



Odisha State strategy for accelerated reduction of Maternal and Infant Mortality



**Odisha
2020**



DEPARTMENT OF HEALTH AND FAMILY WELFARE
GOVERNMENT OF ODISHA



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of Maternal and Infant Mortality**

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**Minister of State (Ind. Charge)
Health & Family Welfare,
I. & P.R., Odisha**

Message

The State Government is committed to reduce the Infant Mortality Rate and Maternal Mortality Ratio in the state by providing health services to all, with special focus on people living in difficult areas through implementation of various initiatives, programmes and related activities for Reproductive, Maternal, Neonatal, Child and Adolescent groups.

To meet this objective, the Health and Family Welfare Department is bringing out a comprehensive guidebook for field level MPHW (F) & Staff Nurses at institutions on standard operating protocols for management of high risk pregnant women & sick children.

I hope that this guidebook will be helpful in appropriate management of high risk women & children and will significantly accelerate the reduction of IMR & MMR of the State.

A handwritten signature in blue ink that reads "Atanu." with a long horizontal line extending to the right.

(Atanu Sabyasachi Nayak)



**Principal Secretary
H&FW Dept, Govt. of Odisha**

Preface

It gives me immense pleasure in presenting before you a comprehensive guidebook for frontline workers at community level and staff nurses at health institutions on standard operating protocols for management of high risk pregnant women & sick children. The document highlights the major maternal & child health initiatives undertaken in the State's special strategies for accelerated reduction of IMR & MMR in Odisha.

It also delineates the protocols for effective management of critical maternal cases and sick children which would be a ready reference for MPHWS (F) & staff nurses.

I sincerely hope that this comprehensive guidebook would be an effective tool for enhancing the quality of RCH programme implementation and help us in reaching the national IMR & MMR goals.

(Ms. Arti Ahuja)
Principal Secretary
H&FW Department,
Govt. of Odisha



**Mission Director
National Health Mission, Odisha**

Foreword

Over the years, efforts have been made to reduce IMR/MMR in the state through implementation of high impact interventions across all districts with major focus on 10 High Priority Districts.

However, in order to achieve accelerated reduction of IMR/MMR, a State specific strategy incorporating several focused interventions in addition to existing intervention under NHM, has been formulated.

I request all districts to take sincere steps for effective implementation of this strategy in the field, to enable the State to meet its target for reduction of IMR and MMR in the State.

A handwritten signature in blue ink, appearing to read 'S. Pandit', with a horizontal line underneath it.

(Ms. Shalini Pandit)

Mission Director
National Health Mission,
Odisha



**Director
Family Welfare,
Odisha**

Acknowledgement

The status of High IMR and MMR in the State is a great concern. The expert group has recommended to update the knowledge and skills of service providers in identifying and managing the high risk pregnancies and sick infants.

Based on the recommendations and also after review of global and national evidences, it was decided to develop a comprehensive guidebook comprising of special interventions and Standard Operating Protocols for reference of MPHWS (F) in the community and Staff Nurses in the facility for management of high risk pregnancies during ante-natal, intra-natal and post-natal period has been developed.

I would like to express that the comprehensive guidebook would not have been possible without constant encouragement and guidance from Ms. Arti Ahuja, Principal Secretary, Health and FW, Ms. Shalini Pandit, Mission Director, NHM, Ms. Roopa Mishra, Ex Mission Director, NHM, experts from medical colleges, practicing specialists, consultants from department & NHM who gave valuable inputs in framing this guidebook.

I would give special mention to the development partners, UNICEF, UNFPA, Jhpiego and NIPI New Born Care Project for their selfless support and inputs for developing concepts, strategies and interventions.

It is hoped that this comprehensive guidebook will be used optimally by Programme Officers, Programme Managers and service providers to update their knowledge and skills and will enable them to implement this intervention successfully and thereby help in accelerating the reduction of IMR & MMR in the state.

(Dr. Nirmala Kumari Dei)

Director Family Welfare
Department of Health and Family Welfare,
Govt. of Odisha

ABBREVIATIONS

ADMO	: Assistant District Medical Officer
AFHC	: Adolescent Friendly Health Clinic
ANC	: Antenatal Care
ANM	: Auxiliary Nurse Midwife
APAR	: Annual Performance Appraisal Report
APH	: Ante Partum Haemorrhage
API	: Annual Parasitic Incidence
ASHA	: Accredited Social Health Activist
AVD	: Alternate Vaccine Delivery
AWC	: Anganwadi Centre
AWW	: Anganwadi Worker
AYUSH	: Ayurveda Yoga Unani Siddha Homeopathy
BCC	: Behaviour Change Communication
BDM	: Block Data Manager
BEmOC	: Basic Emergency Obstetric Care
BMI	: Basal Metabolic Index
BP	: Blood Pressure
BPM	: Block Programme Manager
CDR	: Child Death Review
CEmONC	: Comprehensive Emergency Obstetric & Newborn Care
CHC	: Community Health Centre
CME	: Continued Medical Education
CPR	: Cardiopulmonary Resuscitation
CRT	: Capillary Refill Time
DDK	: Disposable Delivery Kit
DDM	: District Data Manager
DHH	: District Headquarter Hospital
DP	: Delivery Point
EBM	: Expressed Breast Milk
EDD	: Expected Date of Delivery
ETAT	: Emergency Triage Assessment & Treatment
FID	: Fixed Immunization Day
F-IMNCI	: Facility based Integrated Management of Neonatal & Childhood illness
FRU	: First Referral Unit
FW	: Family Welfare
GKS	: Gaon Kalyan Samiti
HBNC	: Home Based Newborn Care
HDU	: High Dependency Unit
Hib	: Haemophilus Influenzae
HIE	: Hypoxic Ischemic Encephalopathy
HIV	: Human Immuno deficiency Virus
HMIS	: Health Management Information System



ICDS	: Integrated Child Development Scheme
ICU	: Intensive Care Unit
IEC	: Information, Education & Communication
IFA	: Iron Folic Acid
IM	: Intra Muscular
IMNCI	: Integrated Management of Neonatal & Childhood Illnesses
IMR	: Infant Mortality Rate
INAP	: India Newborn Action Plan
IPC	: Inter Personal Communication
IPHS	: Indian Public Health Standards
IUCD	: Intra Uterine Contraceptive Device
IUGR	: Intra Uterine Growth Retardation
IV	: Intra Veinous
IYCF	: Infant & Young Child Feeding
JSSK	: Janani Sishu Surakshya Karyakram
JSY	: Janani Surakshya Yojana
KBK	: Kalahandi Bolangir Koraput
KMC	: Kangaroo Mother Care
LBW	: Low Birth Weight
LHV	: Lady Health Visitor
LR	: Labour Room
LS	: Lady Supervisor
M&E	: Monitoring & Evaluation
MAS	: Meconium Aspiration Syndrome
MCH	: Medical College & Hospital
MCP	: Mother & Child Protection
MCTS	: Mother & Child Tracking System
MDR	: Maternal Death Review
MMR	: Maternal Mortality Ratio
MNH	: Maternal & Neonatal Health
MO	: Medical Officer
MPHS (F)	: Multi Purpose Health Supervisor (Female)
MPHS (M)	: Multi Purpose Health Supervisor (Male)
MPHW (F)	: Multi Purpose Health Worker (Female)
MTP	: Medical Termination of pregnancy
MWH	: Maternity Waiting Home
NBCC	: New Born Care Corner
NBSU	: New Born Stabilization Unit
NHM	: National Health Mission
NMR	: Neonatal Mortality Rate
NRC	: Nutritional Rehabilitation Centre
NSSK	: Navajat Sishu Surakshya Karyakram
O&G	: Obstetrics & Gynaecology
OPD	: Out Patient Department

OSACS	: Odisha State AIDS Control Society
OT	: Operation Theatre
PICU	: Paediatric Intensive Care Unit
PIH	: Pregnancy Induced Hypertension
PoG	: Period of Gestation
PR	: Pulse Rate
PIP	: Programme Implementation Plan
PMU	: Programme Management Unit
PNC	: Post Natal Care
PoC	: Product of Conception
PPH	: Post Partum Haemorrhage
PV	: Per Vaginum
PVTG	: Particularly Vulnerable Tribal Groups
PW	: Pregnant Woman
RDS	: Respiratory Distress Syndrome
RMNCH+A	: Reproductive Maternal Newborn Child and Adolescent Health
RR	: Respiratory Rate
RL	: Ringer's Lactate
RTI	: Reproductive Tract Infection
NS	: Normal Saline
O2	: Oxygen-Saturated
SBA/SAB	: Skilled Birth Attendance/ Skilled Attendance at Birth
SC & ST	: Scheduled Cast & Scheduled Tribe
SDG	: Sustainable Development Goal
SDH	: Sub-divisional Hospital
SDMO	: Sub Divisional Medical Officer
SIMT	: State Integrated Monitoring Team
SNCU	: Special Newborn Care Unit
SOE	: Statement of Expenditure
SOP	: Standard Operating Protocol
SPO2	: Saturation of Peripheral Oxygen
SRS	: Sample Registration System
STD	: Sexually Transmitted Disease
STI	: Sexually Transmitted Infection
TABC	: Temperature Airway Breathing Circulation
TB	: Tuberculosis
TFR	: Total Fertility Rate
U5MR	: Under Five Mortality Rate
UC	: Utilization Certificate
UHND	: Urban Health & Nutrition Day
UNICEF	: United Nations Children's Fund
USG	: Ultra Sonography
VHND	: Village Health & Nutrition Day
WHO	: World Health Organization



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Introduction to Special Strategy



1

Introduction to Special Strategy

Reduction of maternal and child deaths is one of the major challenges of the health system in Odisha. With several efforts from the State under the RMNCH+A campaign, it has been observed from the SRS reports, that there has been a decline in the State Maternal Mortality Ratio (MMR) and Infant Mortality Rate (IMR) over the years. However, the current rate of decline is not sufficient to achieve the 12th five year plan goals. Hence, to ensure the survival of mothers and children in the State, it was decided to develop a focused strategy for accelerated reduction of MMR and IMR. To draft the same, several consultative meetings and discussions were held with technical & managerial experts from various domains including private & government medical colleges and development partners. As a result of these intensive dialogues, a strategy was devised for accelerated reduction of IMR & MMR in the State of Odisha.

1.1 PROJECTED GOALS BY 2020

The targets for reduction of IMR and MMR in the State have been set in line with the 12th Plan goals of 2017. For the indicators, where the State is not likely to reach the 2017 goals with the current rate of decline, new goals have been set for 2020. For the indicators where the State is likely to achieve the 12th five year plan targets, the State aims to achieve an additional 30 % decline from the current rate of decline. Hence, the projected re-set goals are set to be achieved by 2020.

**TARGETS**

Major Indicators	Current Status as per SRS	12th Five year plan goal	SDG 2030	Current Compound Annual Decline rate	Expected Status as on 2020 (as per current Compound Annual Decline rate)	Goal 2020
Maternal Mortality Ratio	222	117	70	-4.7%	202	117
Infant Mortality Rate	51	33	-	-5.9%	33	30
Neonatal Mortality Rate	37	23	12	-4.7%	26	23
Under Five Mortality Rate	66	52	25	-5.8%	43	38
Total Fertility Rate	2.1	2.1		-2.6%	1.7	2.1

1.2 EXISTING INTERVENTIONS FOR REDUCING IMR & MMR IN THE STATE

State is continuing its consistent efforts for reducing MMR and IMR through different strategies at community as well as facility level. The major interventions which are implemented currently are as follows:

1.2.1 Village Health and Nutrition Day (VHND)

These days are organized once in a month in every AWC on a fixed day basis (Tuesdays and Fridays) with joint effort of ANM, AWW and ASHA. The VHND provides quality ANC & PNC services for expecting and lactating mothers, counseling on family planning needs, Adolescent Health Day for adolescents, monitoring growth of child development where services like general health check-ups (Weight for age, BMI, Anemia detection etc), provision of essential drugs and micronutrients like IFA, albendazole, calcium are given along with counseling and referral of identified high risk cases to appropriate institutions. Line listing and follow up of anemia cases is also done in this platform.

1.2.2 Services for identification and treatment of STI/RTI among Ante-natal and Post-natal cases

In order to provide early identification and treatment of STI/RTI among ante-natal and post-natal cases, the services are made available up to all CHC level delivery points including medical colleges and hospitals. Exclusive STD clinics are running in all DHHs and MCHs with the support of OSACS. Suspected cases from the community level are referred to these clinics at DPs for confirmation and treatment.

1.2.3 Comprehensive Abortion Care (CAC)

To provide safe and accessible abortion care services, doctors and paramedics are trained in different methods of MTP upto CHC DP level.

1.2.4 Review of Maternal Deaths

To reduce the incidence of maternal deaths, each and every cause of maternal death is analysed and corrective action is taken accordingly at appropriate level. These reviews are undertaken at various levels so that steps can be taken for avoiding similar deaths in future.

1.2.5 Screening of Syphilis and HIV in pregnant women

For early management of syphilis and HIV among pregnant women, at all pregnant women are mobilized for screening test which is presently available up to delivery points. ANMs and ASHAs are mobilizing pregnant women for screening at the facility level and initiation of treatment, if found positive.

1.2.6 Maternity Waiting Home (MWH)

Maternity waiting homes are temporary shelter for the pregnant women residing in hard to reach areas coming for institutional delivery. The basic objective of the programme is to provide alternate supportive infrastructure for addressing communication problems in difficult tribal pockets for ensuring institutional delivery. Functioning of these homes has increased institutional deliveries and reduced home deliveries. This is purely a free service provided to expecting mother nearing EDD. One of the important features is also to provide accommodation and support to one attendant with the expecting mother throughout her stay in MWH. On the onset of labour, they are to be shifted to nearby health institution having BEmOC/CEmONC facilities for delivery.

1.2.7 Strengthening of First Referral Units (FRUs) and Delivery points

Delivery points and FRUs are strengthened for basic delivery services and secondary care services for mother and children by providing services through critical care units like SNCU/NBSU/OT with CS facilities and blood transfusion facilities at FRUs. The FRUs function with specialized manpower for addressing maternal, neonatal and U5 mortality factors.

1.2.8 Implementation of DAKSHATA

Objective of this activity is to provide quality services in the labour room by developing skills of service providers and upgrading the labour room infrastructure as per standards set under Maternal and New born Health (MNH) tool kit.

This programme is implemented in the facilities with deliveries more than 50 per month.

Under this programme training is given to labour room doctors and paramedical staff and regular mentoring by trained mentors from district level through on the job handholding support.



1.2.9 ANM Mentoring

This activity aims at improving knowledge & building defined skill sets of HW (F) for providing quality services in VHNDs and Sub center. The focus is given on poor performing ANMS through following process:

- Assessment of all ANMs at district level
- Mentoring of poor performing ANMs for a period of 3 months by a trained mentor
- Post-assessment of poor performing ANMs at block level, coordinated by MO I/c
- Performance incentive to mentor if ANM qualifies on post-assessment test and has acquired all desirable knowledge & set of skills.

1.2.10 Janani Surkshya Yojana (JSY)

JSY is a safe motherhood intervention implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among all pregnant women with provision of cash incentive of Rs. 1400/- and Rs. 1000/- for rural and urban area & Rs-500/- for home delivery cases belonging to BPL category respectively. The payment is made to the beneficiaries through Direct Bank Transfer (DBT) method only.

1.2.11 Janani Sishu Surakshya Karyakram (JSSK)

JSSK assures cashless services to pregnant women, post-natal women upto 6 weeks after delivery and sick infants up to one year in government health institutions in both rural and urban areas.

Scheme entitlements: Free drugs and consumables, Free Diagnostics, Free diet during stay in hospital, Free provision of blood, Exemption from user charges and Free transport (Home to health institution; higher referral, if required; drop back after 48 hours of stay)

1.2.12 Maternal & Child Health (MCH) Wings

Exclusive MCH Wing is constructed at institutions with high delivery load for providing comprehensive RMNCH+A services under one roof. This will improve 48 hours stay of mothers after delivery and improve post natal and neonatal care.

Bed Strength for MCH wings:

- 100 beds for Delivery load of \geq 400 deliveries per month
- 50 beds for Delivery load within 250-400 deliveries per month
- 30 beds for Delivery load within 125-250 deliveries per month

1.2.13 Newborn Care Corners (NBCC):

A special corner is established in the labour room of all delivery points with a set of equipments for immediate care of the newborn and Healthcare providers conducting deliveries have been trained in Nabjat Sishu Suraksha Karyakram (NSSK) for essential newborn care and resuscitation.

1.2.14 Newborn Stabilization Unit (NBSU):

The state has established NBSUs in FRUs with priority in high IMR districts for stabilization of sick newborns which can't be managed at NBCC.

1.2.15 Special Newborn Care Units (SNCU):

SNCUs are established in district headquarter hospitals and medical college hospitals for treatment of sick newborns. A system has been developed for tracking the cases after discharge from SNCU for follow up & timely management if required along with tracking the exact outcome of a particular admitted newborn within one year. The service providers posted in NBSUs/SNCUs are trained on facility based newborn care.

1.3.16 Nutrition Rehabilitation Centre (NRC):

This is a special facility for treatment of children suffering from severe acute malnutrition (SAM). It is staffed with trained manpower. Besides treatment, there is provision of diet in the NRC for the SAM child and his/her mother along with loss of wages compensation for family during stay at the facility. Mothers are also trained on preparation of nutritious food and maintenance of hygiene & food sanitation during child feeding. Moreover, for sensory stimulation of children, there is provision of indoor & outdoor games and audio-visual aids in the facility.

1.3.17 Kangaroo Mother Care (KMC) units:

KMC units have been established in all health facilities with SNCUs for ensuring warmth and early initiation of breastfeeding in low birth weight, preterm hypothermia & other sick newborns.



1.3.18 Integrated Management of Neonatal & Childhood Illnesses (IMNCI):

ANMs have been trained on IMNCI for identification, treatment, referral & follow up of sick neonates & children up to 5 yrs.

1.3.19 Home based newborn care (HBNC):

ASHAs make home visits to all newborns up to 42 days for early identification and referral of sick newborn. All ASHAs have been trained on HBNC.

1.2.20 Routine immunization (RI):

Immunization is given to all children against the vaccine preventable diseases such as diphtheria, pertussis, tetanus, hepatitis B, poliomyelitis, childhood tuberculosis and measles. Pentavalent vaccine has been introduced recently for inclusion Haemophilus influenzae (Hib).

1.2.21 Integrated Action Plan for Prevention of Pneumonia & Diarrhoea (IAPPD):

As pneumonia & diarrhoea are major causes of under-five child deaths, community health workers are trained on detection of pneumonia by counting respiration and assessment of dehydration in case of a child suffering from diarrhoea. ANMs identify & treat pneumonia with amoxicillin & gentamycin and diarrhea with ORS & zinc. Recently Rotavirus Vaccine has been introduced to prevent Rota Virus infected diarrhoea.

1.2.22 India Newborn Action Plan (INAP):

Major components of INAP are administration of antenatal corticosteroids for preterm labour at all delivery points, administration of vitamin K to all newborns, management of sepsis in newborns by ANM with use of injection Gentamycin and provision of KMC.

1.3 MAJOR CHALLENGES IN THE EXISTING SERVICE DELIVERY SYSTEM

The technical analysis of maternal and child deaths talks of the causes and factors which need to be addressed for accelerating the present rate of reduction of indicators like IMR, MMR, NMR and U5MR. But there are some challenges related to service delivery that slow down the accelerated reduction of mortality rate. The major challenges are as follows:

- Lack of access to quality skilled birth attendance and Comprehensive Emergency Obstetric and Newborn Care services (CEmONC) (causing high incidence of hemorrhage)
- Poor quality of care and inappropriate practices in the labour room (causing high incidence of sepsis)
- Poor quality of outreach antenatal services including identification and

management & referral of high risk pregnancies (causing high incidence of hypertensive disorders)

- High case loads at few facilities leading to compromised quality of care because of inadequate human resources especially in labour rooms (causing high incidence of birth asphyxia)
- Lack of strategy to address the afebrile malaria cases (causing high incidence of prematurity)
- Implementation gaps in Iron Folic Acid supplementation programmes and birth spacing (causing high incidence of prematurity)
- Lack of concerted efforts to address early age of marriage (causing high incidence of prematurity)
- Gaps in addressing home deliveries which take place despite all efforts to promote 100% institutional deliveries (susceptible for high morbidity & mortality)
- Lack of strategy to provide service in the hard to reach inaccessible areas due to lack of roads, long distance to facilities, cultural practices and poor telecommunications network.

1.4 SPECIAL STRATEGIES FOR ACCELERATED REDUCTION OF IMR & MMR

The major three causes of maternal deaths in Odisha are Haemorrhage, Sepsis & Hypertensive disorders which are similar to national data. (Odisha MDR reports 2013-14)

The major causes of neonatal mortality at the facilities are birth asphyxia, complications of prematurity and infections. (Odisha SNCU data 2012-13). As per the Child health epidemiology reference group (2008, WHO & UNICEF) estimates, the major causes of deaths in the post neonatal period in India are Pneumonia (20%), and Diarrhea (13%).

On review of global evidences, for improving Maternal and Child Survival and State level data from different surveys and studies there are certain strategies which can have a visible impact are enumerated as follows:

Areas	Key Strategies	% of death averted
Maternal Survival	Improved access to skilled birth attendance	40%
	Comprehensive emergency obstetric and neonatal care & Clean delivery practices	29%
	Management of hypertensive disorders in pregnancy	8%
Newborn Survival	Access to family planning services	30%
	Prevention and management of pre-eclampsia reduces incidence of prematurity	34%
Child Survival	Resuscitation of newborn and safe delivery practices	6% to 42%
	Prevention and management of hypothermia	18-42%
	Community based pneumonia management	18% - 35%
	Community management of diarrhoea	14%

Source: Lancet series



1.5 FOCUS DISTRICTS FOR PROGRAMME IMPLEMENTATION

The following methodology was adopted for identification of the focus districts:

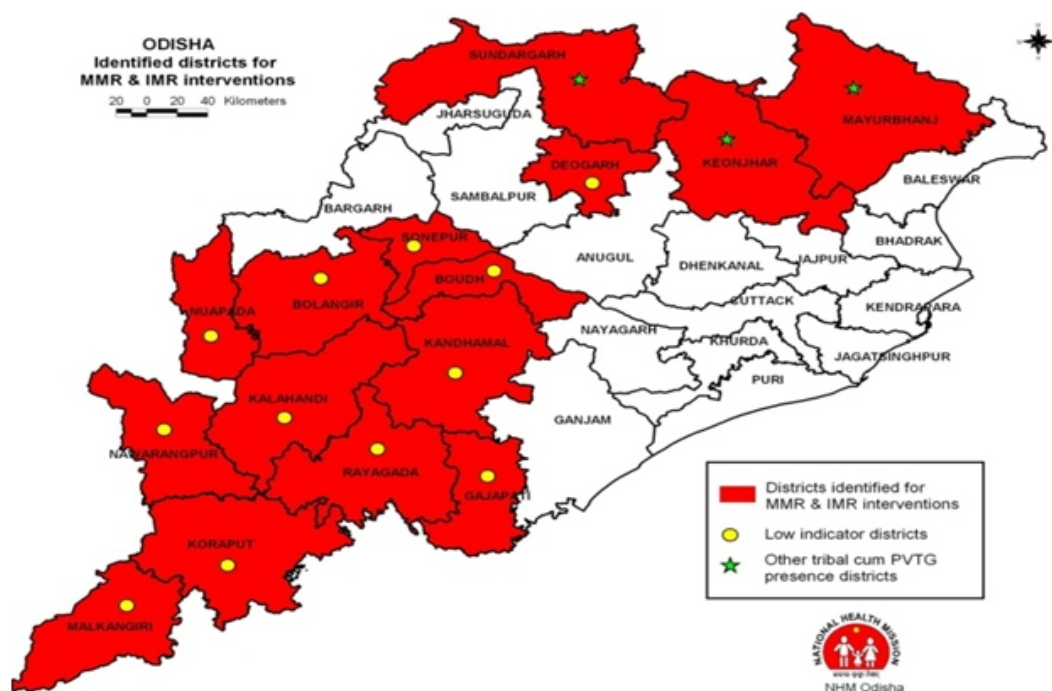
1. Districts belonging to KBK and KBK plus region as they bear a high burden of mortality
2. Tribal districts with Particularly Vulnerable Tribal Groups (PVTG) population
3. High burden districts as per composite index (combined burden of IMR, MMR, Under 5 mortality & high API for Malaria showing score of 75% or more)

11 districts belong to KBK and KBK+ region, 10 Tribal districts have presence of PVTG and 6 districts have a composite index score of 75%. Considering the overlaps within the districts on applying the above mentioned criteria, a total of 15 districts have been selected. The districts are as follows:

Focus Districts for Special IMR/ MMR Interventions

Sl. No.	District	KBK+ District Yes/ No	PVTG Districts Yes/ No	Districts Qualified as per Composite Index Yes/No	Focus Districts for IMR/ MMR Interventions (Yes for Qualifying in any of the Indicator)
1	Balangir	Yes		Yes	Yes
2	Baudh	Yes		Yes	Yes
3	Debagarh		Yes	Yes	Yes
4	Gajapati	Yes	Yes	Yes	Yes
5	Kalahandi	Yes	Yes		Yes
6	Kandhamal	Yes	Yes	Yes	Yes
7	Kendujhar		Yes		Yes
8	Koraput	Yes			Yes
9	Malkangiri	Yes	Yes		Yes
10	Mayurbhanj		Yes		Yes
11	Nabarangapur	Yes			Yes
12	Nuapada	Yes	Yes		Yes
13	Rayagada	Yes	Yes	Yes	Yes
14	Sonepur	Yes			Yes
15	Sundargarh		Yes		Yes
	Total Districts	11	10	6	15

Map of identified focused districts for implementation of special strategy for accelerated reduction of IMR & MMR



1.6 NEW INTERVENTIONS FOR ACCELERATED REDUCTION OF MMR AND IMR

1.6.1 Specific interventions to be undertaken for accelerated reduction of MMR in addition to the existing activities are as follows:

Components	Interventions	Outcome Indicator
Ante Natal Period	<ul style="list-style-type: none"> Identification, management and referral of high risk pregnancies Identification of high-risk pregnancies (Clinical & high risk due to geographical inaccessibility) using specific assessment checklist Issuance of Red card to all high-risk pregnancies at community as well as facility level Birth preparedness plan and mandatory couple counseling Prioritizing admission of high-risk cases coming with red card at appropriate facility Institutional care and services free of cost 	<ul style="list-style-type: none"> % of high-risk cases identified and treated at institution % of high-risk pregnancies who had institutional delivery



Components	Interventions	Outcome Indicator
	<ul style="list-style-type: none"> ● Diet provision to one attendant of high risk antenatal case admitted to facilities below DHH ● Provisioning of dry/cooked food in tie up with nearest AWC for U5 children accompanying mothers admitted to MWH ● USG to be done for high-risk pregnancies as per the advice of treating doctor ● Facility assessment will be done and USG will be provided to all DHH and SDHs as per requirement 	
	<p>Addressing anemia during pregnancy:</p> <ul style="list-style-type: none"> ● Provision of folic acid to pregnant women right at the time of registration ● Distribution of IFA by ANM from 2nd trimester onwards (for 6 months and follow up by AWW and ASHA for consumption IFA ● Provision of Iron Sucrose to moderately anemic pregnant woman (Hb level 7-9 gm/dl) at CHC and above facilities 	<p>% of pregnant women identified with moderate anemia and provided with IFA</p> <p>% of pregnant women showing improvement in Hb level</p> <p>% of pregnant women identified with anemia and provided with IV Iron sucrose</p> <p>% of institutions providing services of Iron sucrose</p> <p>% of pregnant women showing improvement in Hb level</p>
	<p>Strengthening of Village Health and Nutrition Days</p> <ul style="list-style-type: none"> ● Universal Plan: One time site development cost for all VHNDs as per site assessment ● Special Plan for Hard to reach Blocks: ● Mobility support for Holding of monthly integrated VHND & Immunization session in hard to reach areas 	<p>% of VHNDs providing all services by skilled ANM</p>
<p>Intra Natal Period</p>	<ul style="list-style-type: none"> ● Improving the quality of processes in Labour Room and OT ● Prioritizing beds for admission of Red card holders ● Admission of high-risk cases at FRU for delivery to be done at least before 1-2 weeks 	<p>% of Labour Rooms standardized as per MNH tool kit</p>

Components	Interventions	Outcome Indicator
	<p>of EDD</p> <ul style="list-style-type: none"> Standardization of Labour room for providing quality delivery services in a phased manner Support of birth companion in Labour room and PNC ward for high-risk delivery cases High Dependency Unit at FRUs for management of critical delivery cases Still birth audit and mapping Short term periodic refresher training at tertiary level health facilities to O&G specialist posted in low case load institutions in tertiary centre 	
Post Natal Period	<ul style="list-style-type: none"> Diet provision to one attendant of high risk ante-natal, intra natal, postnatal case admitted to facilities below DHH level Provisioning of non-pneumatic anti-shock garment to prevent PPH. The garments will be provided in the 102/108 ambulances as well as in FRUs. MCH wing for high load CHCs for 	% of delivery cases stayed for 48 hours or more

1.6.2 Specific interventions to be undertaken for accelerated reduction of IMR in addition to the existing activities are as follows:

Components	Interventions	Outcome Indicator
Care at Birth for Home Delivery cases	<p>Birth asphyxia management in case of home delivery:</p> <ul style="list-style-type: none"> Provision of Disposable Delivery Kit for safe home delivery SBA & NSSK trained ANMs would be provided resuscitation kits to manage birth asphyxia in home delivery settings in sub centers with more than 20% home deliveries 	No of Newborns died due to birth asphyxia (CDR report)
Provision at Community & Institution level	<ul style="list-style-type: none"> Special provisions for newborn for maintenance of warmth and hygiene through provision of KMC Provision of baby kit to all Newborns 	No. of Newborns provided with baby kit
Strengthening community level care of children between 42 days to 1 year	IMNCI trained AWW would follow up the children after the newborn period up to 18 months through home visits. The key activities will include :	Home visits conducted & counseling done (MCP card)



Components	Interventions	Outcome Indicator
	<ul style="list-style-type: none"> • Growth monitoring using growth chart and recording in MCP card • Assess for danger signs/illness and refer if necessary • Advise for institutional follow ups if discharged from SNCU or NRC • Ensure exclusive breast feeding • Age appropriate vaccination • Early childhood care and development: Counsel for hygiene and hand washing & Age appropriate feeding 	
Strengthening institutions for paediatric care	<p>Establishment of Pediatric ICUs with Emergency Triage Assessment & Treatment (ETAT) for age Establish group of 1month to 14 year)</p> <p>Establish PICUs at tertiary and secondary care level in phased manner with proper referral protocols & SOPs for management</p>	No. of PICU made functional
Screening, Identification, Referral and follow up of High risk children (0-5 years)	<ul style="list-style-type: none"> • All children will be screened immediately after birth at facility level and at community • Children identified with high risk at community level will be issued red card by ANM and referred to appropriate facility for management 	

1.6.3 Crosscutting interventions

Components	Interventions	Outcome Indicator
Human Resource	<ul style="list-style-type: none"> • Filling up of vacancies, especially, specialists at FRUs • Repositioning of existing regular man power at SNCU on priority basis 	<ul style="list-style-type: none"> • No. of FRUs made fully functional as per mandate. • SNCUs functional with regular HR
Referral Transportation	<p>Alternative means of transportation for hard to reach areas identified through specified checklist on the basis of village connectivity to motorable road</p> <ul style="list-style-type: none"> • Provision of stretcher to each identified difficult villages for transportation of cases from village to vehicle pick up point. • Special dedicated hired vehicle for 68 difficult blocks over and above 102/108 vehicles 	% of institutional deliveries conducted from difficult villages

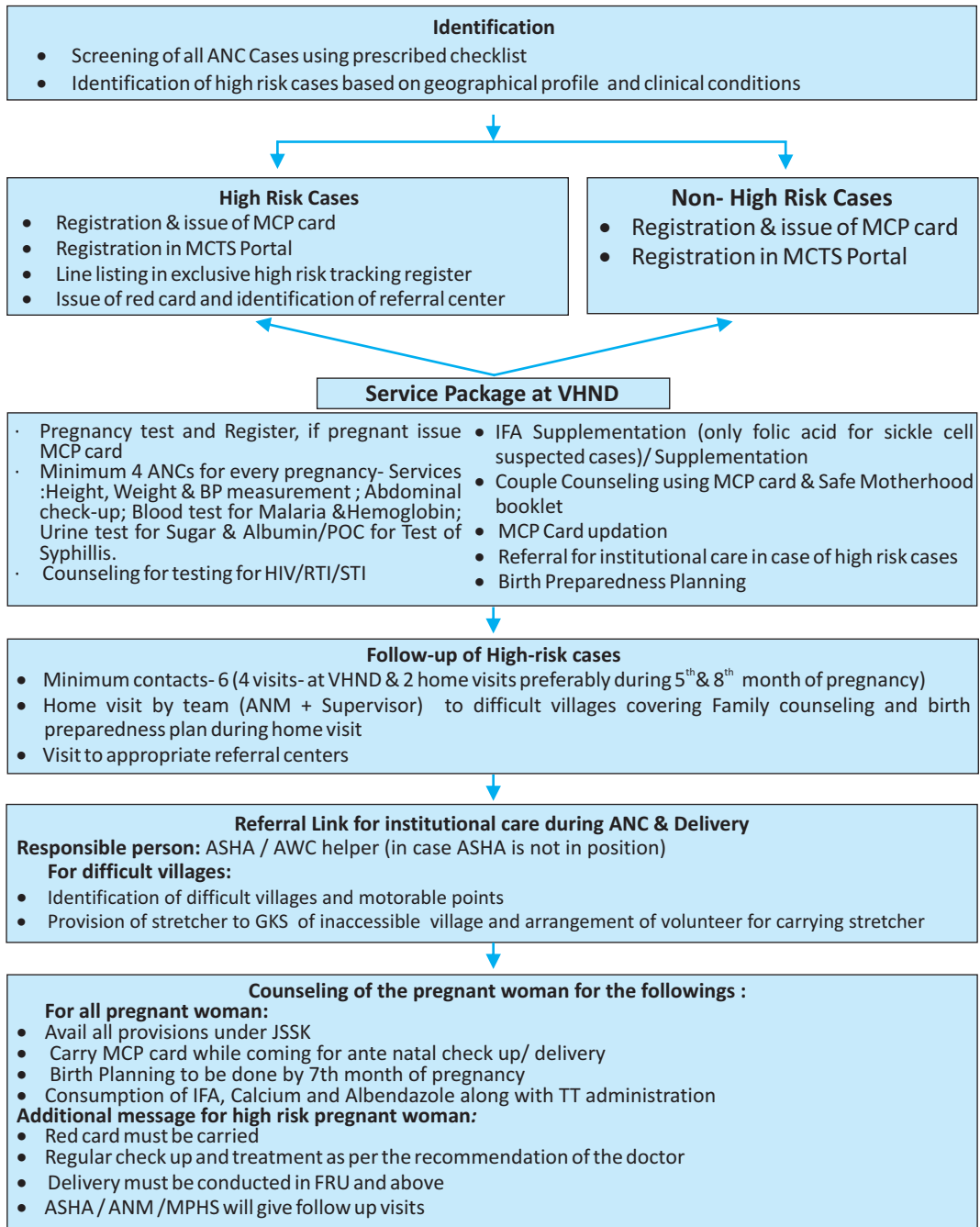
Mentoring	Involvement of Medical Colleges and Hospitals (Government and selected private medical college and hospitals) <ul style="list-style-type: none"> • Mentoring support at SNCUs and NBSUs • Holding of CME at district level with O&G and pediatric specialists using Telemedicine 	No. of SNCUs & NBSUs provided mentoring support by Medical College. No. of district MDR & CDR meeting attended by team from MCH
Tracking of High risk cases and follow up	<ul style="list-style-type: none"> • Support in MDR and CDR implementation • Periodic Performance Review of trained staff in SNCU/NBSU/NRC • Individual tracking of all high risk pregnancies and discharged children from SNCU/NBSU/NRC • Mandatory review at Sector and Block level 	◆ of High risk mothers/ SNCU & NBSU discharged babies/ LBW/NRC discharged cases followed up as per norms
IEC/BCC	Comprehensive IEC/BCC strategy addressing area specific needs	% of Inaccessible pockets covered
Incentive	Performance based incentive to ASHA for survival of High risk mother for 42 days after delivery & Survival of high-risk children	% of High Risk Mothers and Childs survived
Training of service Providers	up-to 18 months (@ Rs. 1,000 per case) Training & orientation of all the service providers of the intervention districts will be done	% of service providers trained
Award to the Good performing district & service providers	Based on the performance, awards will be given to the good performing districts. Service providers will be recognized and will be awarded under various categories	NA

1.7 SYNOPSIS OF SOP FOR MANAGEMENT OF HIGH-RISK PREGNANT WOMAN AND U5 CHILDREN AT COMMUNITY AND FACILITY LEVELS

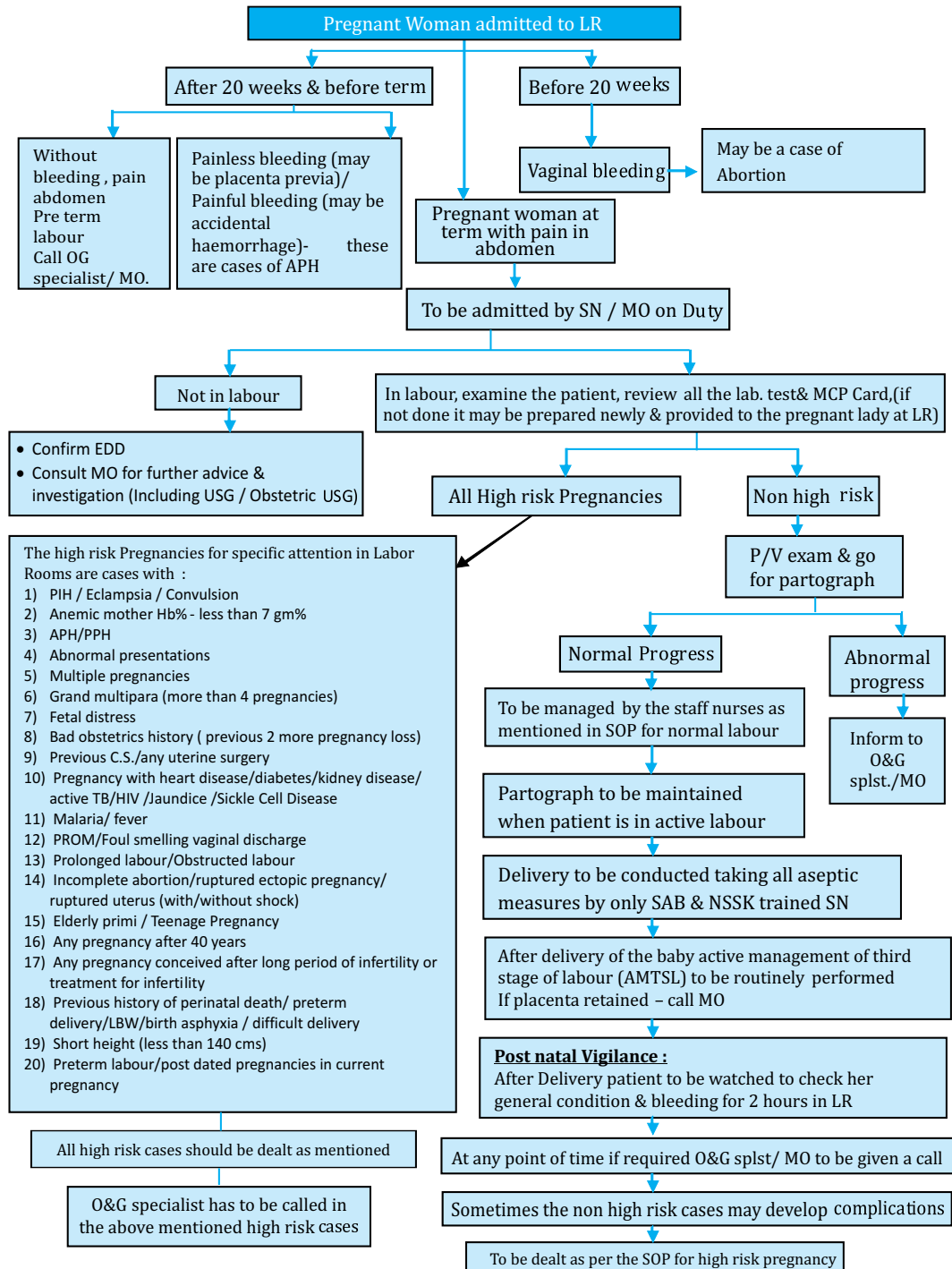
In order to implement the activities which aim at the accelerated reduction of IMR and MMR, there is a need of clear delineation of flow of activities in community and facility level by the grass root workers. Addressing high-risk pregnancies, post-natal mother and sick children within age group of 0-5 years by ANMs and staff nurses at community and facility respectively, will follow the flowing flow charts for case management at their level. Actual treatment is to be conducted as per the technical treatment guidelines issued earlier, which are to be followed by the facilities and community as per the concerned programme.



1.7.1 Identification & management of high-risk pregnant women at community

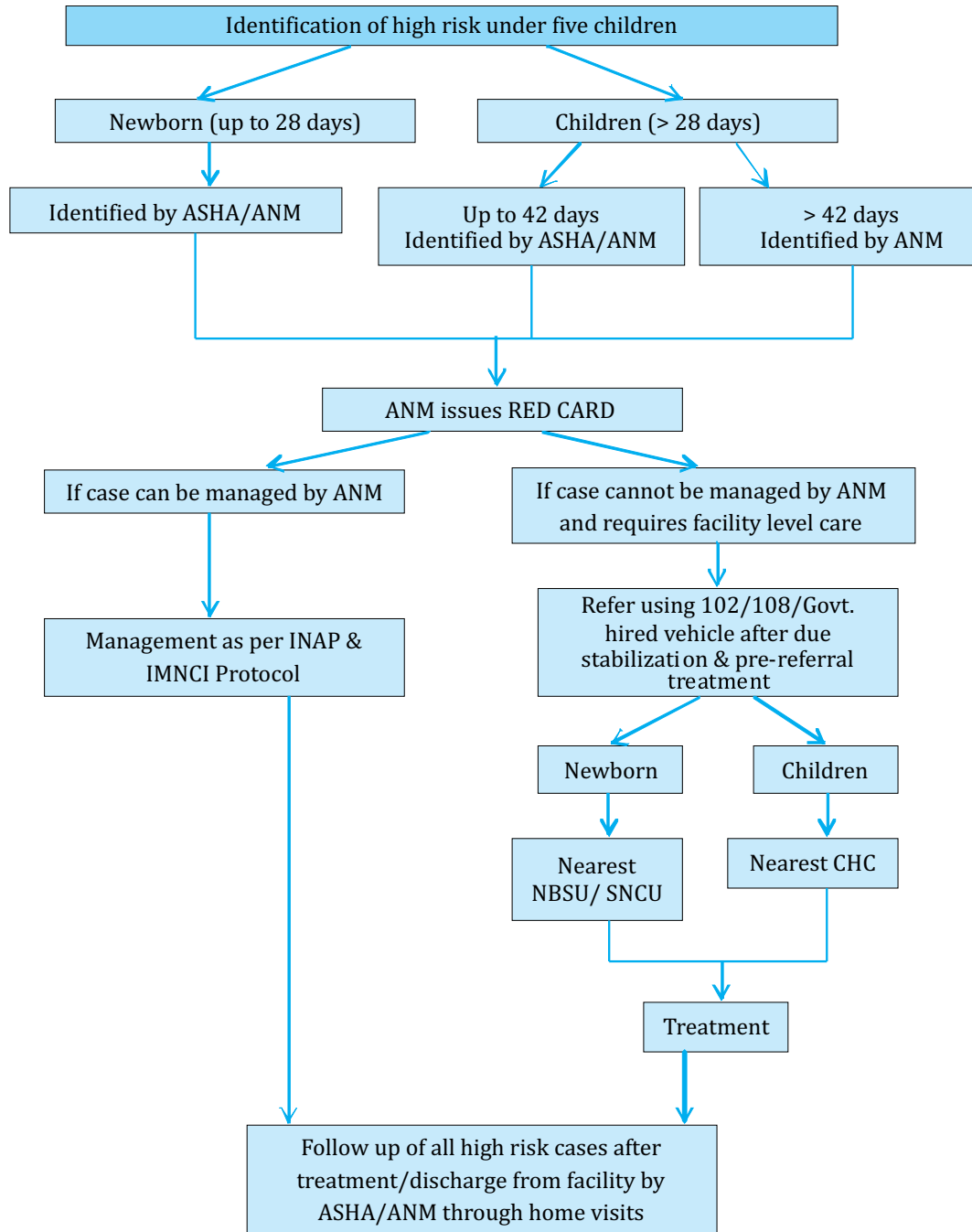


1.7.2 Management of high risk pregnancies & delivery cases at labour room

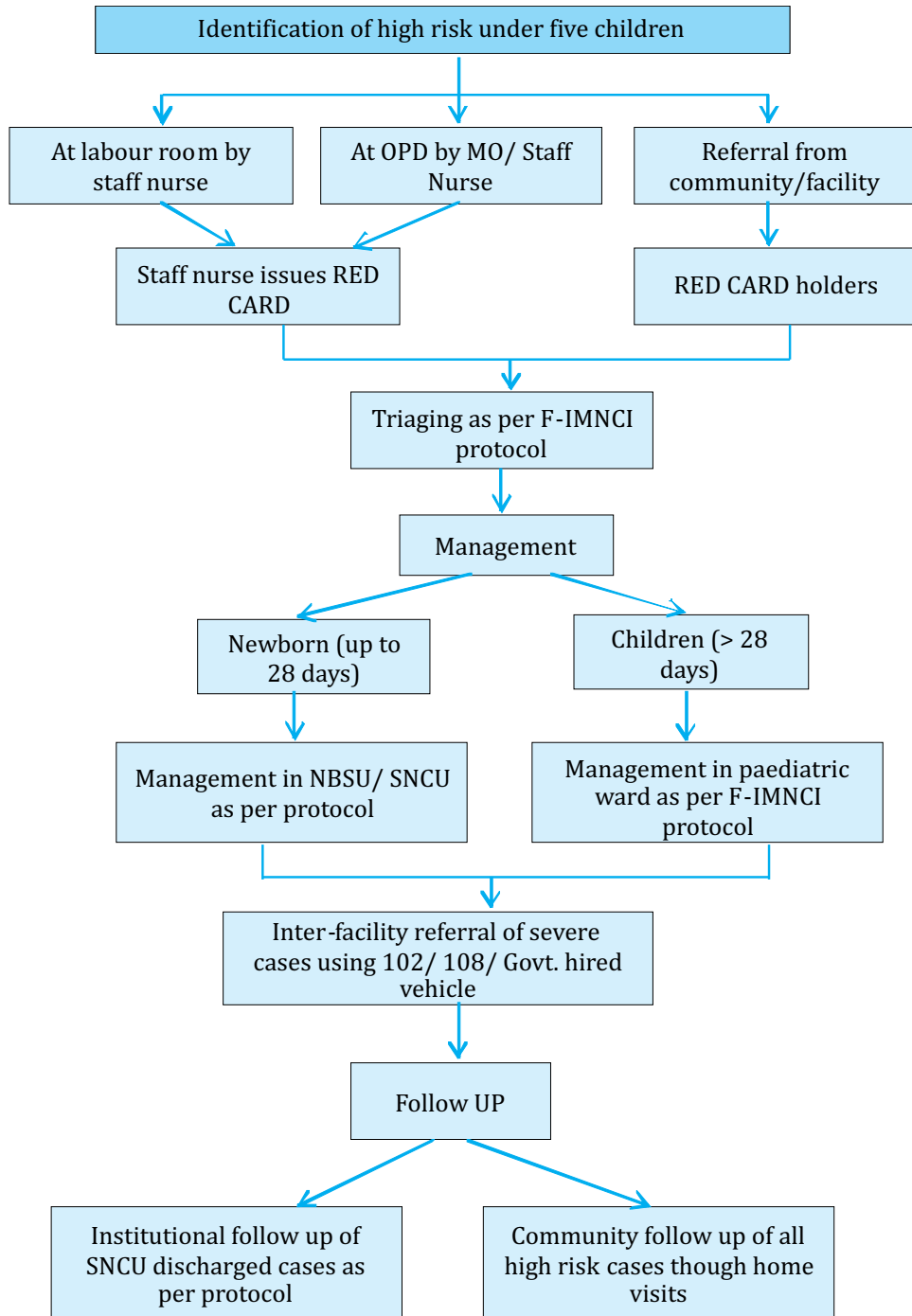




1.7.3 Management of high risk under five children in the community



1.7.4 Management of high risk under five children in the facility





2

Standard Operating Protocol for Identification, Referral, Treatment & Management of High-risk Pregnancies During Ante-Natal Period at Community



2

Standard Operating Protocol for Identification, Referral, Treatment & Management of High-risk Pregnancies During Ante Natal Period at Community

It is estimated that about **15 percent** of all pregnancies can develop complications of which **five percent** can be **life threatening**. These complications cannot be predicted but if detected and timely care is provided then maternal deaths and disability can be averted. Further, there are no evidences that antenatal care alone will have considerable impact on reduction of maternal deaths. However, antenatal care is a crucial aspect of birth preparedness and complication readiness where pregnant women can be screened, danger signs can be detected, treated or referred and to ensure that the pregnant woman and her spouse or family members are educated and counseled.

While the ultimate objective is to ensure **skilled birth attendance for all child births** and prompt referral for emergency obstetric care in case complications arise at any time during ANC, delivery and PNC, there is definitely an opportunity and importance to screen pregnant women developing danger signs during pregnancy. Besides clinical danger signs, more obvious risk factors such as geographical inaccessibility is also important as many women from remote areas have significant barriers to affordable and accessible care.

This protocol describes about the high-risk conditions among pregnant women that can be identified by ANM at the VHND sessions, providing special status for referral and follow up, roles and responsibilities of ANM and ASHA in giving follow up to such high risk cases.



2.1 WHO IS AT HIGH-RISK?

All pregnant women detected with clinical danger signs and pregnant women residing in geographically hard to reach areas where the services are not easily accessible are at high risk.

2.1.1 Clinical High-Risk Cases:

Pregnant women can develop danger signs any time during pregnancy, labour, and in the post partum period. Some of these complications are identifiable during ANC and some are sudden in onset and unpredictable (e.g. PPH, sepsis & eclampsia etc.). Therefore, regular and quality screening provides a chance of early detection of danger signs, which helps in timely referral and treatment.

2.1.2 Geographical High-Risk Cases:

All pregnancies registered from identified difficult villages shall be considered as high-risk cases. Difficult areas/villages will be identified by ANM basing on single criterion i.e., villages not accessible by 102/108/or any four wheeler vehicles. Further it has been categorized in terms of seasonally cut off or permanently cut off for the purpose of programme implementation. One time assessment of difficult villages will be done and will be revised in every two years.

2.2 SCREENING AND IDENTIFICATION OF CLINICAL HIGH-RISK CONDITIONS DURING ANTE NATAL PERIOD

2.2.1 Who are to be screened:

All pregnant women registered are to be screened by HW (F) at VHND Sessions using individual assessment checklist.

2.2.2 Frequency of screening:

At least four (4) times during each antenatal visit and once during the postnatal period. However, pregnant women can be screened more number of times in every VHND if possible.

2.2.3 Platform for screening:

Village Health and Nutrition Days (VHNDs) or Delivery points are the platforms where ANC check up is

Clinical High Risk Conditions

A. High Risk conditions associated with Pregnancy History

1. More than 4 earlier pregnancies
2. Previous Caesarean Section/Any Uterine surgery
3. Previous LBW baby delivery (Pre term delivery/ Intra Uterine Growth Retardation (IUGR) baby)
4. Previous early neonatal death/still birth/ birth asphyxia
5. History of APH/PPH
6. History of Diabetes/Heart Disease/Kidney Disease/Active TB
7. History of Pre-eclampsia/eclampsia PIH (convulsion during previous pregnancy)
8. History of repeated spontaneous abortion more than 3 times
9. History of Active TB/ Leprosy
10. Conceived after long period of infertility/Artificial Reproductive Techniques
11. History of previous complicated delivery
12. HIV positive

conducted.

2.2.4 Tools to be used for screening:

Screening and recording will be done separately for each pregnant woman through specific assessment checklist

2.3 INDIVIDUAL ASSESSMENT CHECKLIST FOR PREGNANT WOMAN DURING ANTE-NATAL PERIOD

- To be used for each pregnant woman during first registration and subsequent ANC checkups.
- This assessment format is also to be used at least once during PNC period
- The assessment is done on the current pregnancy status and history of pregnancy. Format for assessment is attached at Annexure-I.
- The format will be available with ANMs

B. High risk conditions associated with Current pregnancy

1. 1st pregnancy below 18 yrs and above 35 years
2. Any pregnancy above 40 yrs
3. Severe anaemia (<7gm/ dl)
4. Pregnancy Induced Hypertension (BP more than 140/90)
5. Presence of sugar &/or albumin in urine
6. Pregnant woman with Malaria/Any high fever
7. Height <140cm
8. Weight gain per month after 1st trimester <500gm and more than 3kg
9. Rh negative pregnant woman
10. Hepatitis B positive/Jaundice
11. Pregnancy with HIV positive /RTI/STI
12. Bleeding PV
13. Premature Rupture of Membrane/Leaking
14. Foul smelling vaginal discharge
15. Decrease/no fetal movement
16. Premature contraction
17. Over distended/unusual larger size
18. Excess pain in abdomen during 1st trimester
19. Post dated pregnancy (More than 7 days from EDD)
20. History of Thalassemia/Sickle Cell Disease/Rh negative mother

Individual assessment checklist attached at Annexure-I

2.4 DEMARCATING HIGH-RISK CASES:

Considering both the clinical and geographical condition the high risk cases are categorized by ANM as follows:

Difficult village area	Non clinical high risk	High-risk
	Clinical high risk	
Normal area	Clinical high risk	High-risk



2.5 RECORDING OF HIGH-RISK STATUS

2.5.1 MCP card:

To be updated after every check up. The assessment details are to be recorded in MCP card. In case the pregnant woman is having any risk condition/s, then ANM will certify with signature in the designated space provided in the front page of MCP card.



2.5.2 Line Listing Register:

An exclusive line listing register will be maintained by ANM at Sub center level. Format for line listing is attached as Annexure-II

2.6 ISSUE OF RED CARD:

Red card will be issued to all clinical and geographical high risk cases which will be carried by the woman during her visit to institution as well as VHNDs along with MCP card. This will keep a record of the treatment and management of her condition.

The ANM will issue the red card to the identified pregnant women. However in case the high-risk condition of any antenatal case is detected at the facility, then the respective facility in-charge will issue the red card to the pregnant woman.

State will provide the red Cards to the district for further distribution. Prototype of red card is at Annexure-III. ANM will also maintain an issue register for monitoring. Sample format for issue register is attached at Annexure - IV.

2.7 FOLLOW UP THROUGH HOME VISIT AND COUNSELING TO IDENTIFIED HIGH RISK PREGNANT WOMEN

The identified high-risk cases are followed up during VHNDs and through individual home visits

2.7.1 Follow up contact schedule

Contacts	1st	2nd	3rd	4th	5th	6th
Period	Within 12 weeks (3rd Month)	5th Month	6th Month	7th Month	8th Month	36 weeks & term (9th month)
Where (Platform)	VHND Session	Joint home Visit	VHND Session	VHND Session	Joint home Visit	VHND Session
Responsibility	ANM/AWW/ASHA	ANM/ MPHS (F)	ANM/AWW/ ASHA	ANM/ MPHS (F)	ANM/AWW/ ASHA	ANM/ MPHS (F)

2.7.2 Counseling to high-risk pregnant women

Two kinds of counseling will be provided to each high-risk pregnant woman

2.7.2.1 Group counseling at VHND- The monthly counseling topics as per VHND guideline is to be followed.

2.7.2.2 Family and Couple counseling during home visit - Family and Couple counseling by ANM and supervisor during home visit using "Family and couple counseling booklet on safe motherhood". During the home visit the focus of counseling and discussion will be on the following areas:

- Services available for antenatal care
- Diet and nutrition during pregnancy
- Personal hygiene
- Family support
- Danger signs during pregnancy and labour
- Importance of breastfeeding and new born care
- Family Planning
- Availability of referral services
- Importance of institutional delivery

2.8 BIRTH PREPAREDNESS PLAN

2.8.1 Time of Preparation of Birth Preparedness Plan:

It is to be prepared by 7th month of pregnancy.

2.8.2 Who will prepare?

To be prepared by ANM & ASHA in consultation with the family members during joint home visit and counseling.

2.8.3 Components of Birth preparedness planning:

- Place of delivery
- Contact details of service providers
- Mode of transportation
- Account details
- Identifying willing Blood donor
- Logistics and Records to be carried to hospital while going for delivery

The birth planning is to be done after doing complete couple counseling by using the counseling handbook. Format of birth planning is attached in Annexure-V



Activity Matrix

Activity	Platform	Responsibility	Time period	Means of verification	Monitoring official
Screening and identification of high risk cases	VHND	ANM with support of AWW and ASHA	During registration and subsequently in each of the 4 ante natal check up period	Individual pregnant woman assessment checklist	MPHS F/M, LS- ICDS/ Sector Medical Officer
Recording of high risk status	VHND/ Home visit	ANM	As soon as the pregnant woman is detected as high risk	MCP card and high risk line listing register	MPHS F/M, LS- ICDS/ Sector Medical Officer
Issue of red card	VHND/ Delivery points	ANM/Staff Nurse	As soon as the pregnant woman is detected as high risk	Red card issue register	MPHS F/M, LS- ICDS/ Sector Medical Officer
Home visit to high risk cases for follow up and counselling	At home	MPHS- F/ANM/ASHA	As per contact schedule	Red card	Sector Medical Officer/ Block and district level supervisors
Counselling to high risk cases	VHND/Home visit	ANM/ASHA	During VHND sessions and home visits	Family and couple counselling booklet on safe motherhood	MPHS F/M, LS- ICDS/ Sector Medical Officer
Preparation of birth preparedness plan	VHND/Home	ANM/ASHA	During VHND sessions and home visits	Format for birth preparedness plan	MPHS F/M, LS- ICDS/ Sector Medical Officer

2.9 REFERRAL OF HIGH RISK PREGNANT WOMEN AND PNC MOTHERS BY ANM

2.9.1 Referral Matrix:

ANM will refer the high-risk pregnant woman for institutional check up by using referral slips. The appropriate referral institution is to be decided as per the high-risk condition as mentioned below.

Categories of referral Institution	Dealing with High Risk Conditions	Who will refer
For High-Risk Pregnant Women/PNC Mothers		
BEmOC Center (Functional CHC DP)	<ul style="list-style-type: none"> • History of pre eclampsia/eclampsia PIH convulsion during previous pregnancy • History of Active TB/Leprosy • Pregnancy Induced Hypertension (BP more than 140/90) • Pregnant woman having Malaria/ Any high fever • Height <140cm • Weight gain after 1st trimester <500gm and more than 3kg • Bleeding PV • Presence of sugar & or albumin in urine • Premature Rupture of Membrane /Leaking • Foul smelling vaginal discharge • Decrease/no fetal movement 	ANM & Treating Physician considering type of services required
CEmONC Center (CHC/ SDH FRU)	<ul style="list-style-type: none"> • More than 4 earlier pregnancies • Previous Caesarean Section/ Any uterine surgery • History of APH/PPH • History of Previous complicated delivery • Diagnosed multiple pregnancy (Twin/Triplet) • History of Repeated spontaneous abortion more than 3 times • History of STI/RTI/HIV positive • Pregnancy with HIV positive/STI/RTI • Over distended/unusual larger size 	<ul style="list-style-type: none"> • Treating Physician of BEmOC if complication arises • HW (F) may also directly refer the clinically high risk red card holder mothers to the EmONC considering type of services required



<p>CEmONC Center (DHH/ SDH FRU having SNCU)</p>	<ul style="list-style-type: none"> ● Previous LBW baby delivery/ pre-tem delivery/Intra Uterine Growth Retardation (IUGR) Baby ● Previous neonatal death/still birth/ birth asphyxia ● History of Diabetes ● 1st pregnancy age <18 yrs ● Any pregnancy at age above 40 yrs ● Severe anemia (<7gm/ dl) ● Hepatitis B positive/ Jaundice ● Premature Contraction ● Over distended/unusual larger size ● Post dated pregnancy (More than 7 days from EDD) ● History of Thalassemia/Sickle Cell Disease/RH negative mother 	<ul style="list-style-type: none"> ● Treating Physician of BEmOC/ CEmONC (CHC/SDH) if complication arises ● ANMs may also directly refer the Clinically High Risk Red Card holder mothers to the CEmONC considering type of services required
<p>Medical College and Hospital</p>	<ul style="list-style-type: none"> ● History of Heart Disease ● History of Kidney Disease ● History of Thalassemia/Sickle Cell Disease/Rh negative mother ● Conceived after long time of infertility/Artificial reproductive techniques 	<ul style="list-style-type: none"> ● Treating Physician of BEmOC/ CEmONC, if complication arises ● ANMs may also directly refer the Clinically High Risk Red Card holder mothers to the CEmONC considering type of services required

2.9.2 Frequency of referral:

According to the high risk condition ANM will refer the case and in case of follow up ANM/ASHA will ensure the pregnant woman visits the referral institution as per the direction of treating doctor.

2.9.3 Means of transportation in referral cases

Free referral transportation is provided through 102/108 across the state.

2.9.3.1 Transportation of referral cases in difficult villages:

To increase accessibility in the difficult villages, two different alternative means of transportation is planned, especially in difficult identified villages as follows.

Mobility Point	Provisions
<p>Difficult Village to Motorable Vehicle point</p>	<ul style="list-style-type: none"> ● Light weight stretcher to be provided to each identified difficult village. ● The stretcher will remain as the property of GKS. The maintenance will be borne from GKS fund. ● District will be responsible to procure stretcher and supply to the GKS of the identified villages. ● Local Transportation cost of volunteers for carrying the beneficiary from home to vehicle point, if required, would be managed from the GKS fund. GKS to finalize the amount to be given to volunteers. ● This support is provided to transport pregnant women from 6th month of pregnancy onwards or any time if emergency arises ● Utilization of stretcher- AWW as convener of GKS will be the custodian of stretcher. However ASHA will be responsible for follow up & to get back the stretcher from family members of the pregnant woman to AWW. ● Documents to be kept for record at GKS level - Register to record the utilization of stretcher. In case of payment is made to volunteers for bearing stretcher, then payment voucher is to be kept with AWW.
<p>Vehicle point to Referral hospital</p>	<ul style="list-style-type: none"> ● Provision of hired vehicle for the identified 68 geographically difficult blocks, which will be over and above 102/108/Govt. ambulance. List of identified difficult blocks for provision of hired vehicle is attached at Annexure- VI. ● Location of the vehicle: The vehicle will be placed in a strategic location nearer to the identified difficult village/s where there is mobile connectivity. The placement of vehicle will be decided by MO I/C after discussion with supervisors. ● The vehicle will have a dedicated mobile number, which will be circulated to all ASHAs, AWWs and ANMs of identified blocks. ● In case of non-response of 102/108, call will be given to the hired vehicle by ASHA/AWW/ANM. ● A log book will be maintained by the vehicle in which the signature of the patient's attendant is to be kept.



2.9.3.2 Documents to be used by ANM for referral

2.9.3.2.1 Referral Slip - Referral slip to be issued to high risk cases along with red card by ANM. Prototype of referral slip is attached at Annexure- VII.

2.9.3.2.2 Referral Out register - To be maintained by ANM for keeping record of referral cases. ANM will give call to the referral facility for ensuring readiness which will be recorded in the register. The format for referral out register is mentioned at Annexure- IX

2.10 SERVICES FOR REFERRED HIGH RISK PREGNANT WOMAN IN THE FACILITIES

Any high risk case provided with referral slip and red card will visit appropriate facility for treatment and advice. Such referral can be made any time during the pregnancy basing on the condition of high risk.

2.10.1 Registration and Reporting:

- Any high risk case coming to health institution must be registered in OPD.
- No separate register is to be made for such cases; the existing OPD register will maintain the details. However such cases will be demarcated by putting circle mark in the register by the treating doctor/specialist.
- The monthly report will be collected by the Hospital Manager/Jr. Hospital Manager/ BPM from the OPD register for entry in HMIS.
- The treating doctor or staff nurse will enter the service and advice in the red card so that HW (F) and ASHA will do necessary follow up.

2.10.2 Diagnosis and Treatment:

Treatment provided to all high risk cases will be FREE of cost under mandate of JSSK scheme. Further, it must be ensured that all high risk cases should undergo ultrasound scan as per the advice of the treating doctor.

2.10.3 Other Provision for high-risk cases:

- In case of hospitalization during ante-natal, post-natal and during delivery, one attendant of high risk pregnant woman will be provided diet in the delivery points below DHH level from the existing diet cost under state budget.
- Prioritization for allocation of beds for all red card holders: Priority will be given for allocation of beds to the high risk cases as per the severity of condition. Hence ASHA/ANM must ensure the referred high risk case will carry Red Card with her.
- In case the pregnant woman has not been issued Red Card, then staff nurse can issue her the same immediately at the facility level.

2.10.4 Service Matrix at Faulty level

Activity	Platform	Responsibility	Time period	Means of verification	Monitoring official
Registration of high risk pregnancies	OPD	Doctor in OPD	Immediately	OPD register	Facility I/C
Recording of high risk cases	OPD Register/ HMIS	Hospital Manager/ Jr. Hospital Manager/ BPM	Monthly	OPD Register/ HMIS	ADMO (FW)/ SDMO/MO I/c
Updating of RED CARD	Referral facility level	Treating doctor or staff nurse	Immediately	RED CARD	ADMO (FW)/ SDMO/MO I/c
Diet provision to attendant accompanying High-risk pregnant woman in case of hospitalization	Facility	SDMO/MO I/c	Immediately	Diet Register	ADMO (FW)/ SDMO/MO I/c
Prioritization for allocation of beds to RED CARD holders	Facility	SDMO/MO I/c/ staff Nurse of Labour room	Immediately	PNC register	ADMO (FW)/ SDMO/MO I/c

2.11 STRENGTHENING OF VHND PLATFORM FOR QUALITY SERVICE DELIVERY AND IMPROVED PEOPLE'S PARTICIPATION

VHND popularly known as Mamata Divas is a singular and potential platform which is the basic forum for screening and identification of high risk pregnancies and sick & malnourished children at the village level for delivery of essential RMNCH+A services including counseling. In view of this, functionality of VHND sessions is of great significance.

Though 96 % of VHND sessions are conducted annually, the quality of service provisions and attendance of beneficiaries still remains as a challenge.

2.11.1 Strategies for strengthening:

Two pronged strategy is planned for strengthening VHND service platform

Strategy 1 - Improving coverage of eligible beneficiaries to VHND session

Strategy 2 - Quality service delivery



2.11.2 Activities for improving coverage of eligible beneficiaries to VHND session

2.11.2.1 To conduct special Integrated VHND and Immunization sessions in difficult to reach villages: Currently fixed day monthly sessions are being organised on Tuesdays/Fridays. For covering the eligible beneficiaries in difficult and hard to reach areas, special sessions will be held where both the VHND and immunization will be done on same day.

2.11.2.1.1 Features of Special Integrated VHND and Immunization session

- Each identified difficult village will be covered once in a month as per microplan
- The session days will be preferably on Monday or Thursday considering the existing micro plan of immunization and VHND
- These sessions will be managed by team of service providers consisting of ANM, AWW & ASHA of the concerned area, MPHWS - Male, MPHWS - Male and Female
- Special mobility cost will be provided for team mobility
- The organization cost will be as per the existing norm for hard to reach areas
- ANM will be responsible for carrying all the required logistics and concerned ASHA & AWW will arrange venue as per convenience. Venue can be preferably AWC/School building/ or any other place with privacy in the village. AVD will be responsible availing vaccine at the session site

2.11.2.1.2 Activities for conduction of special integrated VHND and Immunization session

Action point: 1- Preparation of special Micro-plan for integrated sessions

- Identification of difficult villages, If there is no such village then VHND to be continued as per existing plan
- If any difficult villages exist, then ANM will prepare special micro plan in addition to the existing micro plan

Action Point: 2 - Assessment of all session sites

- Concerned ANM will conduct session site assessment through a defined checklist to identify the logistic requirements for each of the VHND session site.

2.11.2.2: Performance based incentive to ASHA for mobilization of eligible beneficiaries to VHND session site through IPC

2.11.2.2.1 Performance Deliverables for incentivisation of ASHAs:

ASHA has to mobilize minimum 80% of beneficiaries to VHND sites (Given benchmark is applicable for both monthly fixed day session sites and special integrated sites) for becoming eligible for the incentive.

Step-1 Due list to be prepared for VHND and immunization as per MCTS work plan and shared with ASHAs at the end of VHND session for next month.

Step-2 Attendance as per due list to be reflected in Minutes register & signed by all members present.

Step-3 ANM to certify for incentivisation based on performance of individual ASHA. Incentive to be calculated for VHND and immunization separately considering the 80% coverage of beneficiary of each activity

2.11.3 Activities for Quality of Service Delivery in VHND sessions:

The three broad areas of focus envisaged for ensuring quality at VHND sessions are :

- Essential provisioning for Site readiness
- Strengthening monitoring & supervision
- Skill building of ANMs through mentoring

2.11.3.1 Essential provisioning for site readiness:

ANM/AWW/ASHA to ensure the following readiness of site for holding full-fledged VHND sessions.

- The designated site is AWC. In case there is no AWC building then, the AWC is to be hired by ICDS.
- A set of equipment/instruments at each session site is to be present as per mandate. The details of equipments list is attached as Annexure-XI
- An examination table with curtained partition must be available
- Outdoor Display board at the front of VHND site depicting date, time & services offered (Prototype shared with districts)
- IEC materials must be displayed inside the room during VHND (Prototype shared with districts)

ASHA Incentive

Performance based Incentive- @ Rs.100/- per session

Strict adherence to given bench mark- min 80% eligible cases to be mobilised

Eligible beneficiaries- ANC mothers (4 visits expected. 1st visit-within 12 weeks, 2nd visit-14 to 26 weeks, 3rd visit- 28 to 34 weeks & 4th visit- 36 weeks & term) + PNC mothers (2 visits within 42 days) + LBW (Bimonthly visits expected upto 2 years + SNCU & NRC discharged cases upto 2 years (as per protocol)

Calculation total beneficiaries load in each session: ANM to calculate load based on above given norms.



2.11.4 Monitoring & Supportive Supervision

- Supervisors (MPHS M & F) & AYUSH doctors who are equipped with skills to monitor and support the existing interventions under VHND.
- The plan is to utilize the cadre in convergence with ICDS supervisors for monitoring & supportive supervision.
- Specific supervision plan including special session supervision plan must be available with all supervisors.

2.11.5 Skill building of ANMs through mentoring

To improve the knowledge and skills of ANM for providing all required services in VHND, the trained mentor from MPHS (F) and AYUSH category will provide regular mentoring visits as per ANM mentoring guideline until the ANM attains desirable knowledge and skills for service delivery.



3

Management of High-Risk Pregnancies by Staff Nurse in Labour Room

SBA and NSSK trained staff nurses are to be placed at labour room for conducting deliveries of both high risk and non high risk pregnant women as mandate of labour room. However, there is a need to pay special attention to high risk pregnancies. The onset of high risk condition can be during ante-natal period, intranatal or within 42 days after delivery. Thus a standard protocol is to be followed in the labour room by staff nurses for all high risk mothers. However, staff nurses will call for O&G specialists for technical advice and treatment.

The high risk pregnant woman identified by HW (F) at community is provided with red card which she will carry to the facility. In case high risk condition is identified at the facility, the concerned staff nurse of the labour room will issue red card to the pregnant woman.

High risk pregnant women may come to the labour room with following conditions:

1. PIH /Eclampsia/Convulsion
2. Anemic mother Hb% - < 7 gm%
3. APH/PPH
4. Abnormal presentations
5. Multiple pregnancies
6. Grand multipara (more than 4 pregnancies)
7. Fetal distress
8. Bad obstetrics history (previous 2 or more pregnancy loss)
9. Previous C.S./any uterine surgery
10. Pregnancy with heart disease/ diabetes/ kidney disease/ active TB/ HIV / Jaundice/ Sickle Cell



disease

11. Malaria/ fever
12. Pre-mature Rupture of Membranes (PROM)/ Foul smelling vaginal discharge
13. Prolonged labour/Obstructed labour
14. Incomplete abortion/ ruptured ectopic pregnancy/ ruptured uterus (with/ without shock)
15. Elderly primi/ Teenage Pregnancy
16. Any pregnancy after 40 years
17. Any pregnancy conceived after long period of infertility or treatment for infertility.
18. Previous history of perinatal death (all IUDs + all early neonatal deaths)/ preterm delivery/ LBW/ birth asphyxia/ difficult delivery
19. Short height (less than 140 cms)
20. Preterm labour/post dated pregnancies in current pregnancy

Admission of pregnant woman for delivery or for any treatment at labour room is to be done through OPD (or O&G OPD)/ Casualty OPD. However, any direct admission to the labour room is to be accepted and post facto counter signature of doctor can be done in the bed head ticket. The same bed head ticket is to be sent to the OPD or Casualty OPD for entry in the register.

3.1 BASICS OF NORMAL LABOUR, DELIVERY AND POSTNATAL CARE

The high risk pregnancies can either have normal delivery or may require surgical intervention basing on the condition of pregnant woman. Hence the staff nurse must have clear knowledge about the basic components to be taken of in case of normal deliveries.

3.1.1 What is Active Labour?

- 2-3 uterine contractions in 10 mins
- Progressive shortening and thinning of the cervix
- Show only
- Cervical dilatation 4 cm or more

3.1.2 Normal Labour (4 stages)

- First Stage: onset of labour pains to full dilatation of the cervix
- Second Stage: full dilatation of the cervix to the delivery of the baby
- Third Stage: After the delivery of the baby till delivery of the placenta
- Fourth stage: Two hours following delivery.

3.1.3 Supportive Care (before & during labour)

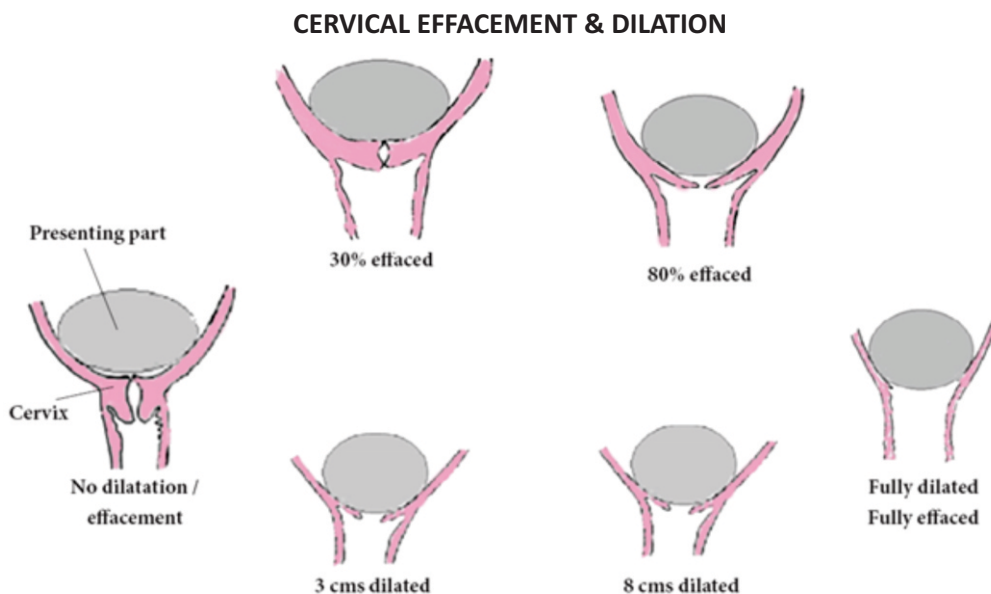
- Avoid unhealthy & inappropriate interventions (e.g. repeated p/v exam.) which may lead to complications.
- Allow a birth companion if possible.
- Good communication and building trust with patient.

- Encourage walking around and changing positions frequently, till beginning of 2nd stage of labour.
- Encourage adequate intake of light food and drinks.
- Monitor maternal and fetal wellbeing using the partograph.

3.1.4 Management of Labour

In active labour (cervix dilated to 4cm or more)

- START partograph
- Monitor every 30 min: uterine contractions, Foetal heart rate (FHR), color of the liquor
- Monitor every 4 hours: Cervical dilatation, Heart rate, Blood pressure, Temperature.
- Look for any danger signs (e.g. FHR comes below 120/bpm or more than 160 /bpm; Liquor becomes meconium or blood stained; or no progress of labour which can be known from partograph; or any abnormality in pulse, BP, respiration & temperature or cord prolapse which may occur following rupture of membranes ; that the mother may develop during labour).



Second Stage Full dilatation of cervix to delivery of baby.

3.1.5 Delivery of the head:

- Control birth of the head to keep it flexed.
- Gently support the perineum as the baby's head is delivered.



- Feel around the baby's neck for the umbilical cord:
 - * If the cord is loose, slip it over the baby's head
 - * If the cord is tight clamp and cut it.
- No routine shaving of the perineum/episiotomy. However the hairs may be trimmed if required.

3.2 ACTIVE MANAGEMENT OF THE THIRD STAGE (AMTSL) (FROM DELIVERY OF BABY TO DELIVERY OF PLACENTA)

- Palpate the abdomen to rule out the presence of additional baby/ies
- Clamp and cut the umbilical cord after cessation of cord pulsation -if the baby cries immediately; otherwise if the baby does not cry immediately, cut the cord immediately to resuscitate the baby without waiting for cessation of cord pulsation
- Administer Oxytocin: 10 units IM on the antero-lateral aspect of thigh
- Deliver the placenta by Control Cord Traction (CCT)
- Uterine massage is to be done to prevent atony uterus
- Examine the fetal and maternal surfaces of the placenta before disposal
- Placenta should deliver within 30 minutes of delivery of the baby. If not, it may be a case of retained placenta-refer to MO/O&G Specialist

3.3 POST NATAL CARE PRACTICES IN FACILITY

3.3.1 Frequency of Observations and recording (to check for general condition, BP, Pulse, Vaginal bleeding & uterus to make sure that it is well contracted and other feto-maternal complications)

- 1-2 hours: every 15 minutes
- 3-5 hours: every 30 minutes
- >5 hours: every 4 hours

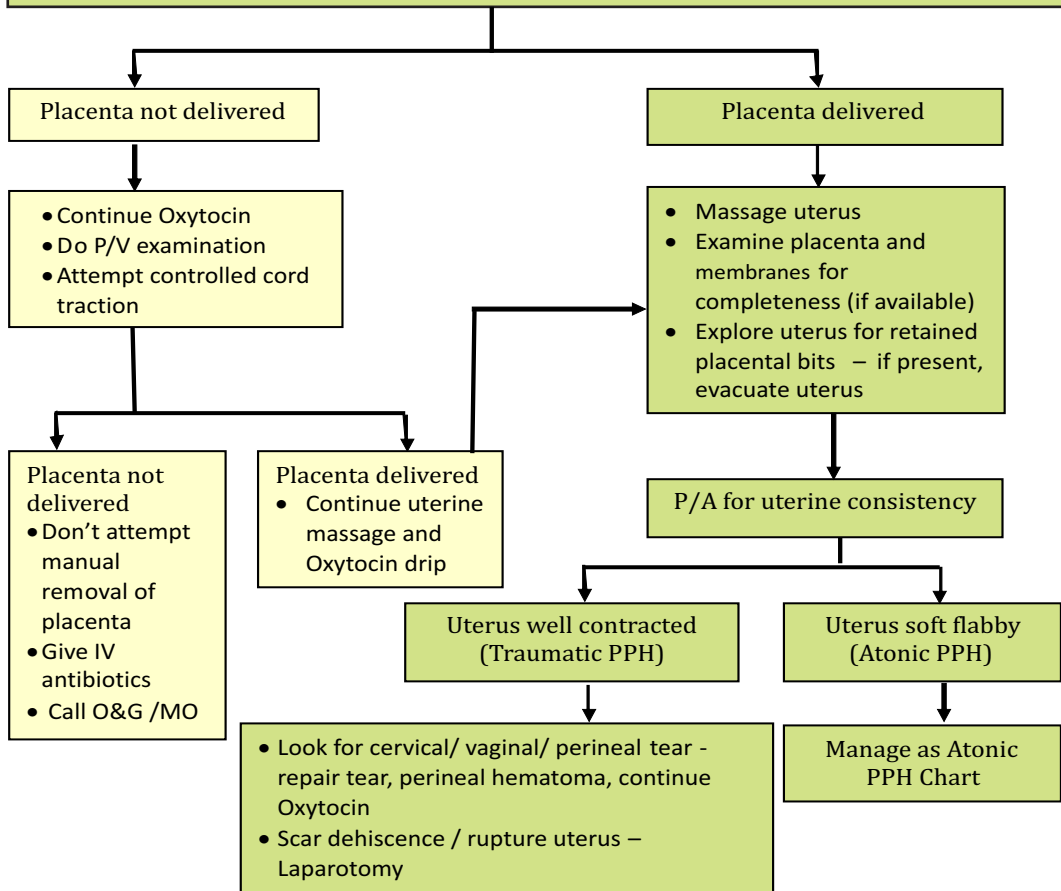
3.3.2 Length of stay in health facility:

- Normal delivery cases - 48 hours
- Complicated cases -as advised by the treating doctor
- Maintain all records of mother & baby

3.4 MANAGEMENT OF PPH

- Shout for help, Rapid Initial Assessment – evaluate vital signs: Pulse Rate (PR), BP, Respiratory Rate (RR) and Temperature
- Establish two I.V. lines with wide bore cannulae (16-18 gauge)
- Draw blood for grouping and cross matching
- If heavy bleeding P/V, infuse ringer’s lactate (RL)/ Normal Saline (NS) 1 L in 15-20 minutes
- Give Oxygen @ 6-8 L/min by mask, Catheterize
- Check vitals and blood loss every 15 minutes, monitor input and output

- Give Inj. Oxytocin 10 IU IM (if not given after delivery)
- Start Inj. Oxytocin 20 IU in 500 ml RL @ 40-60 drops per minute
- Check to see if placenta has been expelled



- If bleeding continues check for Coagulopathy Blood transfusion if indicated
- In case the patient needs to be shifted to higher facility, use non-pneumatic anti-shock garment before transferring the patient to ambulance
- The non-pneumatic anti-shock garment will be available in all FRU delivery points and 108 ambulances.

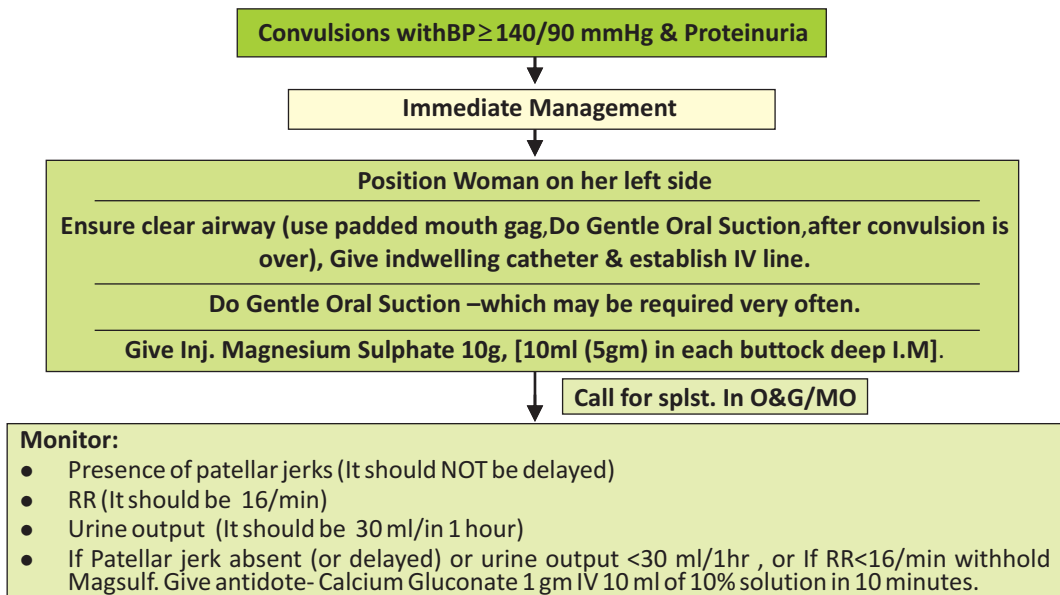


Be aware of blood loss!

Signs and action
If the vaginal pad is completely soaked within 5 minutes (even without rise in respiration rate/ pulse rate/fall in BP - it should be treated as an alarming sign). Shout for help, set the IV line , start R.L. with 20 units of oxytocin @ 30drops/min
Mild increase in pulse & resp. rate-give IV fluids
Fall in BP -give fluids +/- volume expanders +/- and blood transfusion as per advice of M.O./O & G Splst.

Signs	Blood loss	Action
Mild increase in pulse	700 mls	Give IV fluids + oxytocin
Increase in pulse and respiratory rate	1500 mls	Give IV fluids + oxytocin
Fall in BP	2000 mls	Give fluids +/-volume expanders and/or blood as per the advice of the MO/ OG Splst.
Cold, drowsy, very high pulse, very low BP	2500 mls	Multiple transfusions required- call for M.O./O&G Splst.

3.5 ECLAMPSIA



3.6 USE OF PARTOGRAPH

Partograph is used to recognise signs of obstructed labour, prolonged labour & fetal distress during active labour. By plotting of partograph the risk period is identified and management is done accordingly.

[N.B.: Partograph should not be done in case of 1. Patient is not in active labour
2. Patient is having APH 3. Patient is posted for Elective C.S.]

3.6.1 Starting the Partograph

A partograph must only be started when a woman is in active labour. Labour is prolonged if the woman has been contracting (experiencing labour pains) for more than 12 hours without delivery in primi & 6 hours in case of multi-gravida.

3.6.2 Active Labour

- Cervix must be 4 cm (or more) dilated.
- There must be 2 good uterine contractions in 10 minutes.

The active phase (faster period of cervical dilatation) is from 4 cm to 10 cm (full cervical dilatation).




In the active phase, contractions must be three or more in 10 minutes

3.6.3 Points to Remember

- The dilatation during active phase is from 4 cm to 10 cm and dilatation should be at the rate of at least 1 cm/hour, often quicker in multigravida
- Always initiate plotting on the alert line
- Contractions are observed for frequency and duration
- After 4 hours the next PV examination should be done & findings to be plotted on the partograph. If it is to the right of the alert line, it is implied that the labour is not progressing and requires intervention. If the plotting is on the alert line or to the left then labour is progressing well and there may be a normal delivery

The number of contractions in 10 minutes is recorded

The three ways of shading duration of the contractions are: (Give details from the SAB Manual)

- if contractions are Less than 20 seconds, then mark as  in the box
- if contractions are Between 20 and 40 seconds then mark as  in the box
- if contractions are More than 40 seconds then mark as  in the box

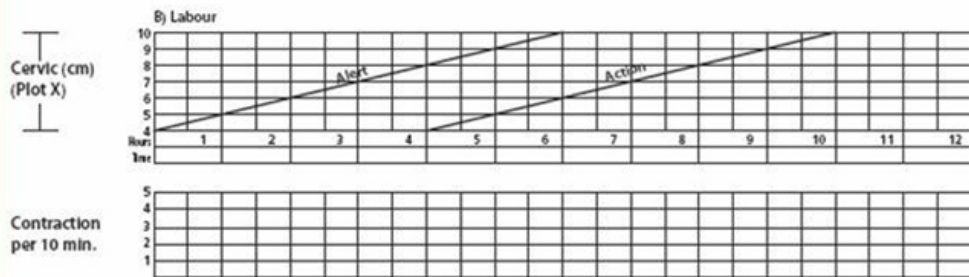
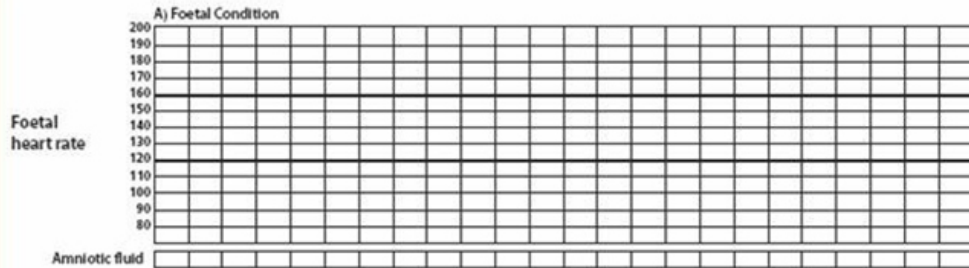


THE SIMPLIFIED PARTOGRAPH

Identification Data

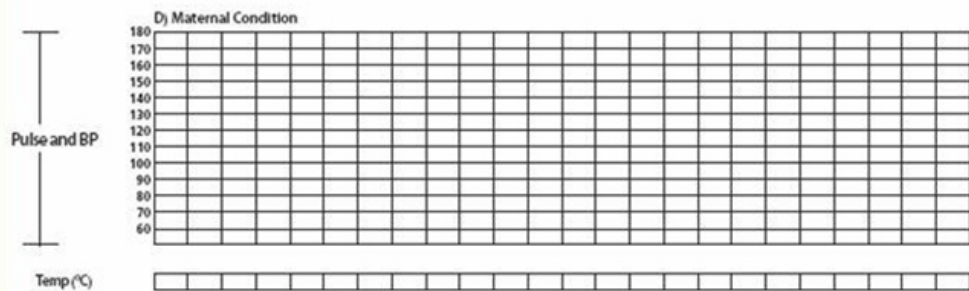
Name: _____ W/O: _____ Age: _____ Gravida/Parity/Abortion _____ Reg. No: _____

Date & Time of Admittance _____ Date & Time of ROM: _____



C) Interventions

Drugs and I.V. fluid given _____



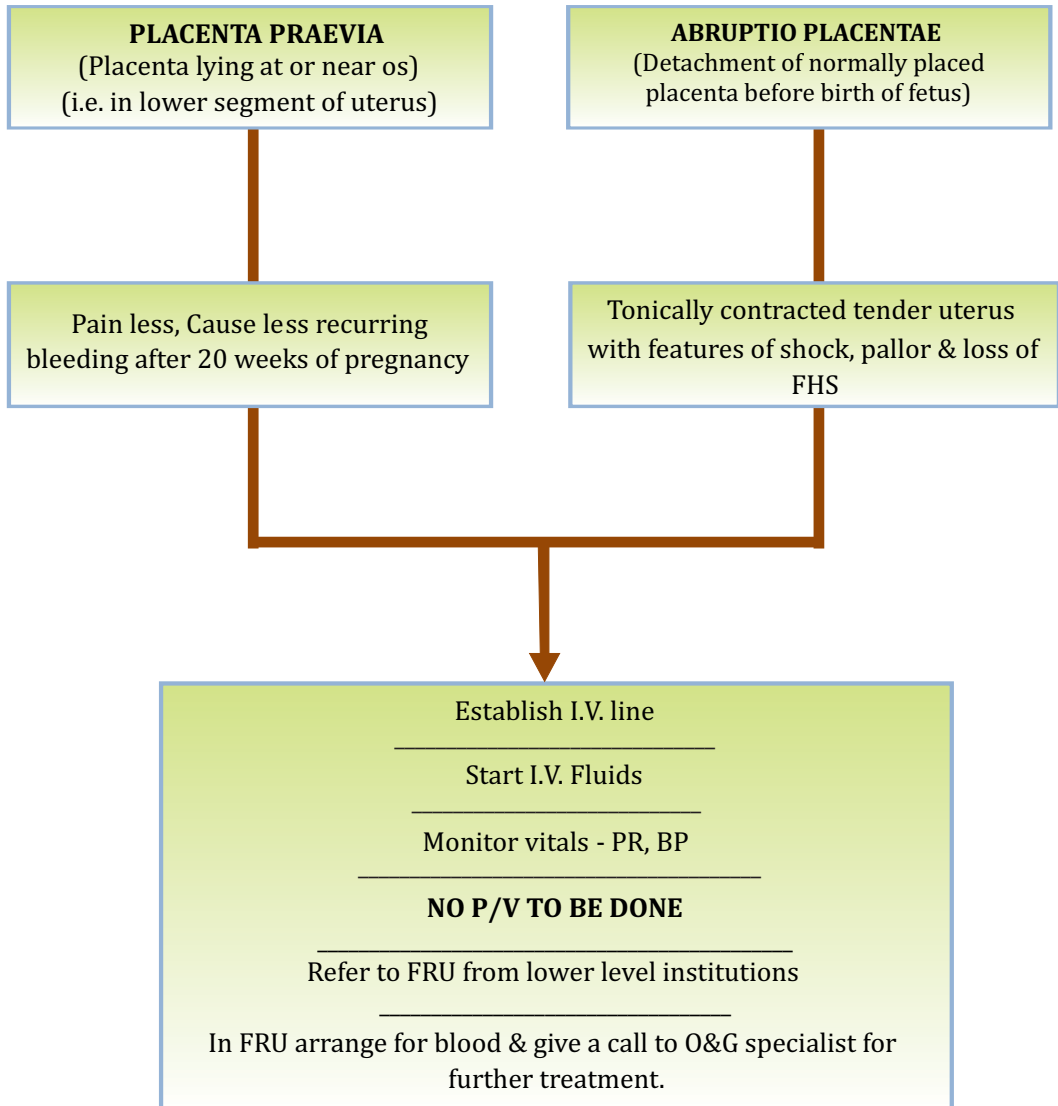
Initiate plotting on alert line

Refer to FRU when ALERT LINE is crossed

- Start partograph in active phase of labour
- Take action when the appropriate facilities and expertise exist
- In case of referral to a higher center is required, referral slip is to be issued and the FRU staff must be alerted over telephone.

3.7 ANTEPARTUM HEMORRHAGE

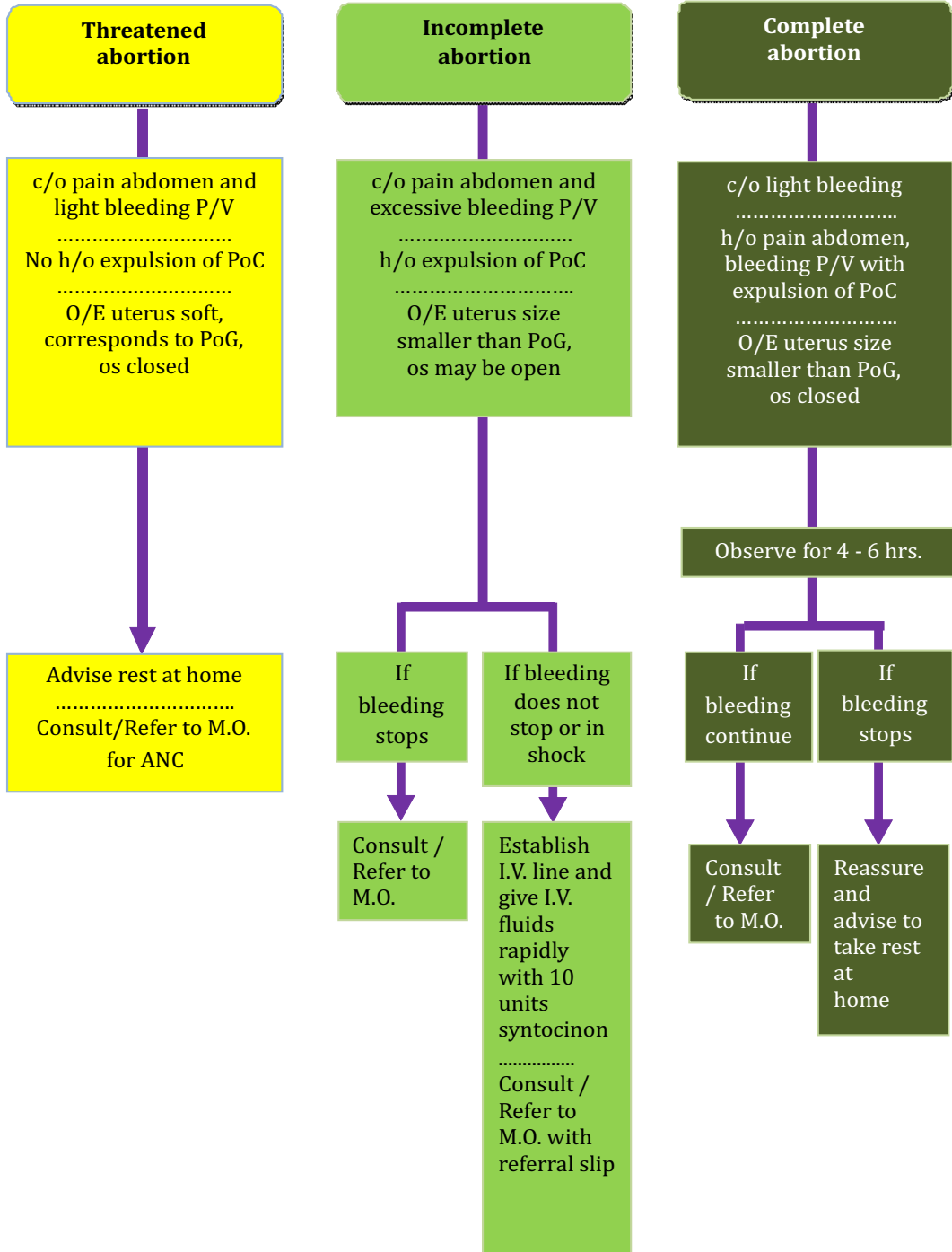
VAGINAL BLEEDING AFTER 20 WEEKS





3.8 VAGINAL BLEEDING

BEFORE 20 WEEKS



3.9 OBSTETRIC EMERGENCIES

In addition to high-risk pregnancies, following obstetrics emergencies may arise at labour room any time during or after delivery process.

3.9.1 During delivery

- Heavy & sustained contraction but cervical dilation is not in progress
- If total duration of labor is more than 12 hours.
- Sudden decrease in rate and intensity of uterine contraction or cessation or stoppage of contraction before delivery
- Contraction adequate, cervix full dilated but head / presenting part not descending
- Sudden heavy bleeding
- Sudden collapse - fall in BP, rapid & low volume pulse
- Rapid, hurried and deep respiration & dyspnoea
- Sudden convulsion
- Fetal distress (FHR less than 120 more than 160, or no FHS)
- Meconium&/or blood stained liquor
- Excessive fetal moment
- Twin, face presentation, breech, & other abnormal presentations, Hand prolapse, Cord prolapse, Shoulder dystocia, Transverse lie - immediate call for O&G Specialist/MO

3.9.2 After delivery

- Placenta not delivered
- Heavy bleeding
- Fall of BP and sudden collapse
- High rise of Temperature
- Convulsion
- No Urination for 8 hours/Less than 25ml. per hour
- Chest pain & dyspnea

If any one or more than one of the above mentioned conditions occurs, then Staff Nurse will give immediate call to the O&G specialist/ Medical Officer for necessary action



3.10 MANAGEMENT OF SHOCK IN PREGNANT WOMAN

3.10.1 Causes of Shock

In pregnant women

- Bleeding
- Sepsis
- Cardiac: Heart failure due to anaemia can be a cause
- Neurogenic

3.10.2 Signs of shock

- Brain - anxious, agitated or irritated, confused or drowsy and unconscious
- Skin - sweaty or cold and clammy
- Breathing- rapid
Conjunctivae -pale
- Pulse- weak and fast >100/minute (sometimes "bounding pulse")
- BP - low systolic < 90 mmHg (late sign)
- Kidney- poor urine output
- Fetus- distressed (FHR below 120 bpm or above 160 bpm)

3.10.3 Action for Shock Management

- Shout for help
- Tilt to lateral position (recovery position)
- Airway and Breathing
- Check & clear airway
- Check breathing
- If not breathing: Airway opening manoeuvres and assist breathing
- Give oxygen (if available)

3.10.4 Circulation

- Get IV access and draw blood samples for necessary investigation
- If pulse >100 / minute or BP < 90 mm Hg or heavy vaginal bleeding, Give 1 L. IV fluid over 20 minutes & call for MO/O&G specialist.
- If at a lower level facility, Prompt Referral to FRU after resuscitation

3.11 MANAGEMENT OF UNCONSCIOUS PREGNANT WOMAN

3.11.1 Grading reduced level of consciousness

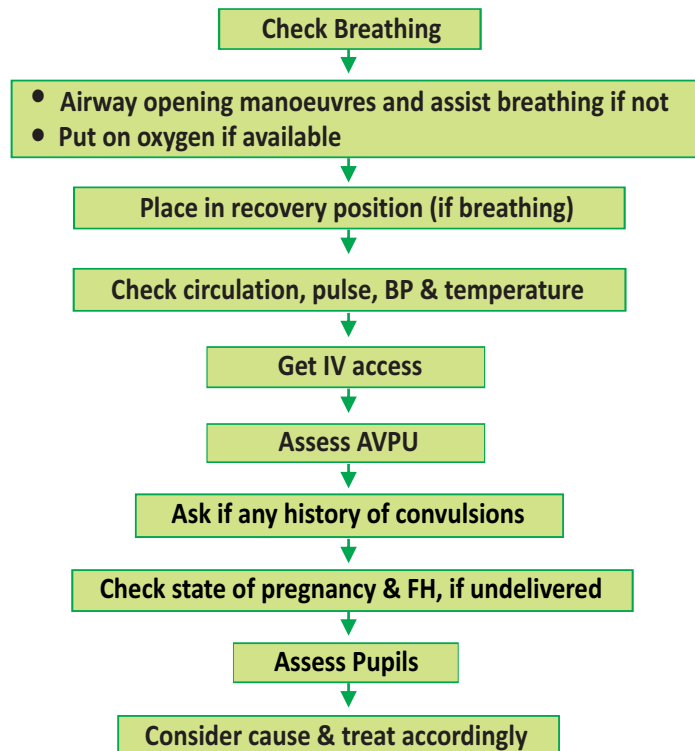
A - Alert

V - Not alert but responds to Voice or confused or drowsy

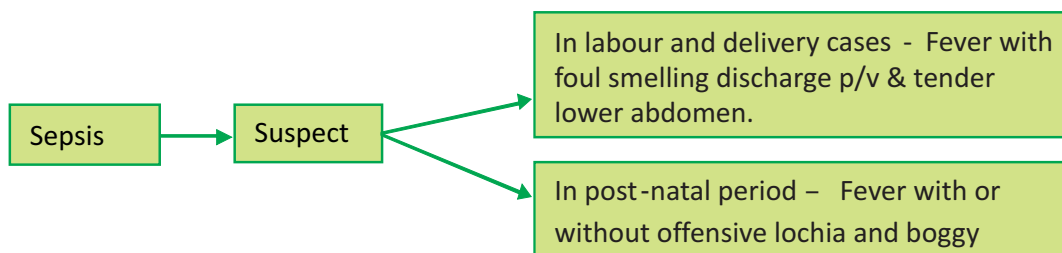
P - No response to voice but responds to Pain

U - No response to pain -Unresponsive

3.11.2 Management of reduced level of consciousness



3.12 MANAGEMENT OF SEPSIS





3.12.1 Signs and symptoms for recognition of Sepsis

- Fever: temperature $> 38^{\circ}\text{C}$
- Warm extremities
- Fast breathing
- Increased maternal and fetal heart rate
- Altered mental state
- Low BP

3.12.2 General Management Principles

- Airway Breathing & Circulation (ABC)
- If conscious, increase oral fluid intake and in all start IV fluids
- Treat fever and underlying causes
- Provide Antibiotic therapy (Ampicillin Gentamycin Metronidazole)
 - Not Severe: oral ampicillin 1g, 80mg gentamicin IM, oral metronidazole 400mg
 - Severe: IV ampicillin 1g stat, 80mg gentamicin IM & IV metronidazole 500mg

3.13 URINARY TRACT INFECTION

3.13.1 Cystitis:

- Ampicillin 500mg orally QDS for 3-5 days or
- Cotrimoxazole 160 / 800mg orally BD for 3-5 days
- If infection recurs: Check C&S, give prophylaxis

3.13.2 Pylonephritis:

- Ampicillin 2g IV + Gentamicin 80mg IM
- Once afebrile for 48 hrs give amoxicillin for 14/7
- Give prophylaxis for remainder of pregnancy and 2 weeks post partum

3.14 RESUSCITATION OF MOTHER

- Ensure a safe environment for patient and rescuer.
- Shake and shout and, if no response, call for help and return to patient.

If patient appears lifeless:

- Turn patient on to her back and place wedge under right side of abdomen to relieve aortocaval compression.

Step 1 - Open the Airway

- Remove any obvious obstruction from mouth
- Perform head tilt by placing hand on patient's forehead and tilting the head back
- Perform chin lift by placing two fingers under the point of the patient's chin and lifting the chin forward
- Jaw thrust, performed by placing fingers behind patient's jaw and lifting jaw forward, may be necessary
- Insert airway adjunct e.g. oropharyngeal airway to keep airway patent

Step 2- Assess Breathing for 10 seconds

- Look for chest movements
- Listen for breath sounds
- Feel for movement of air

If there is absence of breathing in the presence of an open airway, take this as an absence of circulation

- If the patient is breathing, turn her in to the recovery position.
- If the patient is not breathing, give 30 chest compressions followed by two breaths
- Chest compressions are delivered to the middle of the lower half of the sternum
- Place the heel of your first hand on top of the other and interlock the fingers of both hands. Keep in midline to ensure that pressure is not applied over the ribs. Do not apply pressure over the abdomen or bottom tip of the sternum.
- Lean well over the woman and, with your arms straight, press down vertically on the sternum to depress it approximately 4-5 cm at a rate of 100 compressions/minute. Change the person delivering the compressions every two minutes but avoid delays in changeover
- Breaths are delivered by a facemask and self-inflating bag or pocket mask may be used. Maintain head tilt and chin lift when giving breaths. Each breath should last about one second and should make the chest rise as with a normal breath

If available, oxygen should be given as soon as possible

If Cardio pulmonary resuscitation (CPR) unsuccessful after 4-5 minutes, perform caesarean section. This is urgent to reduce the pressure of the pregnant uterus on



the maternal vessels. The patient does not need to be moved to the operating theatre.

Consider and treat causes of cardiopulmonary arrest:

Four Hs:

- Hypoxia
- Hypovolaemia
- Hyperkalaemia and other metabolic disorders
- Hypothermia (very unlikely)

Four Ts:

- Thromboembolism
- Toxicity
- Tension pneumothorax (very unlikely)
- Cardiac tamponade (very unlikely)

3.15 WASTE DISPOSAL

Waste Disposal

Bio-Medical Waste Disposal

1. Segregation 2. Disinfection 3. Proper storage before transportation 4. Safe disposal

 <p>Yellow Bag</p> <p>Human tissue, placenta, products of conception, used swabs/gauze/bandage, other items (surgical waste) contaminated with blood</p>	 <p>Red Bag</p> <p>Used mutilated catheters, I.V bottles and tubes, syringes, disinfected plastic gloves, other plastic material</p>	 <p>Black Bag</p> <p>Kitchen waste, paper bags, waste paper/thermo col, disposable glasses and plates, left over food</p>	 <p>Proper handling & disposal of sharps</p> <p>All needles/sharps/I.V. cannulae/broken ampoules/ blades in puncture proof container</p>
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All plastic bags should be properly sealed, labeled and audited before disposal

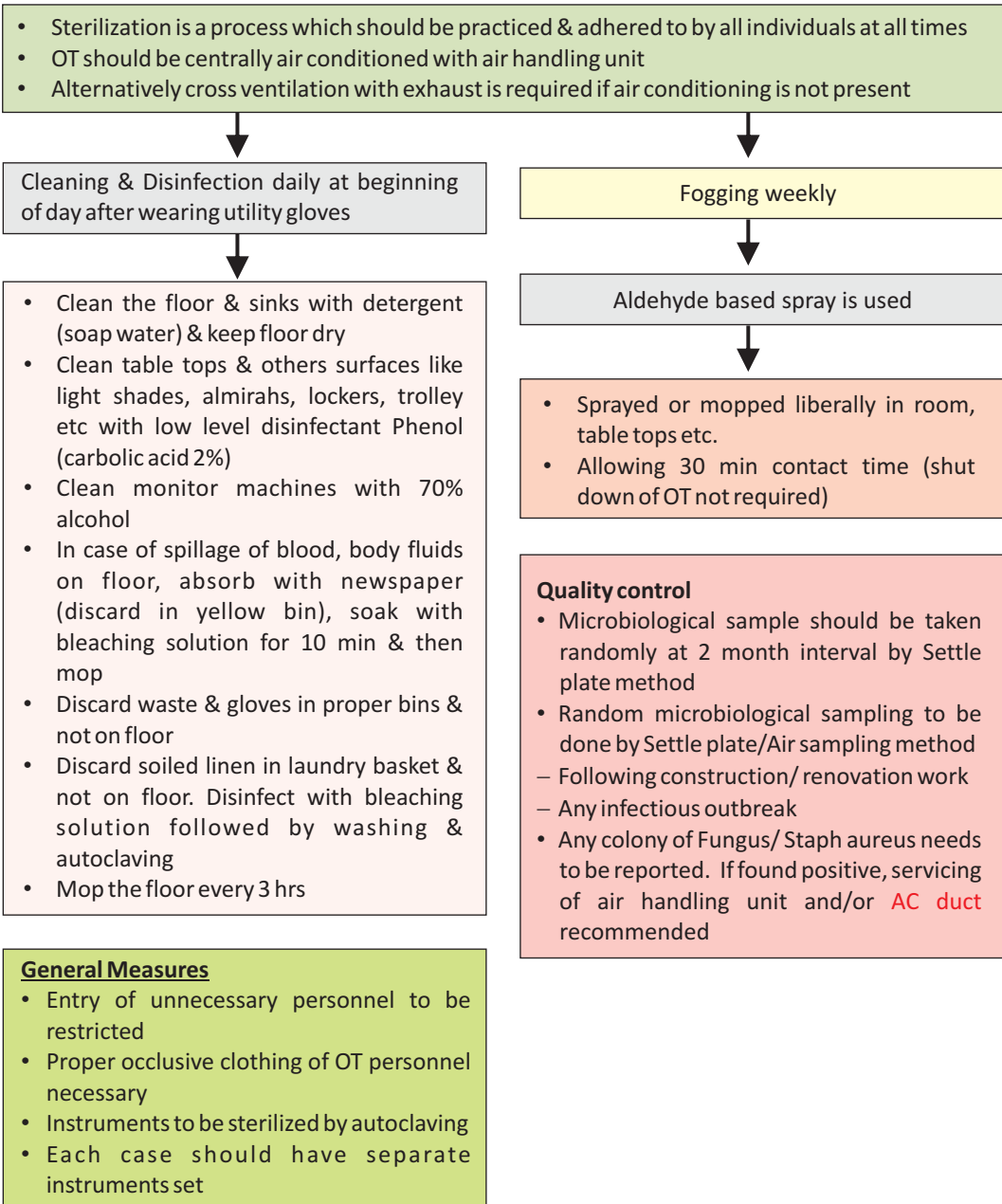
Liquid Medical Waste (LMW) Disposal

- Avoid splashing
- Treat the used cleaning/disinfectant solution as LMW
- Pour LMW down a sink/drain/flushable toilet or bury in a pit
- Rinse sink/drain/toilet with water after pouring LMW
- Pour disinfectant solution in used sink/drain/toilet at the end of each day (12 hrly)
- Decontaminate LMW container with 0.5% bleaching solution for 10 minutes before final washing

PEP
(Post Exposure Prophylaxis)

To be given in case of accidental exposure to blood and body fluid of HIV +ve woman

3.16 OPERATION THEATRE STERILIZATION





3.17 REFERRAL

Inter facility referral is required for high-risk pregnancy, delivery; and woman within 42 days of delivery who develop complication.

In due course of management and treatment of ANC cases, management of delivery & PNC cases, at times there is a need to refer the patient to higher facility. The conditions for inter facility referral should be based on the requirement at higher treatment, not for any non-clinical reasons.

However following measures are to be taken by the referring facility before sending the patient to the higher facility.

- Issue inter-facility referral slip to the pregnant woman/ PNC woman. If required, partograph is also to be attached with the referral slip. Prototype of inter-facility referral slip is at Annexure- VIII
- Issue red card from the facility, in case not issued
- Communicate the attendant of the patient to submit the referral slip and partograph to the treating doctor at the referred facility immediately after reaching there.
- All inter-facility referred cases are to be entered in referral-in register. Prototype of Referral –In register is at **Annexure –X**.



4

Standard Operating Protocol for Identification, Management, Referral & Follow up of High-Risk Under Five Children by ANM/ASHA at Community



4

Standard Operating Protocol for Identification, Management, Referral & Follow up of High-Risk Under Five Children by ANM/ASHA at Community

It is recognized that most of the newborn & under five deaths occur due to preventable causes such as birth asphyxia, sepsis & prematurity (in newborns) and pneumonia, diarrhoea & malnutrition (in under five children). However, these deaths could be averted through timely identification of danger signs with appropriate care and referral. In an effort to strengthen the management of high risk cases, the state has introduced some novel interventions, such as use of disposable delivery kit, distribution of resuscitation and baby kits to ANMs, issuance of red card, etc. The standard operating protocol for identifying high risk children in the community and their appropriate management, referral and follow up is described in this section.

4.1 IDENTIFICATION OF HIGH RISK CASES

Timely identification of high risk cases and appropriate management can reduce under five mortality. High risk cases are grouped into:

1. High risk newborns
2. High risk children

4.1.1 High risk newborns

All newborns will be screened at birth by ANM and during home visits by ASHA for identifying high risk cases. Any of the following conditions will be considered as a high risk newborn:

1. Babies delivered at home



2. Pre-term baby (<37 weeks)
3. Low birth weight baby (<2500gms)
4. Large baby (>4000gms)
5. Baby is lethargic, does not cry/poor cry, pale or blue, cold to touch
6. Baby is unable to suck or refuses to suck
7. Baby is not breathing/has fast breathing (>60 per min)/ has difficulty in breathing/grunting
8. Baby has yellow colouration (jaundice)
9. Baby is having fits
10. Has birth defects
11. Outcome of multiple pregnancy

4.1.2 High risk children

All under five children will be screened by ASHA/ANM during home visits or at fixed immunization day (FID) & VHND for identifying high risk cases. Under any of the following conditions a child will be considered as a high risk child:

1. Lethargy/unconsciousness
2. Convulsions
3. Not able to feed
4. Intractable vomiting
5. Loose motions with dehydration/blood in stool
6. Fever with or without rash
7. Cough/Difficulty in breathing/ Fast breathing
8. Grunting/Nasal flaring/chest indrawing
9. Pallor
10. Jaundice
11. Severe Acute Malnutrition (SAM)
12. Ear or eye problem
13. Any other problem in which the parents feel insecure

All high-risk cases (newborns & children) will be issued a red card by the ANM for easy identification and prioritization of service delivery to these cases.

4.2 MANAGEMENT OF HIGH-RISK CASES

While certain cases can be managed by the ANM in the community, there are certain conditions that require facility level care. Management of the conditions which is feasible at community level has been elaborated below. All the other conditions should be referred to the nearest health facility as per the referral protocol.

4.2.1 Management of LBW babies

A low birth weight baby is a baby who weighs less than 2500gms. If a baby is less than 2500 gms but more than 1800gms, s/he can be managed at the community. However, babies weighing less than 1800gms should be immediately referred to SNCU as per referral protocol.

For babies weighing between 1800gms to 2500 gms, the following is to be done:

1. Start breastfeeding, if able to suck
2. If unable to suck, give expressed breastmilk with katori-spoon and shift to breastfeeding as soon as baby is able to suck
3. Avoid bath till baby weighs 2.5 kg
4. Provide KMC, cover the baby with warm & clean clothes/blanket, use socks and cap provided in the baby kit (Annexure-XII)
5. Give injection vitamin K- 1mg, IM
6. Maintain hygiene to prevent infection

4.2.2 Management of babies that are unable to suck

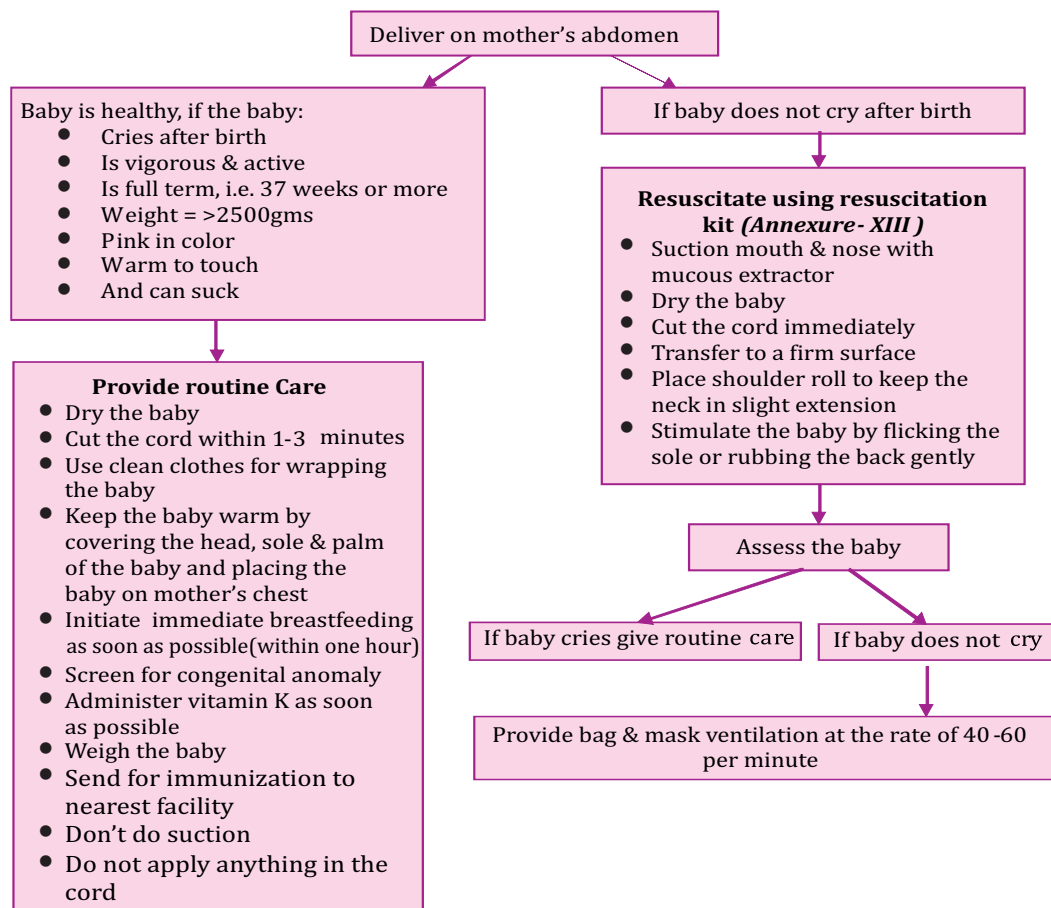
Baby may be unable to suck under the following conditions:

No.	Conditions	Recommendations
1	Cleft lip, cleft palate, IUGR baby	Katori & spoon feeding till baby is able to suck
2	Large nipple	
3	Inverted nipple	Use roll over technique along with frequent latching
4	Sore or cracked nipple	Application of hind milk and correct attachment
5	Oral thrush	Application of Clotrimazole mouth paint



4.2.3 Management of home delivery babies

All deliveries should be conducted at the facility and home deliveries should not be encouraged. However, in certain cases where institutional delivery is not possible, the ANM should conduct home delivery as per the following procedure:



All home deliveries should be conducted using Disposable Delivery Kit (Annexure-XIV). DDK should be kept preferably with SBA trained ANM or ASHA in hard to reach areas. In case, delivery is not attended by SBA trained ANM, the ASHA may assist the delivery using DDK and inform ANM immediately for essential newborn care.

In case of preterm labour (24-34 weeks), antenatal corticosteroid (injection Dexamethasone) is to be given by ANM as per scheduled dose (prescribed under INAP guideline) to reduce the complications related to prematurity of newborn. ANM should weigh the baby after delivery, provide routine care and refer the baby to SNCU, if the baby is <34 weeks or <1800gms. Injection Dexamethasone can also be given to mothers having diabetes or pre-eclampsia.

4.2.4 Management of sepsis

A baby is suspected to have sepsis, if the baby has any of the following conditions:

1. Not able to feed/no breast attachment at all/ not sucking at all
2. Less than normal movements
3. Lethargic or unconscious
4. Convulsions
5. Fast breathing (60 breaths per minute or more)
6. Lower chest in drawing
7. Nasal flaring
8. Grunting
9. 10 or more pustules or a big boil
10. Axillary temperature 37.5°C or above (or feels hot to touch) or temperature less than 35.5°C (or feels cold to touch)
11. Blood in the stool

If any of the above signs are found to be present, the ANM should give pre-referral dose of antibiotics (Inj. Gentamycin 5 mg/kg & Inj. Ampicillin 50mg/kg/dose) as per the scheduled dose under INAP guidelines and refer the baby to nearest health facility.

In case referral is not possible or is refused, the HW (F) should:

1. Inform Medical Officer at health facility about the baby's condition
2. Tell the mother how to give oral Amoxicillin at home for 7 days & administer Gentamycin for 7 days
3. Counsel the mother on how to keep the baby warm and breastfeed frequently
4. Fill up the treatment card
5. Inform concerned ASHA about the young infants condition, the treatment and plan for follow up

4.2.5 Counseling of mothers/family members

Mothers/ family members of all high-risk newborns should be counseled on the following points after delivery by HW (F)/ASHA:

1. To keep the baby warm by skin-to-skin contact, cover head, body, palm & soles
2. To use clean cotton clothes for the newborn
3. To breastfeed the baby every 2 hours and/or on demand with emphasis on night feeds
4. To induce burping after feeding (small regurgitation during burping/after feeding is normal)



5. To exclusively breastfeed the baby for 6 months
6. Not to give any pre-lacteal feeds
7. To take extra nutritious diet with sufficient fluid in case of inadequate milk secretion and put the baby to breast frequently, looking for correct position and attachment but not to give any artificial milk
8. To eat nutritious food and drink adequate quantity of potable water
9. To maintain personal hygiene & sanitation
10. To wash their hands before & after feeding and cleaning the baby
11. To ensure vaccination of zero dose polio, BCG & Hepatitis B and collect written discharge certificate, if baby is delivered at institution
12. Schedule of home visits to be made by ASHA to check the health status of the child:
 - 6 times, if the baby was born in a facility (3rd,7th,14th,21st,28th,42nd day)
 - 7 times, if the baby was born at Home (1st, 3rd,7th, 14th, 21st, 28th, 42ndday)
13. To inform their ASHA/ANM/MO in case they see any of the following danger signs in the baby :
 - Not feeding well
 - Lethargic
 - Cold to touch
 - Having fits
 - Fast breathing (>60 per min) or difficulty in breathing, grunting or nasal flaring
 - High temperature/Fever
 - Blue colored lips and tongue
 - Pus draining from umbilicus
 - Bleeding from any orifice (bleeding & white discharge from vagina in female baby is normal)
 - Pustules over body
 - Yellow colouration of palms & soles (jaundice)

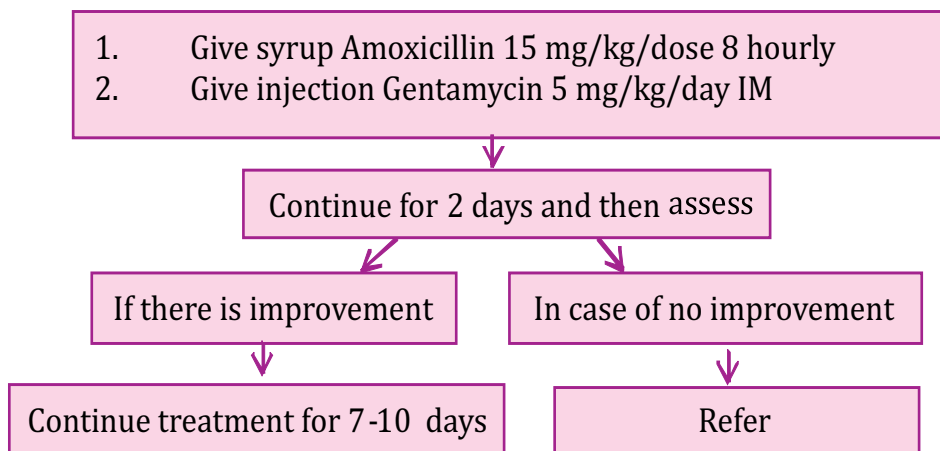
4.2.6 Management of pneumonia

A child is said to have pneumonia, if s/he has

1. Fast breathing, or
 - ≥ 60 per minute in children aged 0-2 months
 - ≥ 50 per minute in children aged > 2 months-1 year
 - ≥ 40 per minute in children > 1 year of age
2. Chest in-drawing, or
3. Nasal flaring, or
4. Grunting

In case the child has any of the above conditions, refer the child with pre-referral dose of Injection Ampicillin (50mg/ kg/dose) and Injection Gentamycin (5 mg/kg).

In case referral is not possible, ANM should treat the child as per the following chart:



4.2.7 Management of diarrhoea

If a child has 3 or more episodes of loose stools, or even one large volume of watery stool, ANM should assess for the features of dehydration, i.e. general condition of the child, sunken eyes and skin pinch. If any of the features of dehydration is present, ANM should manage the case as per IMNCI guideline.

Child having diarrhoea should be referred to a health facility under following conditions:

1. Severe dehydration
2. Persistent vomiting
3. High fever

Key messages for management of diarrhoea:

1. Do not stop feeding
2. Continue breast feeding in children below 2 years
3. Do not give sugar water or carbonated drinks (cold drinks)



4. Convulsions
5. Abdominal distension
6. No urination for more than 8 hours
7. Blood in stool

4.3 REFERRAL PROTOCOL

Timely & appropriate referral of high risk children plays a crucial role in reducing under five mortality. Under this special strategy, the state commits to improve accessibility in hard to reach areas by providing **additional alternative transportation system** besides the existing 102/108 vehicles. It is important to refer sick children to appropriate facility without losing time. Therefore, a suggestive referral structure is given below:

Conditions to be referred	Facility to be referred to	Who will refer	How to refer
<ol style="list-style-type: none"> 1. Gestation: <34 weeks 2. Weight: <1800 g 3. Large baby: >4000 g 4. Apnea or Gasping 5. Refusal to feed 6. Outcome of multiple pregnancy 7. Birth defects 	Special Newborn Care Unit (SNCU)	ANM	<ol style="list-style-type: none"> 1. Fill up community referral slip (Annexure - VII) 2. Stabilize the patient prior to referral 3. Refer using 102/108/ govt. hired vehicle 4. Inform concerned MO about the case with details of condition & pre-referral treatment 5. ASHA will accompany, wherever possible
<p>Severe Acute Malnutrition (Mid Upper Arm Circumference <11.5cm or weight for height less than -3SD or bipedal pitting odema) with any of the following complications:</p> <ul style="list-style-type: none"> ● Anorexia (Loss of appetite) ● Fever (39°C) or Hypothermia (<35°C) ● Persistent vomiting ● Severe dehydration based on history and clinical examination ● Not alert, very weak, apathetic, unconscious, convulsions ● Severe anemia (severe palmar pallor) ● Severe pneumonia ● Extensive superficial infection 	Nutritional Rehabilitation Centre (NRC)	ANM	<ol style="list-style-type: none"> 1. Fill up community referral slip 2. Stabilize the patient prior to referral 3. Refer using 102/ 108/ govt. hired vehicle 4. Inform concerned MO about the case with details of condition & pre-referral treatment 5. ASHA will accompany, wherever possible

All high-risk cases should be stabilized prior to & during referral as per the following:

1. Maintain temperature
 - Through KMC/ by covering with warm clothes
 - Cold sponging for febrile patients
2. Maintain airway
 - Correct positioning
 - Suction of mouth & nose, if required
3. Breathing
 - Provide oxygen
 - Bag & mask ventilation
4. Feeding, if possible
 - Continue breastfeeding (or with EBM)/ age appropriate feeding

ANM should follow-up all high-risk children at home after returning from facility and ensure treatment as advised at the facility.

4.4 FOLLOW UP BY ASHA/ANM

All newborn babies will be followed up by ASHA as per the HBNC protocol, i.e. 6 visits to the institutional delivered babies on 3rd, 7th, 14th, 21st, 28th and 42nd day of birth and 7 visits for home delivered babies on 1st, 3rd, 7th, 14th, 21st, 28th and 42nd day of birth.

During her visit she will ask, look and feel for all the danger signs as per HBNC format. If any of the danger signs is present, she will inform ANM to issue red card and ensure referral to nearest health facility as per referral protocol. On each visit, ASHA will counsel the mothers on feeding practices & personal hygiene and inform the family to contact ASHA/ANM if baby/child falls sick at any time.

Besides the routine HBNC visits, special follow up is planned for high risk cases, i.e. LBW babies, SNCU discharge babies and NRC discharged cases.

1. **For LBW babies:** ASHA will make one visit every month from the 3rd month till one year of age, i.e. for a period of 10 months using the monthly follow up checklist (Annexure- XV)
2. **For SNCU discharged babies:** ASHA will make one visit each on the 1st, 3rd, 7th, 14th, 21st and 28th day of discharge using the SNCU community follow up checklist (Annexure- XVI), followed by one visit every month from 3rd month till one year of age using the monthly follow up checklist .
3. **For NRC discharged cases:** ASHA will visit all NRC discharged cases monthly, verify MCP cards to monitor weight gain and counsel mothers on feeding practices accordingly.

Reporting of the above follow up visits will be done using the monthly reporting format by ASHA. (Annexure- XVII)



Standard Operating Protocol for Identification, Management, Referral & Follow up of High-Risk under Five Children by Staff Nurses at Facility



5

Standard Operating Protocol for Identification, Management, Referral & Follow up of High-Risk under Five Children by Staff Nurses at Facility

As discussed in the previous chapter, management of high-risk children in the community plays a crucial role in reduction of under five mortality. Similarly, it is also important to impart appropriate care to all high-risk cases in the facility. In this regard, the state aims to strengthen facility level care and has proposed to establish Paediatric ICUs with emergency triage assessment & treatment units for providing intensive care to high-risk under five children. Besides identification and appropriate management of high risk children in the facility, it will also be ensured to prioritize referred red card holders from the community. Moreover, the state has also made provisions of free diet to one attendant for improving the quality of service. However, the overall quality of service depends on timely and appropriate management of the cases in the facility, which would in turn require detailed working guidelines for the staff nurses. This chapter delineates the standard operating protocol for identification, management, referral & follow up of high-risk under five children in the facility.

5.1 IDENTIFICATION OF HIGH-RISK CHILDREN

At the facility, all newborns will be screened at birth for danger signs by staff nurses. Depending on the condition of the baby, the high-risk baby will be shifted to NBSU or SNCU as given below:



Shift to NBSU, if:

- Gestation is between 34 to 36 weeks or weight is 1800 to 2000 g
- Newborn has hypothermia or hyperthermia but is hemodynamically stable after initial stabilization
- Newborn has jaundice and requires phototherapy
- Neonate has sepsis and is hemodynamically stable
- Newborn is referred to SNCU for initial stabilization prior to referral

Shift to SNCU, if baby has :

- Birth weight <1800 g or gestation <34 weeks
- Birth weight >4000 g (Large baby)
- Perinatal asphyxia
- Apnea or gasping
- Refusal to feed
- Respiratory distress (rate >60/min or grunt/retractions)
- Severe jaundice (appears <24 hrs/ stains palms & soles/lasts >2 weeks)
- Hypothermia <35.4°C, or hyperthermia >37.5°C
- Central cyanosis
- Shock (cold periphery with CFT >3 seconds and weak & fast pulse)
- Coma, convulsions or encephalopathy
- Abdominal distention
- Diarrheal/dysentery
- Bleeding
- Outcome of multiple pregnancy
- Major congenital malformations
- Suspected surgical conditions
- Birth trauma
- Valuable baby

If any of the above signs are present, the baby is to be issued a red card by staff nurse and then shifted to NBSU/SNCU. Besides, screening for high-risk will also be done at the OPD for children in the age group of 1 month to 5 year. In case any of the following signs are present, the child will be identified as high-risk and will be issued a red card:

- Cold to touch (<35.5°C)
- Not breathing or Gasping
- Central Cyanosis
- Severe respiratory distress (unable to drink, respiratory rate >70/min, severe lower chest indrawing, apnoeic spells, grunting & head nodding)
- Cold hands with CRT >3 secs and weak & fast pulse
- Coma or convulsing
- Diarrhoea with lethargy/unconsciousness/sunken eyes/very slow skin pinch
- Excess vomiting

- Trauma or other urgent surgical conditions
- Severe pallor
- Burns (>20%)
- Poisoning
- Referral from other hospital
- Signs of child abuse

5.2 MANAGEMENT OF HIGH-RISK CHILDREN

5.2.1 Triageing

All red card holders from the community & facility should be triaged by the staff nurse in the facility by maintaining tempertaure, airway, breathing & circulation (TABC) as per the FIMNCI triaging guidelines and priority service should be provided to the identified cases.

5.2.2 Management

High risk newborns admitted to NBSU/SNCU should be treated and managed as per SNCU protocol. High risk children between 1 month to 5 years should be admitted to paediatric ward and management should be done as per F-IMNCI protocols. Treatment protocol for some of the major complications is discussed in the following sections.

5.2.2.1 Management of hypothermia

Assess temperature:

- With digital thermometer
- If not available, by touch method

Treatment for:

A. Cold Stress (36.0°C to 36.4°C)

- Kangaroo Mother Care is the best way to treat cold stress by:
 - Skin-to-skin contact
 - Continuation of breastfeeding

B. Moderate hypothermia (32°C to 36.0°C)

- Provide skin-to-skin contact
- Dress in warm clothes and a cap, and cover with a warm blanket
- Ensure that room temperature is between 25-28°C
- If Skin-to-Skin contact is not possible, use radiant warmer
- Encourage mother to breastfeed the baby
- Check random blood glucose and treat if hypoglycemia is detected



C. Severe hypothermia (<32°C)

- Warm immediately using a pre-warmed radiant warmer
- Remove cold or wet clothing
- Check and treat for hypoglycemia
- Consider sepsis
- Start IV fluids
- Provide oxygen if indicated
- Administer extra dose inj. Vitamin K (phytomenadione)
- Monitor temperature of the baby every ½ hourly

5.2.2.2 Management of hypoglycemia

❖ Assess:

- Any sick baby
 - Lethargy
 - Unconsciousness
 - Convulsion
- } Suspect hypoglycemia

❖ Insert IV line and draw blood for random blood sugar

❖ Check blood glucose

❖ Confirm hypoglycemia if <45 mg/dl in young infant (<2months) or <54 mg/dl in child (2months - 5 years)

In young infants (up to 2 months):

- Give 2 ml/kg of 10% glucose solution rapidly by IV injection
- Start maintenance fluid at GIR 6 mg/kg/min
- Recheck the blood glucose in 30 minutes
- If it is still low, repeat the bolus glucose 2ml/kg
- Increase concentration of maintenance fluid to 8 and if required to 10 mg/kg/min in the infusion pump
- Do not discontinue the glucose infusion abruptly to prevent rebound hypoglycemia
- If hypoglycemia is persisting despite above management, give one dose of Hydrocortisone (5 mg/kg) and refer

In children (2 months - 5 years):

- Give 5 ml/kg of 10% glucose solution rapidly by IV injection

- Recheck the blood glucose in 30 minutes. If it is still low, repeat 5 ml/kg of 10% glucose solution.
- Feed the child frequently, if conscious.

If not able to feed, give:

- IV fluids containing 5-10% glucose (dextrose), or
- If IV line is not possible, milk or sugar solution via nasogastric tube.
- Prepare sugar solution by dissolving 4 level teaspoons of sugar (20grams) in a 200 ml cup of clean water.

5.2.2.3 Management of convulsions

- Assess: If the child is convulsing. If yes, clear airway, position the child and give oxygen
- Secure IV access & draw blood for random blood sugar
- Estimate age/weight

If child is beyond 1month of age: Give Diazepam rectally 10 mg/ 2 ml solution based on age/weight

Age /weight	Dose 0.1ml/kg
1 month to 2 months (<4kg)	0.3 ml
2 to < 4 months (4 to <6 kg)	0.5 ml
4 to <12 months (6 to <10 kg)	1.0 ml
1 to <3 years (10 to <14 kg)	1.25 ml
3 to <5 years (14 o 19 kg)	1.5 ml

Procedure:

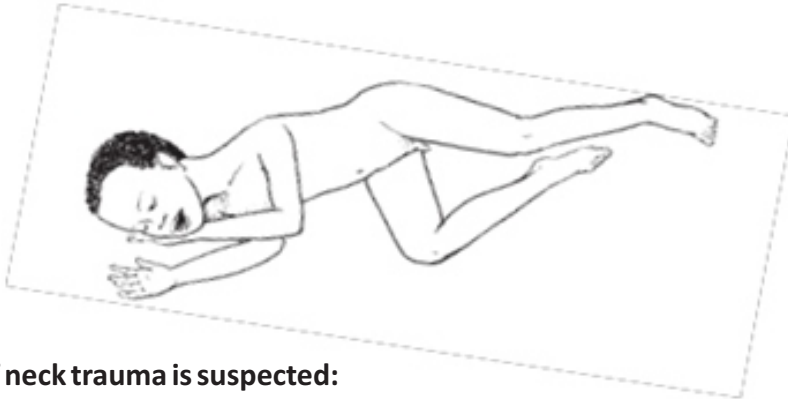
- Draw up the dose from an ampoule of diazepam in to a tuberculin (1 ml) syringe as per the dose according to weight of the child. Then remove the needle.
- Insert a syringe into the rectum 4 to 5 cm and inject the diazepam solution.
- Hold buttocks together for a few minutes
- If convulsion continues after 10 minutes, give a second dose of diazepam rectally [or give diazepam intravenously (0.05 ml/kg) if IV infusion is running]
- If convulsion continues after another 10 minutes, give a third dose of diazepam or Phenobarbital IV (20mg/kg bolus dose)



5.2.2.4 Management of unconscious child

A. If neck trauma is not suspected:

- Turn the child on the side to reduce risk of aspiration
- Keep the necks lightly extended and stabilize by placing cheek on one hand
- Bend one leg to stabilize the body position



B. If neck trauma is suspected:

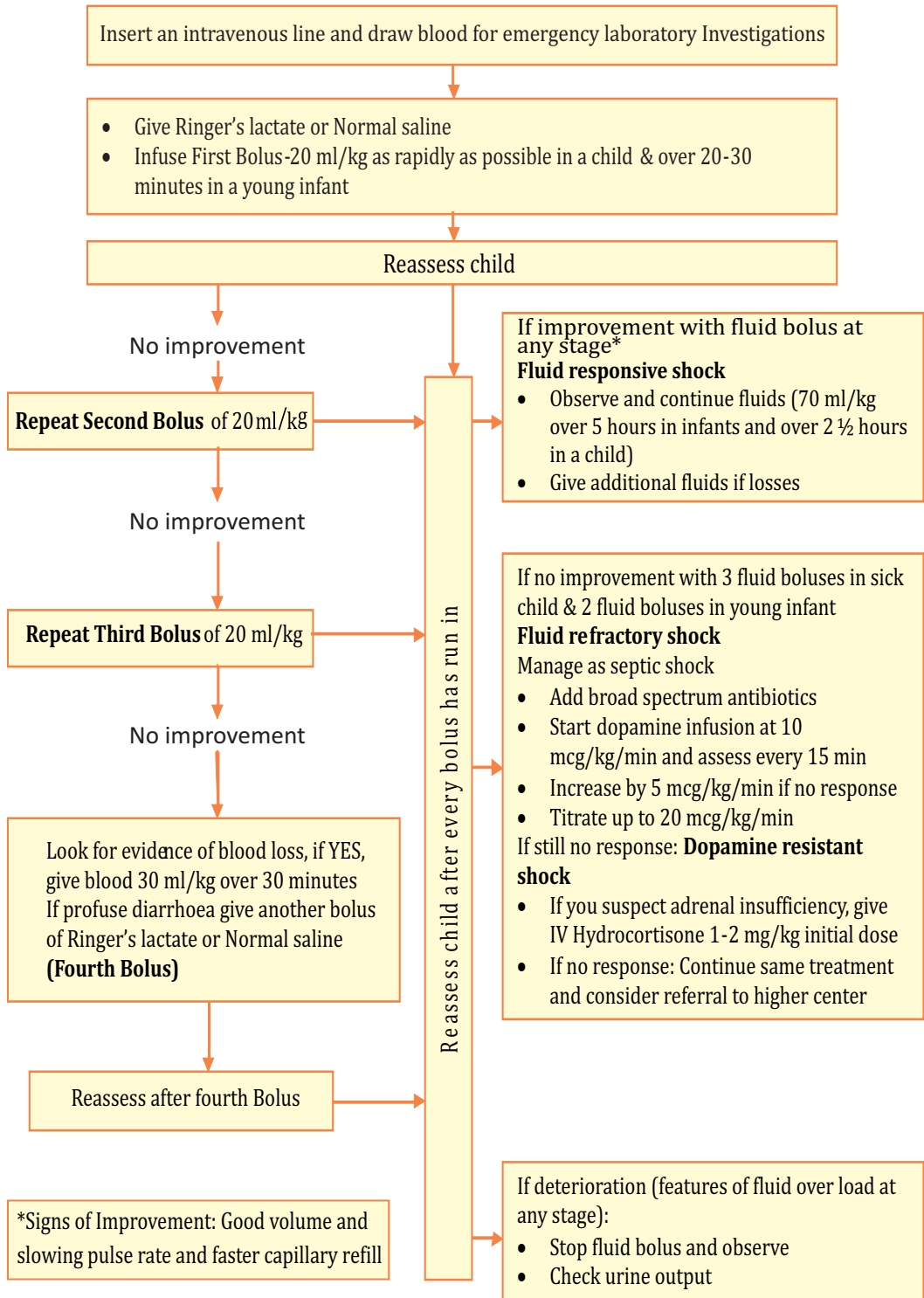
- Stabilize the child's neck and keep the child lying on the back
- Tape the child's forehead to the sides of a firm board to secure this position
- Prevent the neck from moving by supporting the child's head (e.g. using litre bags of IV fluid on each side)
- If vomiting, turn on the side, keeping the head in line with the body.



5.2.2.5 Management of shock

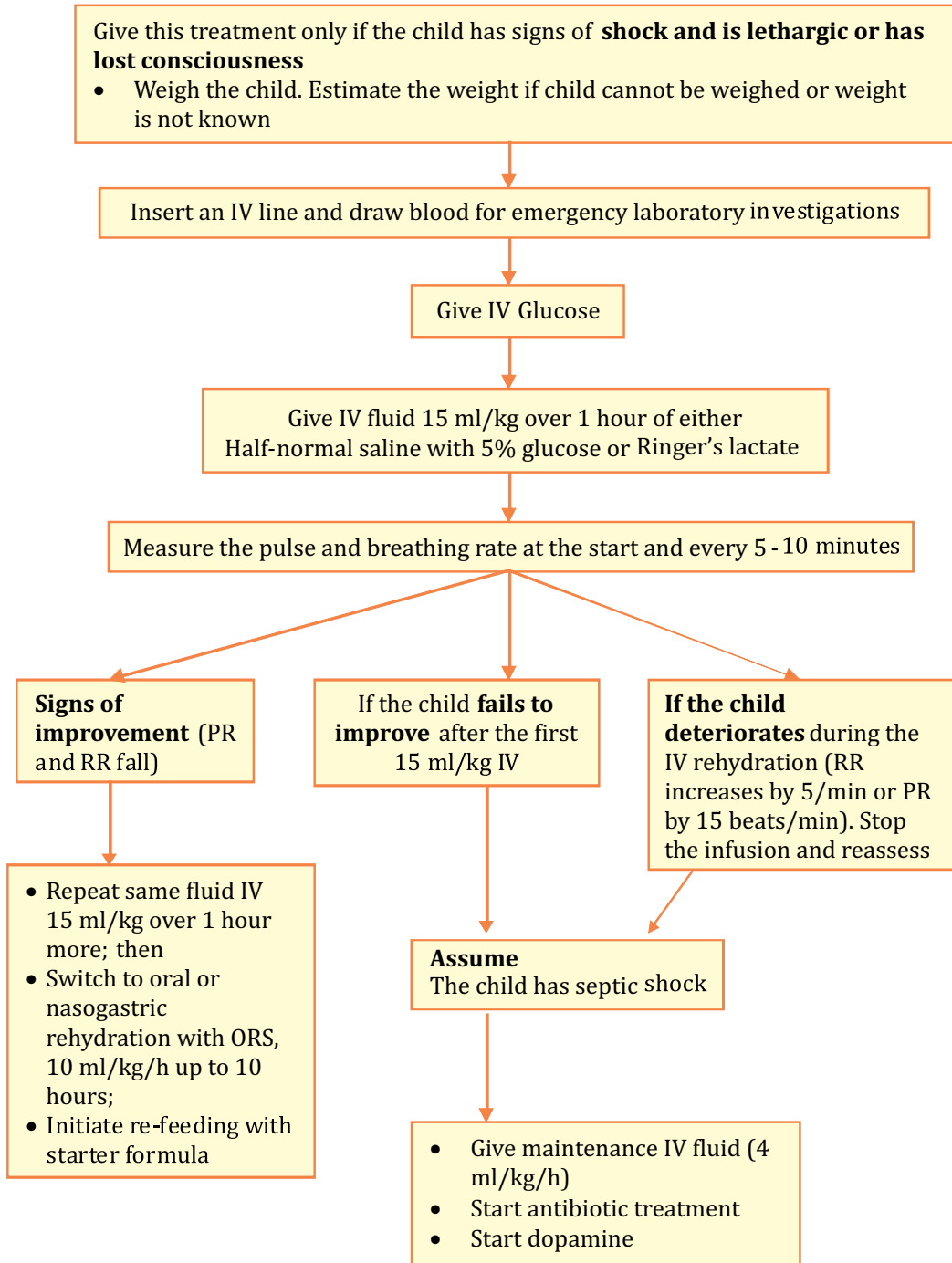
A. In a child without severe acute malnutrition

- Weigh the child. Estimate the weight if child cannot be weighed or weight not known
- Check that the child does not have severe acute malnutrition
- Give oxygen
- Make sure child is warm





B. In a child with severe acute malnutrition



5.2.2.6 Management of severe pneumonia

Condition	Treatment
Severe pneumonia: <ul style="list-style-type: none"> ➤ Central cyanosis ➤ Severe respiratory distress (rate>70/min) ➤ Not able to drink due to distress ➤ Chest in-drawing 	<ul style="list-style-type: none"> ➤ Position & suction ➤ Give oxygen ;monitor SpO₂ (maintain at >90%) ➤ Start recommended antibiotic ➤ Monitor frequently ➤ Treat fever if present ➤ Maintenance of nutrition and hydration

- Antibiotic therapy

Give ampicillin(50mg/kgIM/IV every 6 hours) and Gentamicin (7.5mg/kg IM/IV once a day) for 10 days.

Age/weight	Inj. Ampicillin 50mg/kg 6 hourly. Add 2.1 ml sterile water to vial of 5000 mg (500mg/2.5 ml)	Inj. Gentamycin 7.5 mg/kg OD. Add 6 ml sterile water to vial of 80 mg (10mg/ml)
2 to <4 months (4- to <6 kg)	1 ml	2.25– 3.75 ml
4 to <12 months (6 to <10 kg)	2ml	4.5– 6.75 ml
1 to <3 years (10 to <14 kg)	3 ml	7.5– 10.0 ml
3 to <5 years (14 to <19 kg)	5 ml	10.5 – 14 ml

- Oxygen therapy
- Supportive care

5.2.2.7 Management of severe dehydration

- Start IV fluid immediately. If the child can drink, give ORS by mouth while the drip is set up. Give 100 ml/kg Ringer's lactate solution (or, if not available, normal saline), divided as follows:

AGE	Firstgive 30ml/ kg in	Then give 70ml/kg in
Infants (under 12 months)	1 hour*	5 hours
Children (12 months up to 5 years)	30 minutes*	2 ¹ / ₂ hours

* Repeat once if radial pulse is still very weak or not detectable.



- Reassess the child every 15-30 minutes. If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5ml/kg/hour) as soon as the child can drink: usually after 3-4 hours (infants) or 1-2 hours (children).

Weight	Volume of ORS solution per hour
<4 kg	15 ml
4 to <6 kg	25 ml
6 to <10 kg	40 ml
10 to <14 kg	60 ml
14 to 19 kg	85 ml

- If IV treatment not possible, give ORS 20 ml/kg/hour for 6 hours (120 ml/kg) by NG tube
- Reassess an infant after 6 hours and a child after 3 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) as per IMNCI Protocol to continue treatment
- Give oral antibiotic for cholera if child 2 years or older.
- If possible, observe the child for at least 6 hours after rehydration to be sure that the mother can maintain hydration by giving the child ORS solution by mouth.
- Oral Zinc for all cases of diarrhoea and dysentery (10 mg/day from 2 to 6 months and 20 mg/day for >6 months to 5 years for a period of 14 days)

5.2.2.8 Management of dysentery

In young infants (<2 months)

- Give IM/IV Ceftriaxone (100 mg/kg) once daily for 5 days
- Continue feeding and ORS as usual

In children (2 months to 5 years)

- Give Ciprofloxacin/Ofloxacin/Cefixime 10-20 mg/kg, 2 times per day for 3 days
- Continue feeding and ORS as usual

Antimicrobials that are ineffective for treatment of Shigellosis

- Metronidazole – Streptomycin
- Tetracyclines – Chloramphenicol
- Sulfonamides – Amoxicillin
- Nitrofurans (e.g. nitrofurantoin, kanamycin)
- First and second generation cephalosporins (e.g. cephalexin, cefamandole)

5.2.3 Counseling

As counseling is a vital component of management, parents/family members of all the cases should be counseled on feeding recommendations during sickness & health, hygiene & sanitation, age appropriate immunization, danger signs & when to seek care and home based care.

However, there could be certain cases that can not be managed in the SNCU/DHH and may require higher level of care (Level III SNCU/MCH). Such cases should be referred as per referral protocol.

5.3 REFERRAL PROTOCOL

For conditions requiring higher medical attention, cases are to be referred using inter-facility referral slip. The existing 102/108 referral transport system or the alternative transportation system introduced by state government under this strategy could be used for referring the cases.

The suggestive structure for referral along with indications for referral is cited below:

Conditions to be referred	Facility to be referred to	Who will refer	How to refer
<ul style="list-style-type: none"> • Extreme low birth weight, i.e. <1200 g • Hyper bilirubinemia requiring exchange transfusion • Respiratory distress requiring ventilation support • Major congenital anomalies like omphalocele, extropiavesica, neural tube defects, etc. • Refractory seizure • Severe infections not responding to antibiotic therapy and if culture facility is not available • Septicemia with sclerema • Frequently occurring apnoeic spells requiring ventilator support • Grade III HIE • Refractory hypoglycemia/ suspected Inborn Error of Metabolism • Any other reason where treating paediatrician feel referral is necessary 	Level-III SNCU	Staff Nurse of LR/SNCU or Treating Physician	<ul style="list-style-type: none"> • Fill up inter-facility referral slip • Stabilize the patient prior to referral • Refer using 102/ 108/ govt. hired vehicle • Inform concerned MO/SN about the case with details of condition & treatment • Counsel the parents before transfer regarding the possible outcomes



Conditions to be referred	Facility to be referred to	Who will refer	How to refer
<ul style="list-style-type: none"> • Asthma requiring hourly nebulization/getting tired with increasing oxygen requirement/ mental status change • All patients requiring more than 50% oxygen to maintain saturation • Closed head injury/skull fracture admitted for observation • Diabetes ketoacidosis with pH<7.2 • Patients with episodes of apnea • Patients with significant abdominal trauma with suspected renal/ splenic/hepatic injury • Severe dehydration with mental status change • All ward patients requiring close monitoring due to potentially unstable conditions 	DHH	Staff Nurse	<ul style="list-style-type: none"> • Fill up inter-facility referral slip • Stabilize the patient prior to referral • Refer using 102/ 108/ govt. hired vehicle • Inform concerned MO/SN about the case with details of condition & treatment • Counsel the parents before transfer regarding the possible outcomes
<ul style="list-style-type: none"> • All cases requiring mechanical ventilation • Cases with impending respiratory failure. Respiratory rate > 70 /min with: <ul style="list-style-type: none"> • Chest indrawing, or • Central cyanosis • Comatose patients • All types of shock/hemodynamic instability • Bleeding emergencies • Cardiogenic shock myocarditis • Cardiomyopathy • Congenital heart disease neurogenic shock • Multiple trauma • Cardiac arrhythmias • Severe acid base disorders • Severe electrolyte abnormalities • Acute renal failure • Cases requiring acute hemodialysis, hemofiltration and peritoneal dialysis • Malignant hyperpyrexia • Acute hepatic failure and all post-transplant cases • All cases impending cardiac or respiratory failure • Acute poisoning 	PICU	Staff Nurse	<ul style="list-style-type: none"> • Fill up inter-facility referral slip • Stabilize the patient prior to referral • Refer using 102/ 108/ govt. hired vehicle • Inform concerned MO/SN about the case with details of condition & treatment • Counsel the parents before transfer regarding the possible outcomes

All high-risk cases should be stabilized prior to & during referral as per the following:

- Maintain temperature
 - o Through KMC by covering with warm clothes
 - o Cold sponging for febrile patients
- Maintain airway
 - o Correct positioning
 - o Suction of mouth & nose, if required
- Breathing
 - o Provide oxygen
 - o Bag & mask ventilation
- Feeding, if possible
 - o Continue breastfeeding (or with EBM)/ age appropriate feeding

5.4 FOLLOW UP

Follow up of all high-risk cases is a prime component of the special strategy. It helps in monitoring the progress of these cases and ensures complete treatment. Follow up is of two types:

- a. Institutional follow up: Done for SNCU discharged cases as per institutional follow up protocol under SNCU. Progress/improvement of the cases is assessed by SNCU MO and appropriate advice is given. The parents/family members are also informed about community follow up by ASHA.
- b. Community Follow up: Done for all high risk cases by ASHA/ANM through home visits and also during VHND/FID.



6

Health Systems Strengthening



6

Health Systems Strengthening

Strengthening health systems is a major priority for improving the overall system's performance. The objective of Health Systems Strengthening is to improve the efficiency & quality of health services delivery in the state. Considering the importance of system strengthening various interventions are planned under the IMR MMR strategy to accelerate the rate of decline in the state. The details of the system strengthening measures are mentioned below.

6.1 PROGRAM MANAGEMENT UNIT

“Quality Human Resource” is critical to successful implementation of programmes. Considering the huge ambit of IMR MMR strategy, it is highly imperative to have an exclusive program management unit which will not only monitor the successful implementation of the program but also act as a connecting link between Department, NHM, implementing agencies & other stakeholders.

6.1.1 Structure/Functions of the Programme Management Unit (PMU):

The PMU is envisaged to play a critical role in enhancing overall efficiency of implementation. The staff structure of the PMU is as follows:

Sl. No	Designation	No. of Personnel
1	Programme Manager (Team Leader)	1
2	State Data Manager	1
3	Program Associate	1



6.2 TRAINING & CAPACITY BUILDING

Training & capacity building of service provider is one of the important aspects of the IMR MMR strategy. Accordingly a detail training plan has been developed to ensure proper dissemination of knowledge starting from state level officials till front line workers. Training will be imparted to the program managers & service providers in cascade manner. Exclusive training module has been developed for the planned trainings. The following major trainings are planned under the strategy:

SI No.	Name of the training/Orientation
1	State level ToT for developing state & district level master trainer
2	District level ToT for developing Block Master trainer
3	District level orientation training on SOPs for Staff Nurses
4	Block level orientation training for service providers
5	Sector level orientation for ASHAs & AWW

6.3 COMMUNICATION STRATEGY

Behavioral change Communication is at the centre of all the community based approaches planned under the strategy. The following 5 broad strategies are planned under communication plan.

6.3.1 Strategy 1: Re-enforcement of Specific behavior

15 priority behaviors as per 5x5 matrix is focused under NHM PIP. But as a re-enforcement mechanism the following 3 behaviors, which has both direct & indirect impact on IMR & MMR, will be intensively focused in the 15 target districts.

- Delaying first pregnancy and 3 years gap between two children
- High risk identification and early referral of high risk mothers & children
- Home based management of Diarrhoea & Pneumonia

6.3.2 Strategy 2: Focus on local language

As a part of the IMR MMR strategy it is planned that, the contents of key IEC & BCC messages will be translated to 5 major spoken tribal dialects.

District	Tribal language
Koraput, Rayagada, Gajapati, Malkangiri and Nabarangapur	Desia and Saura
Keonjhar, Mayurbhanj	Santali
Kandhamal, Sonapur, Bolangir and Boudh	Kui
Kalahandi, Nuapada, Deogarh & Sundargarh	Sadri

6.3.3 Strateg 3: Focus on Interpersonal Communication through specific communication Tool:

Exclusive IPC tools have been developed & used by the front line worker for demand generation at the grass root level. The following tools will be developed for effective IEC & BCC:

- Tool for Couple Counseling
- Tool for Educational session at VHND

6.3.4. Strategy 4: Special Media campaign in Media Dark areas:

IEC/BCC will be an integral part of each community based interventions planned under the strategy with special focus in media dark areas. Moreover, periodic special media campaign is designed to address the local requirement of these areas. This will supplement in improving the quality of outreach services.

6.3.5. Strategy 5: Media advocacy at all level

The change agents at all level contributing to achieve accelerated reduction of IMR & MMR at their level will be promoted through different media platforms. This will increase the involvement and build community Ownership to achieve the goal.

6.4 MONITORING & EVALUATION

An intensive monitoring and supervision framework through a two pronged process has been developed for Monitoring & Evaluation of special interventions devised under the strategy.

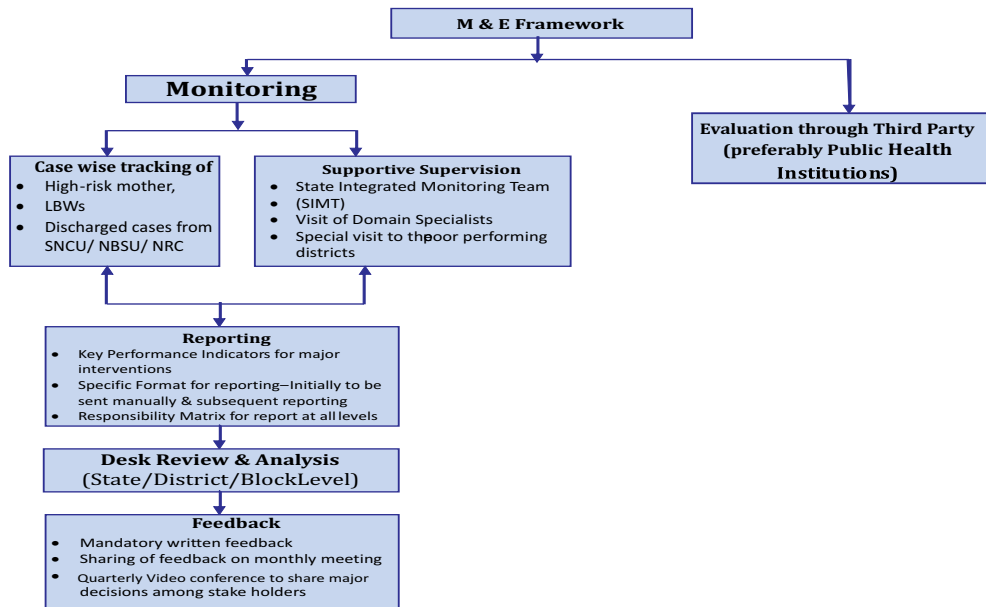
6.4.1 Monitoring:

Monitoring of the strategy will be done through a 2 pronged approach i.e Case wise tracking & supportive supervision.

6.4.2 Evaluation through Third party

Third party evaluation will be done to assess the progress & performance of the strategy. To ensure effective implementation of the planned strategies in the subsequent years, annual assessment & mid-term assessment will be done. Based on the reports of the assessment necessary modifications will be introduced in the strategy.

The detailed M & E framework is mentioned below.



6.5 AWARDS & INCENTIVES:

Under the accelerated IMR MMR strategy incentives are proposed for the ASHAs only, considering their role in effective implementation of the planned interventions. At present, 41 incentives are provisioned for ASHAs in the state NHM PIP. However various new activities and consistent follow up has been outlined for ASHA under the special strategy. The success of the strategy depends heavily on the performance of the ASHA. Hence under the IMR MMR special strategy, an outcome based incentive of Rs 500 each for survival of high risk mother & children, after attainment of certain conditionalities is proposed for the ASHA worker of the 15 focus districts.

Modalities of incentive Payment:

The payment will be released to the ASHAs by their respective blocks based on the certification made by concerned ANM & GKS. The payment will be made bi-annually following regular procedure.

Award to Districts for outstanding Performance

Based on the performance being assessed using key performance indicators developed under the strategy, the good performing districts will be rewarded to motivate them for further accelerated decline of IMR & MMR. Through a special felicitation ceremony the district units & outstanding service providers will be rewarded at the state level to encourage them & motivate others.





Annexure-I

Individual Assessment Checklist for Pregnant Woman					
A	Background				
A.1	Name & age of the Pregnant Woman				
A.2	Husband's/Guardian's Name				
	Address including P.S .				
	Gravida/Para/Abortion/ living (G/P/A/L)				
	LCB (Last Child Birth)				
	LMP				
	Expected Date of Delivery (EDD)				
A.3	MCTS/RCH No.				
A.4	Sub-Centre/Ward				
A.5	Block/PPC				
A.6	Date of Registration				
B	Geographical Profile (As per the Format for Identification of difficult Village)				
B.1	Category of Village	Completely Cut-off/Seasonally Cut-off			
C	Clinical Conditions (Tick at appropriate place)				
Sl. No	High Risk Conditions	Findings			
		1 st ANC	2 nd ANC	3 rd ANC	4 th ANC
C.1	History of Past Pregnancy (to be assessed during 1st visit)				
	Date of assessment:				
C.1.1	More than 4 earlier pregnancies	Yes/No			
C.1.2	Previous Caesarean Section/ Any Uterine surgery	Yes/No			
C.1.3	Previous LBW baby delivery (Pre-term baby) delivery/Intra Uterine Growth Retardation (IUGR)	Yes/No			
C.1.4	Previous early neonatal death/still birth/birth asphyxia	Yes/No			
C.1.5	History of APH/PPH	Yes/No			
C.1.6	History of Diabetes/ Heart Disease/ Kidney	Yes/No			
C.1.7	History of eclampsia/PIH/TB (convulsion during previous pregnancy)	Yes/No			
C.1.8	History of repeated spontaneous abortion more than 3 times	Yes/No			
C.1.9	History of Active TB/Leprosy	Yes/No			
C.1.10	Conceived after long period of infertility/Artificial	Yes/No			
C.1.11	History of previous complicated delivery	Yes/No			
C.1.12	HIV positive	Yes/No			
C.2	Current Pregnancy Conditions				
C.2.1	1 st pregnancy below 18 yrs and above > 35 years	Yes/No			
C.2.2	Any pregnancy above 40 yrs	Yes/No			
C.2.3	Severe anaemia (Hb: <7gm/ dl)	Yes/No			



Sl. No	High Risk Conditions	Findings			
		1 st ANC	2 nd ANC	3 rd ANC	4 th ANC
C.2.4	Pregnancy Induced Hypertension (BP more than 140/90 mm og Hg)				
C.2.5	Presence of sugar &/or albumin in urine				
C.2.6	Pregnant woman with Malaria/Any high fever				
C.2.7	Height <140cm				
C.2.8	Weight gain per month after 1 st trimester <500 gm and more than 3kg				
C.2.9	Rh negative pregnant woman				
C.2.10	Hepatitis B positive/Jaundice				
C.2.11	Pregnancy with HIV positive/RTI/STI				
C.2.12	Bleeding PV				
C.2.13	Premature Rupture of Membrane/Leaking				
C.2.14	Foul smelling vaginal discharge				
C.2.15	Decrease/no fetal movement				
C.2.16	Premature contraction				
C.2.17	Over distended/unusual larger size				
C.2.18	Excess pain in abdomen during 1 st trimester				
C.2.19	Post dated pregnancy (More than 7 days from EDD)				
C.2.20	History of Thalassemia/Sickle Cell Disease/ Rh negative Mother				

Note: If anyone or multiple conditions prevails during the ANC check-list, the type of risk is to be mentioned.

Findings/ Advice:

Particulars	Summary of Findings	Advice
1 st ANC		
2 nd ANC		
3 rd ANC		
4 th ANC		
PNC		

Signature of ANM
Name of the SC :
Name of the Block :
Name of the District :



Annexure-II

Line listing of high risk pregnancies at Sub centre level by ANM

Name of District: _____ Name of the Block _____ Name of the Sub center _____ Month:Year:

Sl. No.	Name of the pregnant woman	Husband's/ Guardian's name with address/ Mobile number or any contact number	LMP	Date of Registration	Category of high-risk (From assessment tool)	Date of identification of High risk condition	Tagging referral institution - Name and category	Name of the concerned ASHA with mobile number	Name of the concerned AWW with mobile number	Outcome of delivery with date- Live birth/ Stillbirth/ Abortion	Home/ Institution delivery	Any other remark
2		3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
4												
5												

Signature of ANM

Verified by MPHS (F)

Annexure-III

Prototype of Red Card

Red Card Sl. No:

Issuing Facility and Authority.....

Date of Issue.....

1. Personal Details :-

MCTS/RCH No. :

Name :

Address with P.S. :

Phone/Mobile :(Self, Family/ ASHA / Other)

2. High-risk status : Geographical/Clinical/Both

Category: Pregnant Woman/Post Natal Cases/Low Birth Weight babies/Pre-term babies/ Discharged cases from SNCU/NBSU/NRC/Child with birth defects/ Children identified with illness requiring recurring treatment

3. Current Status and advice:

Category	Status- Disease condition	Advice / Treatment given, if any	Remark

4. Name of institution referred to (if any):

5. Services:

5.1. Free Referral Transport Services:

Date	Mode of transportation	Signature of Driver/EMT :

5.2.Treatment / Services at Institutions :

Date	Institutions	OPD/ IPD	Period of stay in case of IPD	Treatment/Advice given by treating physician



5.3. Follow up visit at Home:

Sl. No.	Service Providers	Date and services		
		Date of visit	Observation/ Examination findings	Advice/Service given*
1	Joint visit by ANM & Supervisor			
2	Visit by ASHA			

*ANC/Birth Planning/Family level counselling/Referral if required/Follow up to last advice etc.

Annexure-IV

Red Card Issue Register (Sample Format)

Sl. No	MCTS No	Name & Address	Category (tick at appropriate place)				Red Card Sl. No.	Name of the Issuing Institution (Designation)	Issued by (Name and Designation)	Date of Issue
			High-Risk Pregnant Women/ Postnatal Care Mother	High-Risk Children	Children identified with illness	Discharged from SNCU/ NBSU/NRC				
			Having Birth Defects	Pre-term/LBW babies						



Annexure- V

BIRTH PREPAREDNESS PLAN

(To be facilitated by ANM /ASHA by 7th month of pregnancy)

- 1. Place of Delivery** _____ (High-risk mothers should be advised to go to FRU & others to nearest DP of any level)
- 2. Support Person/s:** ANM & ASHA should be kept in loop & contact for advice whenever required)
 - Name & Mobile No. of ANM _____
 - Name & Mobile No. of ASHA _____
- 3. Referral transportation:** Both of them must be made aware of 102/108 services. In case of difficult areas, alternative means of transportation must be arranged with the support of ASHA prior to EDD or admitted at Maternity Waiting Home.
 - Contact No of hired vehicle (if available other than 102/108) : _____
 - Contact No of MWH : _____
- 4. Finances:** (Open Account & keep some savings for managing expenses towards food and other expenses of attendants accompanying her during delivery which are not covered under JSSK)
 - **Account No.:** _____
 - **Name of the Bank & branch:** _____
- 5. Arrange Blood Donor:** Blood is provided free of cost under JSSK & without exchange donor. But donor may be required, if same blood group is not available with the blood bank and/ or encourage for voluntary donation.
 - Blood Group of PW _____
 - Name of the Donor/s: _____ ; _____ ; _____

Don't forget to bring

- | |
|---|
| <ol style="list-style-type: none">1. Clean clothes for wrapping of babies during delivery (clean & sun dried)2. Filled MCP card3. Red card in case of high risk pregnancies |
|---|

Signature of ANM

Signature of ASHA

Signature of Pregnant Woman

Signature of Husband

(THIS PLAN IS TO REMAIN WITH THE PREGNANT WOMAN)

Annexure-VI

Identified Difficult Blocks for engagement for hired vehicles

Sl. No	DISTRICT	No of Identified Difficult Blocks	Name of the Identified Blocks
1	BOLANGIR	3	KHAPARAKHOL, TUREIKELA, TITLAGARH
2	DEOGARH	2	TILEIBANI, BARKOTE
3	GAJAPATI	5	MOHANA, NUAGADA, R.UDAYAGIRI, RAYAAGADA, GUMMA
4	KALAHANDI	4	M.RAMPUR, GOLAMUNDA, LANJIGARH, TH.RAMPUR
5	KANDHAMAL	7	PHIRINGIA, RAIKIA, TUMUDIBANDH, DARINGBARHI, KOTAGARH, TIKABALI, NUAGAON
6	KEONJHAR	4	HARICHANDANPUR, TELKOI, BANSPAL, JODA,
7	KORAPUT	8	LAXMIPUR, BANDUGAON, NARAYANPATNA, BOIPARIGUDA, LAMTAPUT, POTTANGI, NANDAPUR, DASAMANTPUR
8	MALKANGIRI	4	KHAIRPUT, KUDUMULGUMA, KALIMELA, MATHILI
9	MAYURBHANJ	9	BIJATALA, BANGRIPOSI, SULIAPADA, JASHIPUR, MORDA, KARANGIA, THAKURMUNDA, KAPTIPADA, RARUAN
10	NABARANGPUR	6	RAIGHAR, UMMERKOTE, CHANDAHANDI, JHARIGAN, PAPADAHANDI, TENTULIKHUNTI
11	NUAPADA	3	KOMNA, BODEN, SINAPALI
12	RAYAGADA	7	CHANDRAPUR, KALYANSINGHPUR, KASHIPUR, GUDARI, GUNUPUR, BISSAMCUTTACK, MUNIGUDA
13	SUNDARGARH	6	BALISANKARA, LEPRIPARA, HEMGIRI, GURUNDIA, KOIRA, LAHUNIPARA



REFERRAL SLIP

(Sub Centre/VHND)

Name of the Sub Centre: _____

Name of PW/Child: _____

Wife/Son/Daughter of: _____

Name of the Village: _____

Full Address with P.S: _____

MCTS/RCH No. : _____

Regd. No. : _____

Date & Time of Referral: _____

Reason for Referral: _____

Investigation status (before referral)

- Blood group :
- Hb:
- Urine Sugar/Albumin :
- Others

Treatment given (before referral)

1. _____
2. _____
3. _____
4. _____

Management during transport: _____

Condition at time of referral: _____

Consciousness: Temp: Pulse: BP:

Others (specify): _____

Information on referral provided to the institution referred to: Yes/No _____

If Yes, then name of the person contacted/spoken to: _____

Facility to where patient is referred: _____

Mode of transport for referral: Govt. /PPP/ Vehicle arranged by patient: _____

Signature of HW (F) :

Annexure-VIII

Inter Facility Referral Slip

Name of the referring facility: _____

Address: _____

Name of the patient: _____ Age: _____ Sex: _____

Father's/Husband's Name: _____

Address with P.S.: _____ Contact No.: _____

Referred on ____/____/____ (dd/mm/yy) at _____ (time) to
_____ (Name of the facility) to

where the patient is referred.

MCTS/RCH No.: (If available) _____

Provisional Diagnosis:

Admitted in the referring facility on ____/____/____ (dd/mm/yr) at _____ (time) with
chief complaints of:

_____ Summary of
Management (Procedures, Critical interventions, drugs given for management):

- Blood group :
- Hb:
- Urine Sugar&/or Albumin :
- Others

Condition at time of referral:

Consciousness: _____ Temp: _____ Pulse: _____ BP: _____

Others (specify): _____

Information on referral provided to the institution referred to: (Yes/No) _____

If Yes, then name of the person contacted/ spoken to: _____

Mode of transport for referral: Govt. /PPP/Vehicle arranged by patient: _____

Signature of Referring Physician/Health functionaries
(Name/Designation/Stamp)



Annexure-IX

Referral Out Register

Patients Name	Husband/s Father Name, Full Address with P.S. & Mob. No.	Date & Time of Admission	Disease/ Reason for Admission	Reason for referral	Condition at the time of referral	Date & time of referral	Name of the institution referred to	Name & designation of the referring Service provider	Name & designation of the intimidating person	Has the Referred Institution been intimidated about the referral? (Y/N)	If Yes then the person to whom intimidated with Ph. No	Type of vehicle used for referral (102/108) other Pvt. vehicle	Treatment given during transport (If any)



List of Equipment / Instrument and Reagents for VHND

1. BP Instrument (Aneroid)
2. Stethoscope
3. Examination Table with foot step
4. Thermometer
5. Digital Watch/Timer Device
6. Inch Tape
7. MUAC Tape
8. Weighing Scale (Adult)
9. Weighing Scale (Baby)
10. Glucometer
11. Non Invasive Hemoglobinometer
12. Uristix for urine albumin and sugar test (Annual Requirement)

Formula for calculation of Annual requirement of Uristix

One stick per pregnant woman per test (No. of PW X No. of tests during pregnancy)

Annexure-XII

Articles in Baby Kit

A baby kit will be provided to all newborns at birth comprising of the following:

1. Two good quality cotton sheets with a pair of stitched dress, cap and socks or A good quality cotton sheets (preferably flannel material) with stitched edges of size 1 meter length and 36 inch width for wrapping the baby.
2. 4 Cotton diapers (Langoti)
3. Mackintosh/rubber/oil cloth
4. A clean bed sheet for the mother to be used in the ward and could be taken home
5. One plastic sheet to cover the Labour table
6. Hand sanitizer
7. Soap



Articles in New born resuscitation kit for HW (F)

Contents of resuscitation kit:

1. Two clean warm towels/clothes
2. A folded piece of cloth
3. A new born size bag and mask- 250 ml and 500 ml
4. Infant mask in 2 sizes
5. A suction device
6. A clock
7. Two no. of umbilical cord clamps
8. Sterile gauze

Annexure-XIV

Articles in disposable Delivery Kit (ETO Sterilized)

Contents of a disposable delivery kit (DDK):

1. Carbolic Soap, 25gm - 1 piece (Lifebuoy, Dettol etc.)
2. Sterilized gloves:- Two pairs (6 ½&7 size) pre-powdered, BIS specifications gloves, surgical rubber made of Hypoallergic latex. 100% electronically tested, sterilized by Gamma Radiation / ETO, ISI Marked, IS No. 13422-92 = 1 pair
3. Surgical Blade, pre sterilized with Gamma radiation: Size – 24, ISI Marked 3319:1995 = 1 No.
4. Sterilized umbilical cord clamp:- PVC, Gamma sterilized = 1 No.
5. Plastic Sheet (Perineal 4x6 ft. & couch 4x6 ft.) - 1 piece each
6. Sterilized Gauze:- 10"x10", IS No.759/1988 = 4 pieces
7. Absorbent Cotton 100gm Net - 1 Roll (Packet)
8. Mop Egyptian cotton (15x15 inch) - 2 Nos.
9. Neonatal Covering Sheet with hood (Egyptian Cotton) – 1 No. (2ft x 2ft)
10. Water proof Apron – 1 No. (W: 3ft x H: 5ft)
11. Roller Bandage (L: 4 mt. x W: 6 cm, IS-863-1988, Ends (column)-150, Picks (Row)-85/10 Sq. c.m) - 1 Piece
12. Self-Sticking sterilized Maternity Napkin – 2 Nos.
13. Baby Mucous Sucker – 1 No.
14. Triple layer filtered face mask - 1 No.
15. Sterilized Towels – 2
16. Macintosh-1



Annexure-XV

Follow up checklist for LBW babies & SNCU Discharge cases for ASHA (Monthly)												
Village:		Sub-Center:		Block:								
AHSA's name:		Mother's name:		Father's Name:								
Date of delivery:		Place of delivery:	Health Facility/Home	Sex of baby:	Male/ Female							
Mode of delivery:	Normal/Assisted/ CS	Breastfeeding started:	hr, > 24hr < 1 hr, 1-24	Birth weight (gms):								
Date of discharge from SNCU / Hospital:		SNCU/Hospital Registration No.:		Wt. at time of discharge(g m):								
Name of hospital & district												
Visit schedule per month as per baby's age	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	
Date of visit												
Observe for danger signs / illness if present specify, then refer												
Counseled on exclusive breast feeding						NA	NA	NA	NA	NA	NA	
Counseled on KMC as per need												
Counseled on Early childhood care												
Observe for developmental milestone (as per chart given below)												
Counseled on hand washing												
Monitor weight on growth chart in MCP card												
Verify age appropriate vaccination & vit. A on MCP card												
Counseled on complimentary feeding	NA	NA	NA	NA	NA							
Give and explain IFA syrup dosage	NA	NA	NA	NA	NA							
Give 1 packet of ORS and explain about its usage	NA	NA	NA	NA	NA							
Signature of family member												
Signature of ASHA:			Signature of HW (F):									
Signature of MO:												
Date of card submission:												

Annexure-XVI

Community based follow up checklist for SNCU discharged children (Monthly)

[To be filled by ASHA and HW (F)]

Village:		Sub-Center:		Block:			
AHSA's name:		Mother's name:		Father's Name:			
Date of delivery:		Place of delivery:	Health Facility / Home	Sex of baby:	Male / Female		
Mode of delivery:	Normal/ Assisted/ CS	Breastfeeding started:	< 1 hr, 1- 24 hr,> 24hr	Birth weight (gms):			
Date of discharge from SNCU:		SNCU Registration No.:		Wt. at time of discharge (gm):			
Diagnosis at SNCU:				Name of SNCU & district :			
Date of Home Visit (after discharge):		1st visit (within 24 hrs.)	2nd visit (on 3 rd day)	3rd visit (on 7 th day)	4th visit (on 14 th day)	5th visit (on 21 st day)	6th visit (on 28 th day)
Assessment							
Is baby healthy? (Yes/No), If not mention problem/death and date							
See the discharge card. Did SNCU doctor suggest any followup at the time of discharge (Y/N).							
If yes, then please check on compliance/support/encourage							
Is the baby exclusively breastfed? Y/N							
Was anything else given in last 24 hrs? Y/N							
Is the baby sucking effectively? Y/N							
Is the baby covered well and warm? Y/ N							
Any problem in communication between Mother and Baby							
Look for sign of illness? If yes then mention name							
Weigh the baby. Mention wt. in gms							



Temperature of baby in °C/°F						
Respiratory Rate per minute						
Does the baby need referral? (Y/N)						
If yes, did the family comply? (Y/N)						
Counseling & Assistance						
Baby care and development						
Mother care including adequate food & rest						
Exclusive breastfeeding/special feeding for LBW						
KMC messages						
Hygiene (Hand Washing)						
Immunization						
Whom to contact in case of any sign of illness						
Any Remarks BY MO(Quality of visit):						
Name of the ASHA & signature		Signature of Mother/Family member				
Name of the HW (F) & signature		Name of PHC and signature of MO.				

ଶିଶୁର ବିଳମ୍ବିତ ବିକାଶର ସହଜ ଚିହ୍ନ

	ସାମଗ୍ରୀକ ଅଙ୍ଗ ଲକ୍ଷଣ	ସ୍ପର୍ଶ ଅଙ୍ଗ ଲକ୍ଷଣ	ଶୁଣିବା	ବହିବା	ଦେଖିବା	ଅନୁଭୂତି ଓ ସାମାଜିକତା	
୨ - ୪ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁଟି ଚେଇଁ ଉଠିଥିବା ବେଳେ ତା'ର ଉଭୟ ହାତ ଓ ଗୋଡ଼ ସହଜରେ ଏବଂ ସମାନ ଭାବରେ ହଲାଇ ପାରୁଛି	 ବେଳେ ବେଳେ ମୁଣ୍ଡ ଉପରକୁ ଉଠାଇ ପାରୁଛି	 ତା'ର ହାତକୁ ଖୋଲାଗଢ଼ ଆରାମ କରିପାରୁଛି	 ଶବ୍ଦ ବାରି ପ୍ରତିକ୍ରିୟା କରୁଛି	 ଖାଦ୍ୟ ଖାଇବା ପରେ ସ୍ପର୍ଶସ୍ପର୍ଶ ହେଉଛି ଓ ହାତୁଡ଼ି ମାରୁଛି	 ଆଖିରେ ଆଖି ମିଶାଇ ପାରୁଛି	 ମା' ହସିଲେ ଶିଶୁ ବି ହସୁଛି

୪ - ୬ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁଟି ବସିଥିବା ବେଳେ ଟିକା ଚାକୁ ବାଖରେ ଧରିଥିବା ବେଳେ ମୁଣ୍ଡ ସିଧା ରଖିପାରୁଛି	 ବସୁ ପାଖରେ ପହଞ୍ଚି ଚାକୁ ଧରିବାକୁ ଚେଷ୍ଟା କରୁଛି	 ବସୁଟିକୁ ପାପୁଲିରେ ମୁଠାଇ ପାରୁଛି	 ବଆବାଲା ବଲେ ଶିଶୁଟି ସିଧା ମୁହଁକୁ ଘର୍ଟି ପ୍ରତିକ୍ରିୟା ପ୍ରଦାଣ କରୁଛି	 କୋରରେ ହସୁଛି	 ବସୁକୁ ଦେଖି ଅନୁସରଣ କରୁଛି	 ହାତ ପାଟିରେ ପୁରାଇ ବୁଲୁଣି ପାରୁଛି
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	ସାମଗ୍ରୀକ ଅଙ୍ଗ ଲକ୍ଷଣ	ସ୍ପର୍ଶ ଅଙ୍ଗ ଲକ୍ଷଣ	ଶୁଣିବା	ବହିବା	ଦେଖିବା	ଅନୁଭୂତି ଓ ସାମାଜିକତା	
୬ - ୯ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁଟି ଉଭୟ ପାଖକୁ ବଦଳେଇପାରୁ ପାରୁଛି	 ଶିଶୁଟି ଏକ ଛୋଟ ଚିନିଷକୁ ତା'ର ସମ୍ପୂର୍ଣ୍ଣ ହାତ ବ୍ୟବହାରକରି ଧରିପାରୁଛି	 ଶବ୍ଦର ଉତ୍ତରୁ ବାରି ଚାଲୁଛି	 ଶିଶୁଟି ବ୍ୟକ୍ତ ବର୍ଣ୍ଣ ଯଥା - 'ପ', 'ବ', 'ମ' ବହିପାରୁଛି	 ଶିଶୁଟି ମୁଣ୍ଡ ନ'ହଲାଇ ଚିରି ଦେଖିପାରୁଛି	 ପିତା ମାତାଙ୍କୁ ଦେଖି ଶିଶୁଟି ବୁଲିବାକୁ ପ୍ରୋତ୍ସାହିତକରି ଚାକୁ ନେବାପାଇଁ ଅଟିକରୁଛି	 ଶିଶୁଟି ହାତକୁ ଖସିପକିଥିବା ଖେଳନା ବା ଲଗନକୁ ଚାଲୁଛି

୯ - ୧୨ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁଟି ଅନ୍ୟ ବାହାର ସାହାଯ୍ୟ ନନେଇ ବସିପାରୁଛି	 ବସୁକୁ ଏ ହାତକୁ ସେ ହାତକୁ ବଦଳାଇ ପାରୁଛି	 ନୀ ଧରି ବାଜିଲେ ଶୁଣିପାରୁଛି	 ସ୍ପର୍ଶ ସ୍ପର୍ଶ ହେବା ଯଥା - ବା ବା, ବା ବା, ମା ମା	 ଶିଶୁଟି ଚଳପ୍ରଚଳ କରୁଥିବା ବେଳେ ବାଟରେ ପଡ଼ୁଥିବା ବସୁକୁ ବୁଝିବାରୁ ବୁଝେଇ ଚାଲୁଛି	 ଶିଶୁଟି ଲୁଚାକାଚି ଖେଳିପାରୁଛି
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	ସାମଗ୍ରୀର ଅଙ୍ଗ ଲକ୍ଷଣ	ପୁଣ୍ୟ ଅଙ୍ଗ ଲକ୍ଷଣ	ଶୁଣିବା	କହିବା	ଅନୁଭୂତି ଓ ସାମାଜିକତା
୧୨ - ୧୫ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁ ହାତ ଏବଂ ଆଘ୍ର ଲଗାଇ ଗୁରୁଣ୍ଣି ପାରୁଛି	 ଶିଶୁଟି ଛୋଟ ବସ୍ତୁକୁ ଚା'ର ଦୃଷ୍ଟାନ୍ତୁଟି ଏବଂ ଚର୍ଚ୍ଚି ଆଖୁଟି ଦ୍ୱାରା ଦେଖି ଧରିପାରୁଛି	 ଶିଶୁକୁ 'ନାହିଁ' କହି ଦାଇଣ କଲେ ପ୍ରତିକ୍ରିୟାରେ ବାସ୍ତବ୍ୟକୁ ଚିହ୍ନି ଲହୁଛି	 ଶିଶୁଟି ଘୋଟିଏ ଶବ୍ଦ ବ୍ୟତ୍ୟ ଲାବରେ ଲତାତାଣ କରନ୍ତିପାରୁଛି ଯଥା - ମାମା, ବାବା	 ଅନୁଭବଣ କରନ୍ତିପାରୁଛି ଯେପରିକି ଚାରି ମାଗୁଛି/ ହାତ ହଲାଇ ବାଏ ବାଏ କରୁଛି/ ଦୁଇଟି ବେଳେ ଅଭଣା ବ୍ୟକ୍ତି ଧରିଲେ ପିଲାଟି ବାହୁଛି ଲୁଟିରହିଥିବା ବସ୍ତୁ ପୁଟିକୁ ପିଲାଟି ଖୋଜୁଛି

୧୫ - ୧୮ ମାସର ଶିଶୁ ପାଇଁ	 ଶିଶୁଟି ଚିତ୍ତେ ଚିତ୍ତେ ଲୁଚିପାରୁଛି	 ଶିଶୁଟି ଛୋଟ ଛୋଟ ବିନିଷ୍ପଦ ପାତ୍ରରେ ପଦାଭଣି	 ବସ୍ତୁଆଡ଼କୁ ଅନୁଚି ଚିହ୍ନେଣ କରନ୍ତିପାରୁଛି	 ସରଳ ଚିହ୍ନେଣ ମାଗୁଛି ଯଥା - ବସିପଦ, ମୋଟେ ବଲ୍ ବିଅ	 ଶିଶୁଟି ମାମା ବା ବାବା ବ୍ୟତ୍ୟତ ଅନ୍ୟ ଦୁଇଟି ଶବ୍ଦ କହିପାରୁଛି ଯଥା - ଦୁଦୁ, ବିଲି	 ଶିଶୁଟି ଚା'ର ଆଖୁଟିରେ ଖେଳନାକୁ ଆପପଣ କରନ୍ତି ଦୁଇଟି ଖେଳନାଟିକୁ ଦୁଇଟି ବସ୍ତୁ ବସ୍ତୁ ବସ୍ତୁ
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	ସାମଗ୍ରୀର ଅଙ୍ଗ ଲକ୍ଷଣ	ପୁଣ୍ୟ ଅଙ୍ଗ ଲକ୍ଷଣ	କହିବା	ଅନୁଭୂତି ଓ ସାମାଜିକତା	
୧୮ - ୨୪ ମାସର ଶିଶୁ ପାଇଁ	 ଖେଳନା ଚାଣିବା ବେଳେ ସିଧା ହୋଇ ଲୁଚୁଛି	 ସତ୍ୟ ପ୍ରଦତ୍ତ ଲାବରେ ପାରାପାରି କରୁଛି	 ମାମା, ପାପା, ବାବା, ବଲ୍, ବାଲ୍, ବିଲେଲ, ଦୁଦୁ, ବାଏ-ବାଏ, ନାଟ, ହାଟ, କବଜା, ପାଣି, ଖାଇବା, ଲତ୍ୟାଟି	 ପରକରଣା ବାମକୁ ଅନୁଭବଣ କରୁଛି	 ଶରୀରକୁ ବିଲିନୁ ଅଙ୍ଗ ପ୍ରତ୍ୟାଙ୍ଗକୁ ଚିହ୍ନି କରନ୍ତିପାରୁଛି

୨୪ - ୩୦ ମାସର ଶିଶୁ ପାଇଁ	 ପାହାଚ ଲପରକୁ ଚର୍ଚ୍ଚି ପାରୁଛି ଏବଂ ଚକକୁ ଖସାଇ ପାରୁଛି	 ଶିଶୁଟି ଚିତ୍ତେ ହାତ ବା ଲମ୍ପଟ ଦ୍ୱାରା ଖାବ୍ୟ ଖାଇପାରୁଛି ବିନା କପ୍ପରେ ପିଇପାରୁଛି	 ଶିଶୁଟି ଦୁଇଟି ଶବ୍ଦକୁ ଯୋଡ଼ି କହିପାରୁଛି ଯଥା: ମାମା-ପାଣି, ପାଟି-ଲୁଚୁଛି	 ସମାବରଣ ଖେଳ: ଅନ୍ୟ ପିଲାମାନଙ୍କ ସହିତ ମିଶି ଏକାଠି ଖେଳୁଛି	 ଖେଳନା ସହିତ ଶିଶୁଟି ଖେଳୁଛି ଯଥା - ବେଣେଲକୁ ଖୁଆଇଛି
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Annexure-XVII

Monthly reporting format for ASHA for follow up of LBW babies & SNCU / NRC discharge cases

Sr. No.	Name of ASHA:					
	Name of Village:				Reporting month& year:	
	Name of the ANM concerned:				Sub Centre:	
	Block:			District:		
	Details					No.
1	Total no. of SNCU/NBSU discharged babies followed in the month:					
1.1	Total no. of babies with danger signs					
1.2	Total no. of babies referred to hospital					
1.3	Total no. of babies attended institutional follow up as per discharge card					
2	Total No of LBW babies followed up in the month (other than those mentioned above)					
2.1	No of Babies with any danger signs					
2.2	No of babies referred to hospital					
3	No of NRC discharged children followed up in the month					
3.1	No of Babies with any danger signs					
3.2	No of babies referred to hospital					
3.3	No. of babies attended NRC institutional follow up as per discharge card					
4	Line list of all babies					
	Name	Age & Sex	Father's Name	Village	Baby alive / dead	Remarks
1						
2						
3						
4						
5						
6						



**NATIONAL HEALTH MISSION
DEPARTMENT OF HEALTH AND FAMILY WELFARE
GOVERNMENT OF ODISHA**