbidity. Government of India, through its National Population Policy-2000, is committed to reducing maternal mortality to less than 100 per 100,000 live births, and neonatal and infant mortality to less than 20 and less than 30 per 1000 live births respectively by 2010.

Operationalisation of all Community Health Centres and 50% Primary Health Centers to provide delivery services including the management of common obstetric complications, emergency care of sick children and referrals round the clock, all seven days of the week is an important intervention of the Reproductive and Child Health Programme Phase-II under Government of India's National Rural Health Mission. The 'Guidelines for Operationalising A Primary Health Centre For Providing 24-Hour Delivery and Newborn Care Under RCH-II' has been prepared with the intention of making 50% selected Primary Health Centres functional as 24-hours service delivery units.

The task of developing these Guidelines was made possible due to the blessings and encouragement provided by Shri P. Hota, Secretary, Department of Health and Family Welfare. He has been a constant source of guidance and support in this effort and I express my gratitude to him for the same. I am thankful to Smt. S. Jalaja, Additional Secretary, Department of Health and Family Welfare for her continued invaluable guidance and encouragement for developing these Guidelines. I am also thankful to Shri S. S. Brar, Joint Secretary (RCH) for his inputs and invaluable guidance during preparation of these guidelines.

The assistance and active involvement of White Ribbon Alliance of India (WRAI) and CEDPA India in developing these guidelines has been very helpful. I would like to thank Dr. Bulbul Sood, Co-Chairperson WRAI and Country Director, CEDPA and Dr. Aparajita Gogoi, National Coordinator, WRAI and Senior Advisor, CEDPA for their efforts in coordinating with the team of experts to help develop these guidelines. We would also like to acknowledge the John D and Catherine T MacArthur Foundation for supporting the WRAI in this initiative.

Technical expertise and other assistance in the preparation of these guidelines have been provided by WHO, UNFPA and other experts in the field of maternal and child health. I am particularly thankful to Dr. Arvind Mathur, Coordinator-Family and Community Health, WHO-India, and Dr. Dinesh Agarwal, Team Manager Technical Support Group and Technical Advisor Reproductive Health, UNFPA for their active involvement and help. The draft guidelines were discussed with Technical Experts working in the field of maternal and child health. Their valuable suggestions have been incorporated while preparing these guidelines and I would like to thank Dr. Sangeeta Saxena, Assistant Commissioner, Child Health, Department of Family Welfare, Dr. Harish Kumar, National Professional Officer (Child Health), WHO-India, Mr. J. P. Mishra, Senior Advisor, ECTA, Dr. H. P. Anand, Senior Gynaecologist, Safdarjung Hospital, Dr. (Mrs.) V. Zutshi, Senior Gynaecologist LNJP Hospital, Dr. Kamala Ganesh, Senior Gynaecologist, Dr. Anchita Patil and Dr. Rashmi Asif, Consultants, CEDPA for their contributions.

I would like to express my sincere appreciation for the hard work and contribution put in by Dr. Narika Namshum and Dr. Himanshu Bhushan, Assistant Commissioner, Maternal Health, Department of Health and Family Welfare, GoI, for bringing out these guidelines. I hope these guidelines will enable the States to plan for operationalising the selected PHCs to provide 24-hour delivery and emergency obstetric and newborn care at these health facilities close to the community's home.

I acknowledge the help provided by Mrs. Reeta Madan, Shri Pradeep Kumar Sohpaal and Mr. Sachin Kumar for their secretarial help in putting together the document.



(Dr. V. K. Manchanda)
Deputy Director General
Maternal Health Division
Department of Family Welfare
Ministry of Health & Family Welfare
Government of India

Abbreviations & Acronyms

%	Percent
AIDS	Acquired Immuno Deficiency Syndrome
ANM(s)	Auxiliary Nurse Midwife(s)
ARI	Acute Respiratory Tract Infections.
ASHA	Accredited Social Health Activist
BP	Blood Pressure
CHC(s)	Community Health Centre(s)
cms	Centimetres
CuT	Copper T
ECPs	Emergency Contraceptive Pills
EVA	Electric Vacuum Aspiration
FRU(s)	First Referral Unit(s)
gms	Grams
GoI	Government of India
HA-F	Health Assistant - Female
HA-M	Health Assistant - Male
HIV	Human Immuno Deficiency Virus
IFA	Iron Folic Acid
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
Inj.	Injection
I/V	Intravenous
IUD(s)	Intra-uterine Contraceptive Device(s)
Kms	Kilometres
KOH	Potassium Hydroxide
LR	Labour Room
mg	Milligram
ml	Millilitre
MoHFW	Ministry of Health and Family Welfare
MTP	Medical Termination of Pregnancy
MVA	Manual Vacuum Aspiration
NHP	National Health Policy
NPP	National Population Policy
NRHM	National Rural Health Mission
NSV	No-Scalpel Vasectomy
OPD(s)	Out Patient Department(s)
PID	Pelvic Inflammatory Disease
PHC(s)	Primary Health Centre(s)
POL	Petroleum Oils and Lubricants
RCH	Reproductive and Child Health
RGI	Registrar General of India
RHS	Rural Health Statistics
RTI(s)	Reproductive Tract Infection(s)
SRS	Sample Registration System
STI(s)	Sexually Transmitted Infection(s)

Introduction

The Primary Health Centres (PHCs) in rural India were established for the purpose of providing the full range of primary health care services to the community. The PHC represents the point of first contact of the community with a doctor. The provision of Maternal and Child Health services are an integral part of the service package to be provided by the PHC.

Both the National Population Policy (NPP - 2000) and the National Health Policy (NHP - 2002) envisage that by the year 2010, India must reduce its maternal mortality ratio to below 100/100,000 live births from the current level of 407/100,000 live births (SRS, RGI 1998). More than 50% of the maternal deaths occur during or immediately after childbirth. Hence, these deaths can be prevented by ensuring that all pregnant women deliver under the care of a skilled birth attendant. However, skilled birth attendants are present only in negligible numbers at the field level and we need to increase the number of institutional deliveries if we wish to provide all women with skilled attendance at birth. Presently only 46.9% of all deliveries occur in an institutional setting (RCH Survey, 2002-2003), as against the goal of 80% as set in the NPP, to be achieved by the year 2010. Of the rest conducted at home, only 13% are conducted by a skilled birth attendant, whereas the NPP envisages that all deliveries should be conducted at the hands of a skilled person.

Similarly, the Infant Mortality Rate (IMR) in India is high and has now stabilized at around 64/1000 live births (RGI, 2002). More than two thirds of these deaths occur during the first one month of life. The Neonatal Mortality Rate in our country, as estimated by the SRS, 1999, is around 45/1000 live births. Hence, to be able to achieve the national goals as set in the NPP and NHP, of reducing the IMR to less than 30/1000 live births, we would have to concentrate on reduction in neonatal mortality. This can be achieved by providing immediate and essential new born care to every baby at the place of birth, and care for every sick neonate during the first one month of life. We also need to efficiently manage very sick children, as these deaths contribute to the infant mortality too.

Keeping the above in mind, the Government of India, under its RCH Programme, Phase II, envisages the operationalisation of 50% of the PHCs, and all the CHCs in each district, as health centres providing 24-hour delivery services and new born care, all seven days a week, by the year 2010. As PHCs are, in effect, the point of "first referral" for the rural community, such round the clock service provision would help in increasing the percentage of institutional deliveries substantially and thus help in the reduction of maternal mortality. As a necessary adjunct to the delivery services, provision of newborn care and emergency care of sick children would help in reducing infant mortality.

Under RCH Programme Phase I, several inputs have been provided to improve the status of maternal and child health. These include:

- Provision of funds to the states for carrying out civil works required to upgrade labour rooms, and make them fully functional.
- Provision of an essential obstetric care drug kit (the PHC Drug Kit) to selected PHCs in all districts.
- Provision of additional staff nurse on contractual basis in selected districts.
- Scheme for provision of honorarium to doctors, especially specialists, wherein they are on call, and are paid for each case that they handle.

Purpose of these Guidelines

Under Phase II of the RCH Programme, the Government of India intends to provide to the state governments total flexibility and autonomy in planning for their states. The States have prepared their own state action plans and district action plans for implementing RCH-II. The following guidelines are meant to assist the states in formulating their own implementation plans regarding the operationalisation of 50% of the PHCs and all the CHCs as 24-hour delivery and newborn care services PHCs (24-hour PHCs).

To realise the above objective, a mapping of the existing PHCs and other health facilities in the district needs to be done before deciding which PHC to operationalise as a 24-hour PHC. The guidelines for selecting a PHC for providing 24-hour services are provided in **Annexure I**. The district health authorities may have already undertaken such an exercise for operationalising the FRUs. The same information may be used wherever appropriate.

Critical determinants of a facility being a 24-hour functioning PHC

Recommended Service Package

A facility which is designated as a 24-hour PHC should be equipped for providing round the clock delivery services and new born care, in addition to all the other emergencies that any primary health care centre is required to cater to. The package of services to be provided by a PHC for it to be designated as a 24-hour PHC is detailed in Box-1. Services marked with an asterix (*) are critical for labelling a PHC as one providing round-the-clock delivery and newborn care services. **It must be kept in mind that the following services are in addition to all the services that a PHC is normally required to provide.**

Box-1: Essential service package to be provided by a 24-hour functional PHC

1. 24-hour delivery services, both normal and assisted (*)
2. Essential newborn care (*)
3. Referral for emergencies (*)
4. Ante-natal care and routine immunisation services for children and pregnant women (besides fixed day services).
5. Post-natal care
6. Early and safe abortion services (including MVA)
7. Family planning services
8. Prevention and management of RTIs/STIs
9. Essential laboratory services

(*): Critical determinants of functionality

1. 24-hour Delivery Services, both Normal and Assisted:

Provision of round the clock delivery services, post-natal care, newborn care and referral linkages are the critical determinants for designating a PHC as a 24-hour PHC. These PHCs should therefore be able to provide services for

- Conducting normal deliveries
- Conducting assisted vaginal deliveries (Forceps delivery, vacuum delivery) whenever required.
- Management and referral for manual removal of placenta
- Administration of parenteral oxytocics, parenteral antibiotics and anticonvulsants for pregnancy induced hypertension
- Management of common obstetric complications such as post-partum haemorrhage, pre-eclampsia and shock.
- Pre-referral management (obstetric first-aid) and stabilization of patients with those obstetric emergencies which cannot be managed at the PHC level, prior to referral.

The absence of staff skilled in the techniques of conducting assisted deliveries and other specialised interventions like manual removal of placenta, is foreseen as a problem that will be faced by a number of PHCs. The states are therefore advised that, for provision of the full range of delivery services (both normal and assisted) and management of obstetric complications, they must ensure that the staff at the PHCs is fully trained/re-oriented in the above skills to enable them to provide these services.

2. Essential Newborn Care

Two thirds of all infant deaths take place during the neonatal period. The most common causes of neonatal mortality are pre-maturity, neonatal tetanus, septicaemia and birth injury.

Provision of essential newborn care to every baby can help prevent the development of various complications which are the causes of neonatal mortality. Every facility providing round the clock services will need to have provision for essential newborn care for every baby born there. Equipment and kits required for the same are being supplied to the public sector health care facilities under RCH-II. It is also envisaged that training will be imparted to all the health care functionaries posted at these 24-hour facilities, who will be responsible for providing newborn care. These PHCs should, therefore, be able to provide services for the following and on which training should be imparted:

- Basic resuscitation technique,
- Identification, management and referral of the sick newborns,
- Feeding of the neonate, assessment of breastfeeding and solving breastfeeding problems
- Special care for the Low Birth Weight (LBW) babies.
- Management of sick children

These facilities should also be equipped for providing care to the sick neonate. It must be remembered that a sick neonate deteriorates very fast, and therefore needs immediate attention. A 24-hour PHC should be equipped to handle the common emergencies that a sick neonate may present with.

The most common causes of infant mortality are diarrhoea, ARI, malaria, measles and malnutrition. The policy of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) is a holistic outlook for the outpatient management of common childhood illnesses. Implementation of the same along with in-patient management guidelines for management of severe malnutrition and selected conditions such as severe dehydration, severe pneumonia and malaria at the 24-hour PHC can help save numerous lives during infancy.

3. Referral for Emergencies

Referral should not be misunderstood as only provision of transport facilities to send a woman with obstetric complications to a referral facility. It is an active process which begins at the doorstep of the patient's household, transits through the referral facility and, in theory, ends again at the patient's household.

Planning is required at the local level for managing referral linkage. Referral should be made to appropriate pre-determined referral centres. The Medical Officer, and all health personnel should be aware of the services and facilities available at various referral centres, both in Public and Private sectors and should be aware where to refer for a particular emergency.

The community should be made aware of conditions in which a woman and a child require immediate referral (the danger signs), the transport facilities available, and the place where they should go in case of various emergencies. Referral should be made keeping in mind the geographical accessibility and the perceived quality of care of the referral centre, and the financial status of the patient and her family.

The PHC staff should involve and encourage ASHA and other community based volunteers/workers to work with the community to make them aware of the danger signs in women, newborns and children who require referral to an appropriate health facility. Community should be made aware of the names and location of various health facilities where such cases can be referred.

At the PHC level it is not enough just to provide for transporting a woman with obstetric complications to a referral facility. It is the duty of the staff to stabilise the patient and provide pre-referral obstetric first aid before transporting the woman. It should be ensured that referral is being made to a health facility which is capable of handling the particular complication concerned. The staff must also ensure that a referral slip is given to each patient referred, in which the salient points of the patients' history and examination, and the details of the medication given are mentioned to assist the doctor attending to the patient at the referral centre. [See Annexure II for a "Sample Referral Slip"]. Similar action needs to be ensured for sick newborns.

Providing government procured vehicles should not be seen as the only option for referral transport/linkage. The option of providing funds to the medical officer in-charge of the facility, with the administrative and financial powers to utilize these funds to make local arrangements, like hiring a private vehicle or using a pre-identified vehicle in the area whenever the need arises, is a recommended option.

4. Ante-natal care and routine immunisation services for children and pregnant women (besides fixed day services)

Although PHCs have been providing ante-natal care to the pregnant women for many years, surveys have revealed that not only are women being missed out, but that even among those receiving care, the complete package of services is not being offered. Hence the PHC should try and ensure that the complete package of ante-natal care services, including the essential investigations, is provided to all pregnant women visiting the PHC on all working days. If that is not feasible, ante-natal clinics may be held on pre-designated days of the week. Medical Officer in-charge of such PHCs should ensure that regular outreach sessions are also held for covering MCH services. [Refer to Guidelines for Antenatal Care and Skilled Attendance at Birth for ANMs and LHV's and to Guidelines for Pregnancy Care and Management of Common Obstetric Complications by Medical Officers, developed by MoHFW, GoI]

5. Post-natal Care (PNC)

Post-natal care package is important for prevention of mortality and morbidity in both the mother and the newborn. **Unfortunately, post-natal care is a neglected component of maternal health services. Surveys have shown that only 1 in 6 women receive any form of post-natal care. Out of these too, most of the women are not provided the complete package of post-natal care.** Most of the maternal and newborn deaths take place during the post-natal period from puerperal and newborn sepsis respectively.

PHC medical officer should ensure that adequate and timely numbers of PNC visits are provided for all deliveries, whether institutional or domiciliary. It has to be ensured that essential newborn care is provided to all newborns with management and referral of sick newborns if required. Similarly, timely referral is to be ensured for women with post-natal complications. Hence, provision of post-natal care, especially management and referral (after stabilising the patient) for complications, should become one of the focus points of service delivery for these 24-hour PHCs. [Refer to the two Guidelines mentioned above].

To ensure post-natal care at home, it is advised that a copy of the discharge summary of the institutionally delivered cases be forwarded to the ANM of the respective Sub-centre for taking follow-up action.

6. Early and Safe Abortion Services

Provision of safe abortion services is possible at the PHC level using the simple technique of conducting Manual Vacuum Aspiration (MVA) at the PHC level. The Government of India has already issued guidelines for conducting Manual Vacuum Aspiration at the PHC level. However, it is necessary to train the Medical Officers in this technique. Such training is a part of the RCH-II Programme. While effort must be made to ensure the provision of facilities for MVA, at least, at all the 24-hour PHCs, routine MTP (using techniques other than MVA such as Electric Vacuum Aspiration (EVA) and others) may also be carried out wherever the infrastructure and skilled manpower exists.

7. Family Planning Services

All 24-hour PHCs should provide round-the-clock counselling services for all the clients desirous of availing contraceptive services. They should have facilities for IUD insertion, provision of oral contraceptive pills, condoms, sterilization services and Emergency Contraceptive Pills (ECPs). Male participation in planned parenthood is one of the major thrust areas in National Population Policy 2000. Intensive advocacy and promotion of No-Scalpel Vasectomy (NSV) as a simple and safe procedure of male sterilisation by the health provider is an essential component of family planning.

The staff at a 24-hour PHC should be trained in the various methods of contraception, and should offer them to men/women wherever and whenever required. Currently available IUD i.e. CuT 380A (which is effective for at least 10 years) should be promoted among the couples who have completed their family size but are reluctant to accept a permanent method. It should, however, be ensured that couples are counselled on all available methods of contraception to ensure an informed choice.

Knowledge on emergency contraception as a back-up method for situations where conception can occur due to various reasons, should be widely disseminated and the contraceptive should be provided where required. However, it should also be ensured that regular contraceptive adoption is followed after the emergency situation has been managed.

8. Management of RTIs/STIs

RTIs/STIs are the most important causes of reproductive morbidity and perinatal morbidity and mortality. Serious complications of RTIs/STIs are Pelvic Inflammatory Disease (PID), preterm labour, miscarriages and still births, ectopic pregnancy, infertility and genital cancers. There is an increased risk of HIV/AIDS in people suffering from RTIs/STIs. Hence, the problems of RTIs/STIs should be addressed at the PHC level.

RTIs/STIs can be effectively managed at the PHC, thus preventing the complications. A Medical Officer should take a complete history, including for behaviour risk assessment. If basic laboratory facilities are available, it will ease the process of making a diagnosis and instituting the proper therapy. It is important to note here that early diagnosis and treatment of RTIs/STIs is an integral part of the chain of prevention of RTIs/STIs. Other important, though often ignored, steps in the prevention and management of RTIs/STIs are partner management, and counselling for safe sex practices, including the use of condoms. These functions can be easily carried out at the PHC with the existing facilities. For complicated cases, or in cases where a diagnosis is not possible without the availability of laboratory facilities, the patient may be referred to a higher facility. Community outreach activities will complement actions needed to prevent these infections and utilization of health care services.

It must be kept in mind that gynaecological (such as IUD insertion) and other procedures involving the reproductive tract, if carried out without aseptic precautions, can lead to RTIs through the iatrogenic route. Hence proper asepsis should be maintained during these procedures.

Comprehensive Guidelines for management of RTI/STI cases along with the list of drugs and reagents required to set up such centres at the PHCs is under formulation by Ministry of Health and Family Welfare (MoHFW), Government of India (GoI). The District Programme Officer can refer to them for establishing RTI/STI centres at the PHCs.

For handling cases of RTIs/STIs, some states, like Tamil Nadu, have PHCs which run exclusive RTIs/STIs management clinics either once or twice a week, depending upon the case load and requirement of the area concerned. These clinics are conducted during the afternoon hours to provide confidentiality and also to optimally utilise the time available with the PHC staff. The other states can replicate this model and may start RTIs/STIs clinics on pre-designated days, as is feasible for them.

9. Essential Laboratory Services

Having laboratory services particularly related to pregnancy, newborn care and children, at the 24-hour PHCs as a back-up is absolutely necessary. These PHCs must have adequate space, equipment, reagents and trained staff to carry out the required essential laboratory investigations.

Provision of Quality Services

All services should be provided in accordance with GoI Guidelines. Provision of quality services, including a clean environment at the PHC, is a key component for attracting clients to the facility and increasing its utilisation. The Medical Officer in-charge has to ensure the following:

- A sign board or a wall painting in local language at a prominent and visible place in the PHC displaying the following important information to the clients:
 - The OPD timings (which must be fixed and must be adhered to by all the staff)
 - The services provided by the PHC
 - Names of the referral centres located near the PHC
 - Transportation facilities for referral of the patients and its charges for the same (or no fee, as the case may be).
- Waiting area, drinking water and toilet facilities for the clients: There should be a waiting area for the patients and their relatives, with the benches placed in the shade. There should be a covered garbage bin near the waiting area. Adequate arrangements should be made for potable drinking water for the clients. There should be toilet facilities with water for all the clients, and at least one of these should be specifically only for women. The toilets should always be kept clean and in working condition. It should be ensured that it is cleaned 3-4 times a day and once in the night with disinfectants such as phenyl etc.
- Cleanliness of the premises: Areas of daily cleaning and periodic cleaning should be identified and work schedule of the cleaners prepared accordingly. Standard cleaning practices and adequate and timely supply of cleaning materials should be ensured. There should be arrangements for disposal of biomedical and other wastes, which should be in accordance with the national and state regulations.

Cleaning of the indoor and patient waiting areas should be done in accordance to the patient care programme. For example, cleaning of the ward should not be done during meal hours or when treatments are being given. Similarly, it is advisable to allow a minimum of 30 minutes following the making of beds or cleaning of a room before changing the dressings of a patient in the room. There should be no water logging inside or in the surrounding area of the PHC, and no breeding site for mosquitoes. Universal precautions for infection prevention must be strictly adhered to.

- A locked suggestion box placed in the PHC waiting area: The Medical Officer in-charge of the PHC should keep the key of the suggestion box in his/her personal custody, open the suggestion box on a regular basis and should actively seek clients'/patients' feedback regarding services.
- A board in the waiting area (near or next to the suggestion box) listing the suggestions received and the action taken: If it is not possible to implement a particular suggestion, reasons for the same should also be recorded on the board.
- Various guidelines and job-aids issued by the government from time-to-time are easily accessible to all PHC staff.
- All patients are received cordially and greeted by the health staff.
- All the instruments and equipment are in working order: The staff nurse in-charge should perform a regular check to ensure that the equipments are in working order and there is running water, get repairs and maintenance work done, if necessary.
- The staff nurse should also keep in readiness the emergency drug tray, especially for management of normal delivery and obstetric emergencies.
- Any fault or dysfunction noted by the staff nurse in-charge should be reported to the Medical officer in-charge of the PHC.
- The beds in the wards should always have clean linen. All PHCs should have sufficient bed-sheets, pillow covers, blankets, towels etc. to ensure that the linen is changed at least every alternate day. Blankets should be washed at least once in a fortnight.

Infrastructure Needs

Under the RCH-I, funds were provided to many health facilities for civil works related to operationalisation of labour rooms, Operation Theatres (for CHCs), supply of 24-hour running water and electricity etc. Hence the PHCs where this infrastructure is in place should be given preference over others which lack this. But this must be carefully balanced with the geographical location of the PHC.

To be able to perform the full range of functions of a 24-hour PHC, the facility must have the following infrastructure:

- A minimum bed strength of 4-6 functional beds
- A fully equipped and operational labour room with an area earmarked for new born care in the labour room [see Annexure III]
- Toilet facilities, at least one each attached to the labour room and the ward
- Regular availability of 24-hours water supply
- Residential quarters/accommodation for the Medical officer(s), staff nurse(s), paramedical staff and support staff
- A functional laboratory/space with facilities for all essential investigations
- An enclosure in the OPD and wards to ensure privacy while examining the female patients

- Regular electricity supply with back-up arrangements (generator with POL) to ensure uninterrupted supply to the labour room and to maintain cold chain
- Arrangements for waste disposal
- Uninterrupted functioning of telephone connection
- Ambulance or transport facility (owned or locally hired)

Supplies and Equipment

To perform the full range of functions of a 24-hour PHC, supplies of consumables and non-consumables and equipment will be required. The following is a list of supplies and equipment/kits that must be present at a fully functional 24-hour PHC.

- Normal Delivery Kit
- Partographs
- Referral Slips
- Equipment for assisted vacuum delivery
- Equipment for assisted forceps delivery
- Standard Surgical Set (for minor procedures like episiotomy stitching)
- Equipment for Manual Vacuum Aspiration (MVA)
- Equipment for New Born Care and Neonatal Resuscitation
- IUD insertion kit
- Equipment for Sterilisation.
- Equipment/reagents for essential laboratory investigations
- Stocks of Contraceptive material.
- Drugs as specified by the MoHFW, Maternal Health Division, for RCH package of services at sub-centre and primary health care centre. **Drugs are being supplied under RCH Programme for all the PHCs. Besides these, the States with poor demographic indicators will be provided additional drugs for the PHCs under National Rural Health Mission (NRHM).**

An assessment thus needs to be made of the equipment already available at the PHCs to be operationalised for 24-hour usage, and the deficient equipment supplied, either through purchase, or by shifting equipment from other facilities, where they are not being used, to a 24-hour PHC.

The procurement and/or use of certain equipment, like those for assisted deliveries, for MVA etc. should be done only after the staff has been properly trained in carrying out the procedures. Hence it is recommended that the procurement of equipment be staggered: getting equipment only after the staff has received training.

Human Resources

- For manning a fully functional 24-hour PHC, skilled manpower will be required to be available round the clock. One Medical officer who is residing at the PHC is essential for the functioning of a 24-hour PHC. As it might not be feasible for a single medical officer to be available on call 24-hours a day, 7 days a week, posting two medical officers for such 24-hour PHCs is desirable.

- Most of the PHCs have a male medical officer. Since the main purpose behind establishing a 24-hour PHC is to provide round the clock delivery services and essential newborn health care, it would be preferable to post a lady medical officer wherever possible, especially in those PHCs where having a second medical officer is being considered.
- Redeployment of staff from the PHCs providing only OPD services to such 24-hour PHCs, as was successfully done in the state of West Bengal, should be seen as a viable option.

In the state of West Bengal

- **Well-functioning PHCs with indoor facilities were identified and their infrastructure was strengthened.**
 - **The existing manpower position of the block PHCs and well functioning PHCs was strengthened by withdrawing and posting manpower from the PHCs that were providing only OPD services.**
 - **All the staff of the PHCs providing only outdoor services was withdrawn and redeployed in the Block PHCs and PHCs with indoor facilities. Manning of the OPD of these PHCs was done from the Block PHCs by deployment of manpower for the required work on a rotation basis.**
- It is also essential to have staff nurses (or ANMs, who are trained as Skilled Birth Attendants, if sufficient number of staff nurses are not available) on duty round the clock, to provide the necessary assistance to the Medical Officer. It is therefore recommended to post at least 5 staff nurses (or ANMs) at such PHCs. The states have the flexibility of deciding the feasibility of this at the local level, looking at their own ground situation.

The states for Andhra Pradesh and Tamil Nadu have already started running a few PHCs as 24-hour PHCs. They have made available additional staff in the form of either staff nurses or ANMs to man the labour room round the clock. The staff has been hired on a contractual basis, and work under the supervision of the PHC Medical Officer.

- Paramedical workers will also be necessary for managing the services like the laboratory, pharmacy and referral transport. Multi-skilling of staff is a viable option in these cases.
- An adequate number of semi-skilled workers, especially persons trained as cleaners, must also be available round the clock, working in shifts, if required. Multi-skilled persons should be preferred. Outsourcing for such workers may be resorted to as a feasible option.

Training Needs (to update skills of the providers)

The Medical Officer, who is going to guide and supervise the nursing staff, should himself/herself be competent to manage all normal deliveries and should also be able to conduct assisted deliveries such as applying Ventouse or Forceps. He/She should also be proficient in the technique of manual removal of placenta. He/She may be given additional training in carrying out an MTP using the technique of manual vacuum aspiration (MVA).

The training of the technical staff, especially the Medical Officers and the nursing staff is essential so that

they are skilled enough and able to handle and manage the obstetric, newborn and childhood emergencies to the extent feasible at the PHC level, and also make a timely referral of the cases which are beyond their capacity to the nearest First Referral Unit (FRU). These criteria should be kept in mind while recruiting staff for these 24-hour PHCs.

The staff nurses or ANMs may be trained to carry out the basic laboratory tests for emergencies, and/or to counsel clients for family planning/contraception, and/or to counsel RTI/STI patients.

Functional/Financial Autonomy

Once a PHC becomes operational for providing 24-hour delivery and newborn care services, it is the responsibility of the State Government to ensure that there is no disruption in the services due to lack/absence of staff and/or equipment, or due to minor requirement of funds.

The State Government will have to ensure adequate level of financial autonomy for the PHCs to enable them to:

- Locally purchase drugs and/or minor equipment
- Make local arrangements for referral transport
- Outsource non-clinical services
- Hire locally available medical and paramedical staff in case of need
- Retain user charges, if any

A small contingency fund given to the PHCs for the above mentioned requirements is another option that may be looked into.

The State governments will also have to:

- Formulate appropriate guidelines to enable the District Health Officers/Chief Medical Officers to identify and re-deploy Medical Officers and paramedical staff within a district and/or within a block.
- Prepare an appropriate training schedule for the training of doctors/paramedical staff in the skills necessary to carry out the required functions at a 24-hour PHC.
- Formulate appropriate strategies to ensure that the trained and skilled manpower is retained at the same facility for at least 2-3 years.

Points to be considered while selecting the PHC

Selection: The first step

Eventually, all PHCs must provide 24-hour quality delivery and newborn services effectively. However, since this may not be immediately feasible, the capacity and current utilisation rate for all PHCs has to be assessed in order to prepare a priority list of the PHCs for every district. For example, starting round-the-clock services will be much easier in well located PHCs having a functional operation theatre and a labour room, than the PHCs which do not have an OT and/or a labour room.

It is important, therefore, that every PHC is carefully assessed and a district wise priority list drawn. To select a potential 24-hour PHC, a scoring system has been developed which can be used to prepare the priority list in a district. This is given at Annexure 1. Based on this exercise it will be possible for the States to draw the district-wise action-plan for operationalising 50% top ranking PHCs per district as 24-hour PHCs in a phased manner. Collated district plans at the State level will help to list the consolidated requirements of the State in various areas for operationalising 24-hour PHCs during the RCH phase II.

It may be noted that higher scores are to be assigned in the assessment exercise when a criteria is considered an important determinant to provide 24-hour delivery services (e.g. labour room, staff quarters). Similarly, higher score is to be assigned if a given parameter is more favourable (e.g. good location).

It would be obvious that the prioritisation exercise would require a facility survey across the State which all States have proposed to undertake as a part of their RCH-II PIP. The facility survey would also provide a definite idea about the infrastructure and other gaps for each facility.

The **examples** given below illustrate the logic underlying the scoring system (Annexure-I) to be used for the prioritisation exercise

Geographical location: The PHC selected for operationalisation should be accessible to the population it caters to. If a 24-hour PHC is located near a CHC, district hospital or any other higher health facility, its services are likely to be under-utilised. The efforts for operationalising a 24 hour PHC should be directed towards a facility which has no higher health facility nearby (approximately 15 Kms radius), and hence has greater chances of its services being optimally utilized.

Presence of staff and staff quarters: Availability of competent staff-medical officers and paramedical staff is important to provide delivery and newborn services. RCH-II plans to train and update the skills of the providers to provide quality delivery and emergency obstetric care services. Hence it is important that the potential 24-hour PHCs have Medical Officers, Staff nurses and ANMs in adequate numbers posted as well as staying at the PHC. As deliveries can happen at any time during 24 hours, availability of the staff at the PHC campus round the clock is crucial. Therefore, presence and utilization of residential quarters by the above mentioned staff at the PHC campus is to be assessed.

Labour room: To ensure clients' privacy and to provide adequate facilities for delivery, an existing and functional labour room is critical at the potential 24-hour PHC. A functional labour room will not require large inputs for readiness and will be easy to operationalise for round-the-clock services.

Number of deliveries conducted annually: To make the effort cost effective, it is suggested that the PHCs already providing services to a high number of deliveries as a routine will be better for selection in the initial phase. With trained manpower and existing services at the facility, there is a higher chance of community utilizing the facility for institutional delivery when such an awareness campaign by the community level workers/volunteers is initiated in the villages.

Referral services: Availability of life saving services is critical for healthy outcome of pregnancy and to prevent maternal and newborn mortality and morbidity. As all such services are not possible at the PHC level, it is essential to refer the clients to a higher and appropriate health facility. It is also important that the community is aware of the delivery and referral services at the PHC. Hence a PHC with referral linkages from the community and to an appropriate higher health facility such as a CHC or FRU ranks higher for selection. The 24-hour PHC is expected to receive clients/patients from the sub-centres and community directly for management and sent back or managed/stabilized and referred to a higher appropriate facility such as CHC/FRU for further management. A CHC or FRU may directly receive a client/patient from the community or a sub-centre for management. To have an effective linkage the States should develop a system for the flow of information regarding the client/patient managed at the referred site from and to the health facility from where it had been referred or a health facility close to the client's home to ensure continuity of care.

It is hoped that the State and District Programme Officers will find these guidelines useful while planning and implementing the operationalization of their 50% PHCs as 24 Hour PHCs providing delivery and newborn care services.

ANNEXURE

Annexure-1

Suggested Scoring System for Selection of Facilities as 24 – hour PHCs

State:

District:

Note: Please note the appropriate score from the scoring system provided below against each column for each PHC assessed. Calculate the total score for each PHC assessed in column #13. Identify and list 50% PHCs with higher total scores according to merit, to be selected for operationalisation as potential 24-hour PHCs.

S. No	Address of PHC	Scores (refer to the scoring system given below)											
		Location and accessibility				Staff			Labour Room	Deliveries	Referral Services	Total Score	
		Road	Population Size	Other Health Facilities	Market Place	Medical Officer	Staff Nurse/ ANM	Staff Quarters					
1	2	3	4	5	6	7	8	9	10	11	12	13	
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													

Annexure-1

Scoring system: Assign scores to facility as given below.

Location and Accessibility	<ol style="list-style-type: none"> 3. If facility connected with an all weather road link 1. If facility connected by a kuccha road 0. If facility not connected by road
	<ol style="list-style-type: none"> 3. Population size catered to > 35,000 (or > 25,000 in hilly/tribal areas) 2. If Population size catered to 25,000 - 35,000 (or 15,000-25,000 in hilly/tribal areas) 1. Population size catered to < 25,000 (or < 15,000 in hilly/tribal areas)
	<ol style="list-style-type: none"> 3. If no private/charitable/trust hospital/health facility in a radius of 15 Kms 2. If no private/charitable/trust hospital/health facility in a radius of 10 Kms 1. If no private/charitable/trust hospital/health facility in a radius of 5 Kms 0. If private/charitable/trust hospital/health facility present in a radius of 15 Kms
	<ol style="list-style-type: none"> 1. If a market place is present within 2 Kms radius of facility 0. If no market place is present within 2 Kms radius of facility
Presence of Staff and Staff Quarters	<ol style="list-style-type: none"> 5. If 2 Medical Officers are posted and working at facility 3. If 1 Medical Officer is posted and working at facility 0. If no Medical Officer is working at facility
	<ol style="list-style-type: none"> 5. If ≥ 3 Staff Nurses/ANMs are posted and working at facility 3. If 1-2 Staff Nurses/ANMs are posted and working at facility 0. If no Staff Nurse/ANM is working at facility
	<ol style="list-style-type: none"> 5. Residential quarters for Doctors, Nursing Staff, and other paramedical staff 3. Residential quarters for only Doctors and Nursing Staff 1. Residential quarters for either Doctors OR Nursing Staff 0. No residential quarters
Labour Room	<ol style="list-style-type: none"> 10. If the facility has a functional labour room with Electricity Supply (and power back-up) and 24 hour water supply 8. If the facility has a labour room in use, with either Electricity Supply (and power back up) or 24 hour water supply 5. If the facility has a labour room in use with no/intermittent electric supply and/or no/intermittent water supply 1. If facility has a space earmarked as the labour room, but not in use 0. If facility has no labour room

<p>Number of Deliveries conducted in one year (use data from 2003 and 2004)</p>	<p>10. If ≥ 500 deliveries conducted annually 8. If 100-499 deliveries conducted annually 5. If 50-99 deliveries conducted annually 2. If 20-49 deliveries conducted annually 0. If < 20 deliveries conducted annually</p>
<p>Referral Services</p>	<p>3. Established Referral Linkage with sub-centres, villages and FRU (Government or Private) 2. Established Referral Linkage with FRU (Government or Private) only 1. Established Referral Linkage with Sub-centres and/or villages only 0. No Referral Linkage with either the community or sub-centres nor the CHC or FRU (Government or Private)</p>

Annexure-2 Referral Slip

Registration Number:

Name of Patient:

Age:

Address:

Date and Time:

Sex:

Reason for referral/Diagnosis:

History:

Examination (at the time of referral):

General condition:

Pulse:

BP:

Temperature:

Systemic Examination:

Investigations done (if any with date and report):

Treatment given (Mention dose, route, date and time of administration):

1.

2.

3.

4.

5.

Referred to (Name and/or location of Health facility):

(Signature & Name of Medical Officer)

Name of PHC, District

(States may make colour coded referral slips for different Districts/PHCs)

Annexure-3

Requirements for a fully equipped and operational labour room with a "new-born care area"

A fully equipped and operational labour room must have the following:

1. A labour table with foam mattress, macintosh and Kelly's pad
2. I/V Stand
3. Suction machine
4. Facility for Oxygen administration
5. Sterilisation equipment-Autoclave
6. 24-hour running water with Infection Prevention equipment and supplies
7. Electricity supply with back-up facility (generator with POL)
8. Attached toilet facilities
9. Emergency drug tray: This must have the following drugs
 - * Inj. Oxytocin
 - * Inj. Diazepam
 - * Tab. Nifedepine
 - * Inj. Magnesium sulphate
 - * Inj. Lignocaine hydrochloride
 - * Sterilised cotton and gauze
 - * Adequate number of gloves
 - * Sterile syringes and needles
 - * Sterile drip/IV sets
10. Delivery kits, including those for normal delivery and assisted deliveries (forceps delivery/vacuum delivery, Surgical kit)
11. An area earmarked for new-born care with facility for temperature maintenance

Equipment and supplies for New Born Care and Neonatal Resuscitation

12. Equipment
 - Foetal stethoscope
 - Baby scale
 - Radiant warmer
 - Table lamp with 200 watt bulb
 - Phototherapy unit
 - Self inflating bag and mask- neonatal size
 - Oxygen hood (neonatal)
 - Laryngoscope and Endotracheal intubation tubes
 - Mucus extractor with suction tube and a foot operated suction machine
 - Feeding Tubes
13. Supplies
 - Blankets
 - Clean towels
 - Baby feeding cup
 - Feeding Tubes

PRIVACY of a woman in labour should be ensured as a quality assurance issue.

Annexure-4

List of instruments/supplies required for various procedures

Instruments and supplies for a pelvic examination

1. Sim's/Cusco's vaginal speculum (small, medium, large)
2. Anterior Vaginal wall retractor
3. Sterile Gloves
4. Sterilised cotton swabs and swab sticks in a jar with lid
5. Kidney tray for keeping used instruments
6. Bowl for antiseptic solution
7. Steel tray with lid to keep sterile/HLD instruments for use
8. Antiseptic solution: Chlorhexidine 1% or Cetrimide 2% (if povidone iodine solution is available, it is preferable to use that)
9. Cheatle forceps with a dry bottle to hold it
10. Proper light source/functional torch
11. Infection Prevention equipment and supplies
12. For vaginal and Pap Smears:
 - Clean slides with cover slips
 - Cotton swab sticks
 - KOH solution in bottle with dropper
 - Saline in bottle with dropper
 - Ayre's spatula
 - Fixing solution/hair spray

Instruments/Supplies required for MVA

1. Sim's vaginal speculum/Cusco's vaginal speculum (small, medium, large)
2. Anterior vaginal wall retractor
3. Sponge holding forceps
4. Valsellum (small toothed)/Allis long forceps
5. MVA syringe and cannulae of sizes 4-8 (two sets; one for back up in case of technical problems)
6. Sterile gloves
7. Steel tray with lid to keep sterile instruments for use
8. Strainer for tissues
9. Sterilised cotton swab
10. Sterile kidney trays (for keeping instruments in case of reuse and for sterile saline or sterile water for flushing in case of blocked cannula)
11. Kidney tray for emptying contents of syringe
12. Bowl for antiseptic solution for soaking cotton swabs
13. Basin with antiseptic solution for washing gloved hand

14. Tray containing chlorine solution for keeping soiled instruments
15. Cheatle forceps with a dry bottle to hold it
16. Proper light source/functional torch
17. Syringe for local anaesthesia(10 ml) and Sterile Needle (22-24 gauge)
18. Local anaesthetic agent (Inj. 1% Lignocaine, for giving para cervical block)
19. Sterile saline/sterile water for flushing cannula in case of blockage.

Instruments/Supplies required for Insertion of Copper-T

1. Sim's/Cusco's vaginal speculum (small, medium, large)
2. Anterior vaginal wall retractor
3. Allis forceps/Valsellum (small toothed)
4. Sponge holding forceps
5. Uterine sound
6. Scissors
7. Toothed forceps
8. Steel tray with lid to keep sterile/HLD instruments for use
9. Sterilised cotton swabs
10. Bowl for antiseptic solution
11. Kidney tray for keeping used instruments
12. Copper-T in a pre-sterilised packet
13. Cheatle forceps with a dry bottle to hold it
14. Antiseptic solution
15. Infection Prevention equipment and supplies

Glossary

24-hour functioning PHC: A PHC equipped for providing round the clock delivery services and newborn care with referral linkages in addition to all other services and emergencies that any PHC is required to provide.

Emergency Obstetric Care: Is the term used to describe the elements of obstetric care needed for management of complications arising during pregnancy, delivery and the postnatal period.

Essential Obstetric Care: Refers to the minimum package of services that should be made available to all pregnant women, i.e. prenatal care, safe delivery, postnatal care, identification of complications and referral to health facilities with emergency services for Emergency Obstetric Care.

First Referral Unit (FRU): Means the first level of referral where facilities for surgical intervention, such as Caesarean Section (including administration of anaesthesia) and blood transfusion are available.

Manual Vacuum Aspiration (MVA): A method of removing tissue from the uterus by suction through non-electric handheld aspirators for diagnostic purposes or to remove products of conception. Plastic cannulae which vary from rigid to flexible are used with MVA aspirators.

Maternal death: Death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy, or its management, but not from accidental or incidental causes.

Maternal mortality ratio: The annual number of maternal deaths per 100,000 live births. This measures the risk of maternal deaths among pregnant or recently pregnant women. A more precise measurement would be the number of maternal deaths per 100,000 pregnancies. However, data on number of pregnancies is difficult to obtain.

Obstetric Emergency: Life threatening condition resulting from a pregnancy, whether before, during or after delivery.

Obstetric First-aid: Care that can be administered by qualified birth attendants at home or in facilities with minimal equipment. It includes uterine massage or bi-manual compression to reduce or stop bleeding and the administration of antibiotics and antipyretics orally as a temporary measure if transport to more extensive facilities takes more than a few hours.

Primary Health Centre (PHC): Is the health facility in a rural setting and is the first level of contact of the community with a doctor. Primary Health Centre caters to a population of 30,000 in plains and 20,000 in difficult (hilly, tribal) areas.

Safe abortion: Access and provision of abortion services by trained providers in a Government approved health facility for the purpose as described in the MTP Act 1971.

Skilled birth attendance: The process through which women are provided with adequate care during labour, delivery and the postnatal period. This process requires two key components, a skilled attendant and an enabling environment.

Skilled birth attendant: A skilled attendant is an accredited health professional- such as midwife, doctor or nurse - who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period and in the identification, management and referral of complications in women and newborns.

