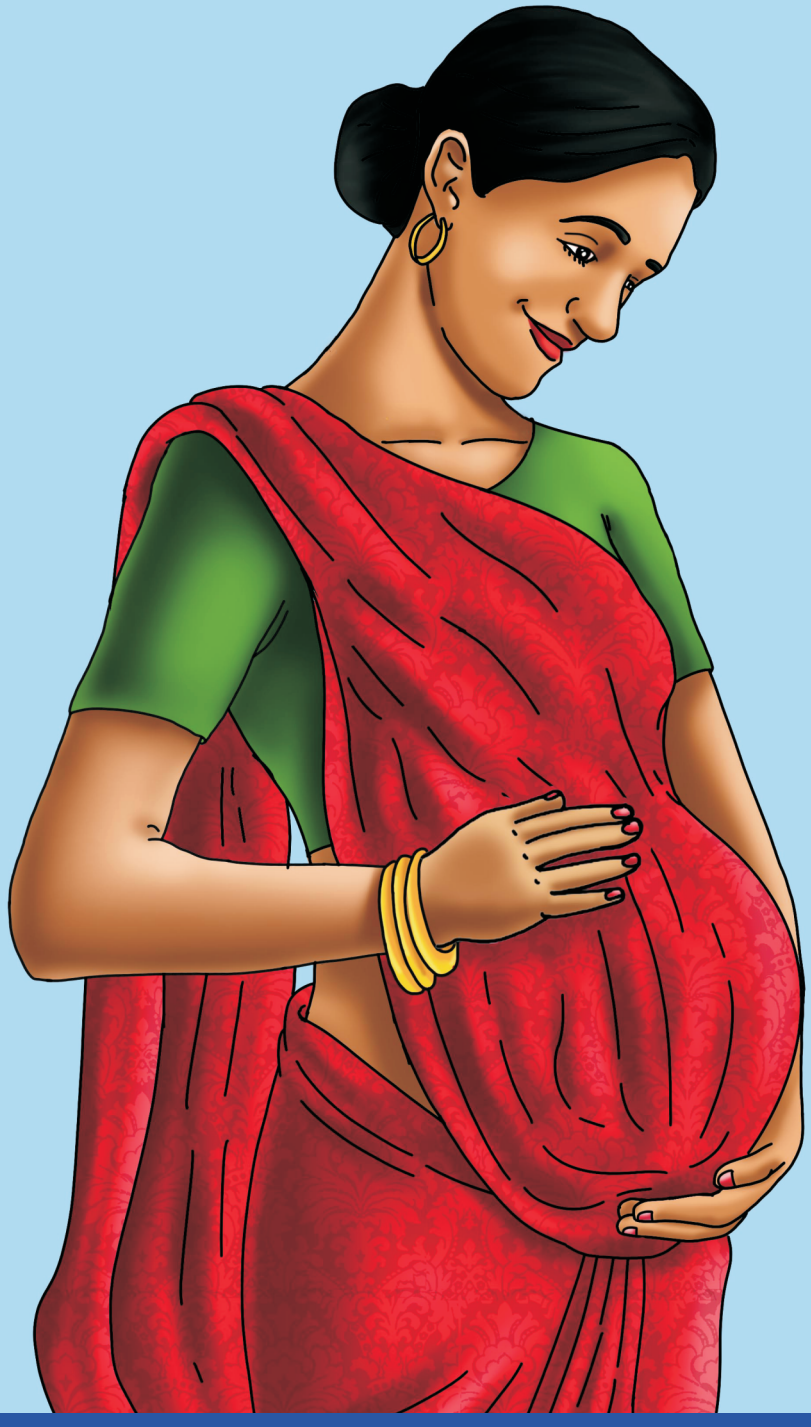
सत्यमेव जयते

Ministry of Health & Family Welfare
Government of India

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन



Training Manual on Care During Pregnancy and Child Birth

for Community Health Officer
at Ayushman Bharat - Health and Wellness Centres

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2021

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LIST OF ABBREVIATIONS

ANM	Auxillary Nurse Midwife
ANC	Antenatal Care
BCC	Behavioural Change Communication
CHC	Community Health Centre
CHO	Community Health Officer
CMO	Chief Medical Officer
CAC	Comprehensive Abortion Care
DH	District Hospital
EMTCT	Elimination of mother to child transmission
FRU	First referral unit
GDM	Gestational Diabetes mellitus
HIV	Human Immuno Virus
HDU	High Dependency Unit
HMIS	Health Management Information System
ICU	Intensive care unit
ICDS	Integrated Child Development Services
IEC	Information Education Communication
JSY	Janani Suraksha yojana
JSSK	Janani Shishu Suraksha Karyakram
MTP	Medical Termination of Pregnancy
MDSR	Maternal Death Surveillance Response
MCH	Maternal and Child Health
MC	Medical College
NHP	National Health Policy
NHM	National Health Mission
SHC-HWC	Sub-Health Centre-Health and Wellness Centre
SRS	Sample Registration System
SDH	Sub districtHospital
SBA	Skill Birth Attendant
VHND	Village Health Nutrition Day
VHSND	Village Health Sanitation and Nutrition Day

Chapter 1: Status of Maternal Health in India and Service Delivery Framework

India has made substantial progress in reducing maternal mortality through evidence-based interventions, financial resources, infrastructure and human resource strengthening, health promotion strategies, since the launch of National Health Mission.

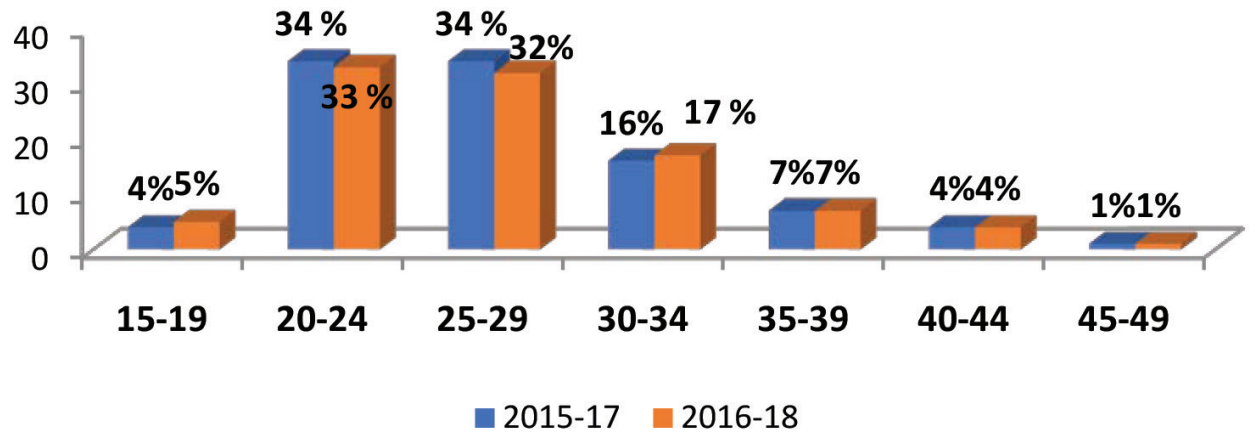
To have a better understanding of the progress made in reducing the maternal mortality the progress made so far is given below:

Progress & Target				
Maternal Health Indicator	**SRS 2011-13**	**Current status (SRS 2016-18)**	**NHP Goal (2020)**	**SDG Goal 2030**
Maternal Mortality Ratio	167	113	100	<70

India's maternal mortality ratio reduced 54 points from 167 deaths per 100,000 live births (SRS' 2011-2013) to 113 deaths (SRS' 2016-18). The SDG goal is to have the global MMR at <70 per 100000 live births while the NHP target is to reduce the Maternal Mortality Ratio to 100 by the year 2020.

As per SRS 2016-2018, 5 states have achieved the SDG target while 11 states have already achieved the NHP 2017 targets. The names of these states are given in the table below.

States achieved **SDG** (70/lakh live births)	Kerala (43), Maharashtra(46) and Tamil Nadu(60), Telangana (63), Andhra Pradesh(65)	**SRS (2016-2018)**
States achieved **NHP 2017 Goals** (100/lakh live births)	Kerala (43), Maharashtra (46), Tamil Nadu (60), Telangana (63), Andhra Pradesh (65), Jharkhand (71), Gujarat (75), Haryana (91), Karnataka (92), West Bengal (98), Uttarakhand (99)	**SRS (2016-2018)**



Age wise distribution of Maternal Death

Age wise distribution of the maternal deaths show that 65% of maternal deaths are happening in the age group of 20 to 29 (SRS 2016-2018). The major reasons for maternal deaths are high blood pressure, post-partum haemorrhage, obstructed labour and abortion.

India experienced an estimated 30,000 maternal deaths in the year 2018 (HMIS division), this is a decrease of 2,400 yearly maternal deaths from 2017.This decrease has happened largely due to improved implementation of key government interventions under National Health Mission which are shown in the picture below.

This module will support the Community Health Officer in refreshing their knowledge regarding antenatal and postnatal care of pregnant women.

In order to achieve further decline in maternal mortality as envisaged in the NHM 2017, it is important to ensure that every pregnant woman delivering in health facilities is entitled to respectful maternity care during pregnancy and labour. The various components that define 'Respectful Maternity Care' are as follows:

RESPECTFUL MATERNITY CARE CHARTER

THE UNIVERSAL RIGHTS OF WOMEN & NEWBORNS

I Everyone has the right to **freedom** from harm & ill-treatment

No one is allowed to physically hurt you or your newborn. You should both be taken care of in a gentle and compassionate way and receive assistance when experiencing pain or discomfort.

II Everyone has the right to **information**, informed **consent**, & respect for their choices & preferences, including companion of choice during maternity care & refusal of medical procedures

No one is allowed to force you or do things to you or your newborn without your knowledge or consent. Every woman has the right to autonomy, to receive information, and provide informed consent or refusal for care. Every parent or guardian has the right to receive information and provide informed consent or refusal for their newborn's care, in the newborn's best interests, unless otherwise provided by law.

III Everyone has the right to **privacy** & **confidentiality**

No one is allowed to share your or your newborn's personal or medical information, including all records and images, without your consent. Yours and your newborn's privacy must be protected, except as necessary for healthcare providers to convey information for continuity of care.

IV Everyone is their own person from the moment of birth & has the right to be treated with **dignity** & **respect**

No one is allowed to humiliate, verbally abuse, speak about or touch you or your newborn in a degrading or disrespectful manner. You and your newborn baby must be cared for with respect and compassion.

V Everyone has the right to equality, freedom from discrimination & **equitable care**

No one is allowed to discriminate against you or your newborn because of something they think or do not like about either one of you. Equality requires that pregnant women have the same protections under the law as they would when they are not pregnant, including the right to make decisions about what happens to their body.

VI Everyone has the right to **healthcare** & to the highest attainable level of health

No one may prevent you or your newborn from getting the healthcare needed or deny or withhold care from either one of you. You and your newborn are entitled to the highest quality care, provided in a timely manner, in a clean and safe environment, by providers who are trained in current best practices.

VII Everyone has the right to **liberty**, **autonomy**, self-determination & freedom from arbitrary detention

No one is allowed to detain you or your newborn in a healthcare facility, even if you cannot pay for services received.

VIII Every child has the right to be **with their parents** or guardians

No one is allowed to separate you from your newborn without your consent. You and your newborn have the right to remain together at all times, even if your newborn is born small, premature or with medical conditions that require extra care.

IX Every child has the right to an **identity** & **nationality** from birth

No one is allowed to deny your newborn birth registration, even if they die shortly after birth, or deny the nationality your newborn is legally entitled to.

X Everyone has the right to adequate **nutrition** & **clean water**

No one is allowed to prevent you and your newborn from having adequate nutrition, clean water or a healthy environment. You have the right to information and support on child nutrition and the advantages of breastfeeding.

RESPECTFUL MATERNITY CARE · UNIVERSAL RIGHTS OF WOMEN & NEWBORNS

As a CHO, you should inform the MPWs and ASHAs about the importance of respectful maternity care and to create awareness among the community about entitlements of pregnant women and mothers of infants. The service guarantee at the public health facilities are as follows:

Service Guarantee Charter

Suman-Surakshit Matritva Aashwasan

All Pregnant Woman/Neonates visiting public health facilities are entitled to the following free services:

- **At least 4 ANC checkups (including one checkup during the 1st trimester and at least one checkup under Pradhan Mantri Surakshit Matritva Abhiyan, Iron Folic Acid supplementation, Tetanus diptheria injection and other components of comprehensive ANC package) and 6 home based newborn care visits**
- **Comprehensive Abortion Care Services in line with the MTP Act**
- **Safe Motherhood booklet and Mother and Child Protection Card with service guarantee charter**
- **Free and zero expense access to identification and management of complications**
- **Free transport from home to health institutions (dial 102/108), assured referral services with scope of reaching health facility within one hour of any critical case emergency and Drop back from institution to home after due discharge(minimum 48 hrs)**
- **Zero expense delivery and C-section facility in case of complications at public health facilities**
- **Services for elimination of Mother to Child Transmission (EMTCT)of HIV, HBV & Syphilis.**
- **Quality care by trained personnel (including Midwife/SBA)**
- **Respectful care with privacy and dignity**
- **Delayed cord cutting**
- **Early initiation and support for breastfeeding**
- **Zero dose vaccination.**
- **Free and zero expense services for sick neonates and infants under JSSK**
- **Birth registration certificates from healthcare facilities**
- **Conditional Cash transfers/ direct benefit transfers under various central and state specific schemes.**
- **Post-partum family planning counseling**
- **Time bound redressal of grievances including responsive call center/helpline, web portal etc**
- **Counseling and IEC/BCC for safe motherhood**

Chapter 2: Maternal Health Service Provision

FRAMEWORK FOR MATERNAL HEALTH SERVICES

The Community Health Officer as envisaged in AYUSHMAN BHARAT is the nodal person for the Health and Wellness Centre and they will be working as ambassadors of Ayushman Bharat. The essential outputs for the Community Health officer for the maternal health programme will be as under

1. SERVICE PROVISION

Community health officer is a trained health worker and is designated to be the in-charge of the health and wellness centre. Thus, service provision becomes one of the key areas of activity. The service provision has been divided in field level service provision and community level service provision.

1.1 Field level/Community level service provision

Field level (village level) service provision forms one of the core components of the work to be done by Community Health Officer. This activity will ensure that quality care is brought nearest to the community. The following activities need to be conducted by CHO in field:

1.1.1 Village Health, Sanitation and Nutrition Days (VHSND):

1.1.1.1 VHSND plan is made so as to cover all pockets under the geographical area in the jurisdiction of health and wellness centre including hilly, tribal, underserved, hard-to-reach areas.

1.1.1.2 Be the lead service provider in VHSND of hard-to-reach and underserved areas or areas with poor ANC registration and high home deliveries.

1.1.1.3 Services provided in VHSND

Services	Actions
Antenatal care	• All pregnant women are to be registered • Registered pregnant women to be given ANC • Dropout pregnant women eligible for ANC are to be tracked and given services
Immunization	• All eligible children are to be given vaccines as per immunization schedule • All dropout children who do not receive vaccines as per the scheduled doses are to be vaccinated • Vitamin A solution is to be administered to under-five children
Nutrition	• All under-six children are to be weighed every month and their height to be recorded every quarter, and data to be entered in CAS application and plotted on MCP card simultaneously by AWW • Underweight and wasted children are to be identified and managed appropriately. Identified SAM children with medical complications to be referred to the NRC or health facility with paediatric care facilities. All under-six children to be provided supplementary nutrition
Family Planning	• All eligible couples are to be given condoms, Combined Oral Contraceptives (COCs), Centchroman (Chhaya), Emergency Contraceptives Pills (ECP) as per their choice and referrals made for other contraceptive services
HBV, Syphillis and HIV	• Screening and referral, ensuring confidentiality (HIV)

1.1.1.4 In these field level VHSNDs the CHO should in coordination with ANM and ASHA, undertake all the important tasks to be done as per VHSND guidelines, like, ensuring 100 percent attendance of all ANC women enrolled in that VHSND, ANC check-up including blood pressure, sugar, haemoglobin etc., identification of high-risk pregnancy, immunization of ANC, IFA distribution, calcium distribution etc.

1.1.1.5 CHO should ensure that all the pregnant women are registered in first trimester of pregnancy and all pregnant women should have 4 ANC check-ups done.

1.1.1.6 Counselling to the pregnant women regarding iron and folic acid tablets, calcium tablets, diet etc.

1.1.1.7 Counsel about comprehensive abortion services.

1.1.1.8 Investigation for Malaria, dengue, HbsAg should be provided.

1.1.2 Universal Screening for GDM, HIV and Syphilis

1.1.2.1 CHO should ensure that all the pregnant women should mandatorily have tested for GDM, HIV and Syphilis in VHSND clinic.

1.1.3 Janani Suraksha Yojana (JSY):

1.1.3.1 CHO should ensure that all the ANC mothers have got their bank account opened so that the direct benefit transfer of incentives can happen.

1.1.4 Janani Shishu Suraksha Karyakram (JSSK)

1.1.4.1 CHO should ensure that all the ANC mothers are made aware of all the entitlements under the JSSK program like: Free referral and transport to the hospital and drop back, free drugs and diagnostics, Free diet. This will ensure that out of pocket expenditure does not happen.

1.1.5 Home delivery:

1.1.5.1 CHO should ensure that a proper birth plan is made, and the pregnant woman is counselled to have an institutional delivery.

1.1.5.2 The CHO should be ensuring that in case the pregnant women undergoes home delivery, then the home delivery is conducted by them.

1.1.6 Home Visits to Mother in PNC period:

1.1.6.1 CHO should visit all the PNC women's home within 48 hours of birth, and on 3rd, 7th, 14th, 28th and 42nd day of pregnancy.

1.1.6.2 In this visit, the CHO should do a thorough examination of the PNC women as per guidelines and do proper reporting in the formats.

1.1.7 Maternal Death Review:

1.1.7.1 Actively take part in identifying and reporting all the female deaths in the reproductive age groups and reporting them.

1.1.7.2 Help the team in community based maternal death review.

1.2 Facility Level service provision

1.2.1 **Routine OPD:** CHO should ensure that all the OPD services are happening daily and pregnant women are examined daily.

1.2.2 **VHSND:** CHO should conduct VHSND in the SHC-HWC and provide all the range of services as mentioned in field level VHSND above.

1.2.3 Labour Room and Delivery:

i. In place where the HWC is a delivery point the CHO (Nurse) will do the normal delivery of the pregnant woman only after getting SBA training.

ii. All the identified high-risk pregnant women should be referred to higher centre.

iii. CHO will ensure that the labour room is equipped as per the maternal health guidelines and all the logistics and drugs as needed in the labour room should be present.

iv. Partograph should be plotted and active management of third stage of labour should be done for all delivery cases.

v. All the complications of delivery cases like PPH, Eclampsia etc. to be stabilised and then referred to appropriate higher centres where the care for that health condition is available.

vi. Undertake breast crawl and initiate breastfeeding. Every newborn, when placed on mother's abdomen, soon after birth, has the ability to find its mother's breast on its own and to decide when to breastfeed. This is called 'Breast Crawl', which is helpful to baby as early initiation of breastfeeding is successfully established for nutrition, and to the mother as it helps in uterine contraction for faster expulsion of placenta, reduce maternal blood loss and prevents anemia. CHO should support the mother to provide confidence and direction to baby.

2. SUPERVISORY

2.1.1 The CHO will supervise all the work done by her team of ANM and ASHA with regard to maternal health programme.

2.1.1.1 Supervisor of ANM:

a. Early diagnosis of pregnancy using Nischay Kits.

b. Register all the pregnant women in the first trimester of pregnancy.

c. Ensuring four antenatal care checks in VHSND.

d. Provide Folic acid and Iron, folic acid tablet to and calcium tablets to all normal and anemic (mild and moderate) pregnant women as per their blood haemoglobin level.

e. Provide TT/TD immunization to all pregnant women.

f. Test all pregnant women for urine albumin and sugar, haemoglobin, syphilis, HIV and blood grouping.

g. Counselling regarding care during pregnancy including information about nutritional requirements

h. Identifying high risk pregnancies and appropriate referral.

i. Supporting birth planning.

j. Maintaining the RCH register and do entry for ANMOL Portal.

k. Ensuring bank account for all pregnant women for JSY and other DBT transfer.

l. Making PNC home visit on 0, 3, 7, 14, 21, 28 days.

m. Support and hand hold ANM in her supervision of ASHA.

n. Help and support ANM in doing the birth planning of the pregnant women.

2.1.1.2 **Supervisor and Mentor of ASHA:**

a. CHO may and should act as a resource person for training of ASHA.

b. Guide the ASHA in beneficiary mobilisation for VHSND.

c. Motivate and guide ASHA for taking the pregnant women for check-up in PMSMA clinic and to delivery points during labour.

d. Motivate and guide ASHA for ensuring adherence to IFA and Calcium supplementation during pregnancy.

3. REFERRAL & LINKAGES

3.1 Up referral with PHC, CHC, DH/MC

3.1.1 Pradhan Mantri Surakshit Matritwa Ashwasan(PMSMA)

3.1.1.1 CHO should ensure that all pregnant women in second and third trimester should compulsorily attend at least one PMSMA clinic.

3.1.2 High Risk ANC and Complications of Delivery:

3.1.2.1 CHO should map the higher facilities (PHC, CHC, SDH,DH) with respect to the type of emergency maternal health service provided by them and establish linkages with them so that assured up referral can be done.

3.1.2.2 Example: A case of postpartum haemorrhage, eclampsia, retained placenta and sepsis should be referred directly to a centre with blood transfusion facility and posting of a gynaecologist/EmOC trained medical officer.

3.1.2.3 Example: Pregnant women with high blood pressure or GDM, or Syphilis can be referred to a PHC or a CHC with MBBS Medical Officer or for PMSMA.

3.1.2.4 All the high-risk pregnant women should be referred to higher facility with a properly filled referral slip, which will help in identifying the complication for which the pregnant women has been referred for, the treatment given so far and help needed.

3.1.2.5 CHO should telephonically contact the higher centre and inform them about the referral made.

3.1.3 Comprehensive Abortion Care

3.1.3.1 CHO should identify women who need the services for medical or surgical termination of pregnancy and refer them to appropriate higher centre.

3.2 Back referral from PHC, CHC, DH/MC.

3.2.1 CHO should ensure that all the pregnant women who were referred to a higher centre should be back referred to the CHO and the CHO should ensure treatment compliance and follow up on the advice given by higher centre.

3.3 Down Referral to ASHA

3.3.1 CHO should guide the ASHA regarding the follow-up and ensuring treatment compliance to the pregnant women.

3.4 Linkages with Line departments

3.4.1 Linkages with ICDS for organising VHSND and maternal nutrition.

3.4.2 Linkages with ICTC for referral and testing and treatment of HIV suspected cases.

3.4.3 Linkages with RNTCP for referral and testing and treatment of pregnant women with TB

Chapter 3: Care during Pregnancy

2.1 Importance of Antenatal Care

Quality antenatal care is the cornerstone to improve maternal health and a crucial challenge. Good quality and full completion of ANC check-ups are critical for reducing the persisting burden of maternal and newborn mortality. In this chapter you will learn about the importance of early detection of pregnancy, antenatal care and its essential components including:

- Calculation of expected pregnancies
- Schedule of antenatal assessment
- History taking for pregnant mothers
- Physical Examination, General Examination and Abdominal Examination
- ANC related Investigations– Urine test for pregnancy, Haemoglobin Test, Urine test for proteins and sugar,Oral Glucose Tolerance Test (OGTT),RDT for Malaria, HIV, Dengue, HBsAg, and RDT for Syphilis etc.
- Counselling

a. Calculation of Expected Pregnancies

To ensure complete registration, it is essential that you know the estimated number of pregnancies to be registered annually in your area. In case the number of pregnancies registered is less than that of the estimated pregnancies, you need to track down the pregnancies you have missed with the help of ASHAs and ANMs

You have learnt in Induction Module, the calculation of expected pregnancies at your Sub Centre Health and Wellness Centres of 5000 population.Suppose the birth rate of the district is 20 per 1000 population, then, 100 children will be born for a population of 5000; then 110 women will become pregnant in the population, considering 10 % wastage; in any month, you should have about at least 52-53 pregnancies registered with you.

Some women may be receiving ANC from the private sector. Ensure that their names with the names of the facilities where they are registered are mentioned in your RCH register/ANMOL.

b. Early detection of pregnancy

Early diagnosis of pregnancy is necessary to ensure adequate care to pregnant mother, foetal growth and development and safe delivery. It should be undertaken as early as possible after the first missed period. ASHAs have a list of eligible couples for their population and undertake household visits to facilitate early identification of pregnancy using Nishchay kits.

Undertaking Pregnancy Detection Test:

Procedure

- Remove the pregnancy test Cassette from the pregnancy kit. Keep this card on a flat surface.
- Use the dropper to take morning sample of urine. Put 2-3 drops in the well-marked 'S'.
- Wait for 5 minutes.

Result:

- If one red band appears in the result window 'R', the pregnancy test is negative.
- If two parallel red bands appear, the pregnancy test is positive.

c. Determining LMP and EDD:

- As a first step you would take the menstrual history to calculate the EDD and prepare a birth plan.
- Recall that the LMP refers to the FIRST day of the woman's last menstrual period.
- Make sure that the woman is not referring to the date of the first missed period, i.e., the date when menstruation was expected to occur the following month and failed to occur.
- If the woman is unable to remember the exact date, encourage her to remember some major event,festival, or occurrence which she might link with her LMP.
- If the exact date of the LMP is not known and it is late in the pregnancy, ask for the date when the foetal movements were first felt. This is known as 'quickening' and is felt at around 20 weeks of gestation. This information would give a rough idea about the period of gestation, which needs to be correlated with the fundal height to estimate the gestational age.
- Calculate the EDD using the formula in box. It is based on the assumption that the menstrual cycle of the woman was regular before conception and that it was a 28–30 days' cycle.

EDD = Date of LMP + 9 months + 7 days

d. Schedule of Antenatal visits and Timing of Registration:

- The first visit or registration of a pregnant woman for ANC should take place as soon as the pregnancy is suspected, and you would need to ensure that ASHAs and MPWs are able to register all pregnant women from the HWC service area.
- Including the registration, four antenatal check-ups should be ensured for every pregnant woman as per the schedule below:

No. of Visit	Timings of Visit
1st Visit	Within 12 weeks, preferably as soon as pregnancy is suspected
2nd Visit	Between 14-26 weeks
3rd Visit	Between 28-36 weeks
4th Visit	Between 36 weeks and term
PMSMA check-up	In 2nd or 3rd trimester

As a CHO, under PMSMA you will need to:

- Follow up with ASHAs to ensure that at least one ANC is conducted by the Medical Officer of the PHC.
- Inform and refer the mother to avail ANC check-ups as part of the Pradhan Mantri Surakshit Matritva Abhiyan. This programme aims to provide assured, comprehensive, and quality antenatal care, free of cost, universally to all pregnant women on the 9th of every month at designated government health facilities.

- Inform the pregnant mothers and caregivers that under PMSMA programme, free antenatal check-up services at designated PHCs/CHC/DH would be provided by specialists such as Obs-Gynaec/Radiologists/physicians with support from private sector doctors to supplement the efforts of the government hospital.
- Ensure that the ASHA maintains the line list of beneficiaries.
- Create awareness on the importance of regular health check-ups during ANC period including PMSMA and also after delivery i.e., during postnatal care period.
- Support ASHA and ANM in identifying missed-out cases that is those pregnant women who have not registered and have not received any antenatal care services.
- Support ASHA and ANM in identifying left out pregnant women,i.e., those pregnant women who after registering or receiving first ANC check-up have not received three more ANC check-ups.
- Ensure mobilisation of beneficiaries to avail services during PMSMA.
- Ensure that those high-risk pregnant women who have been referred to higher level centre during the previous PMSMA, visit the higher centre for management and treatment of the complications.

2.2 Antenatal Assessment and its Components

Essential Components of Antenatal Care

- Early registration (Refer Section 2.4)
- History taking
- Physical examination (Weight, BP, pallor, respiratory rate, edema)
- Abdominal palpation
- Vaginal examination
- Laboratory investigations – Hb, Urine for sugar and proteins, Rapid testing for Syphilis screening, tieup with nearest ICTC/PPTCT Centre for: Rapid testing kits for HIV screening and Referral and management of +ve cases, OGTT testing for Gestational Diabetes, Ultrasound etc.
- Optional Investigations – Hepatitis B and Australia Antigen testing and Thyroid Stimulating Hormone
- Tetanus Toxoid Vaccination or Tetanus and Adult Diphtheria (td) Vaccine
- IFA and Calcium Supplementation
- Calcium Supplementation – Two tablets of Calcium after first trimester for next six months
- Deworming
- Malaria Prophylaxis and Treatment
- Nutritional Counselling
- Micro birth planning

a. History Taking

The history taking is important because it will help to:

- Identify whether there were complications during previous pregnancy that may have a bearing on the present one.

- Identify any current medical/surgical or obstetric condition(s) that may complicate the present pregnancy.

While taking the history, it is important to ensure privacy and make the woman feel calm and relaxed. As the pregnant woman will be under your care for nine months it is important that you establish a rapport with her and make her feel comfortable. Remember to record all findings in the MCP card and highlight abnormal findings. In case the pregnant woman has not met the MPWs and ASHAs of her area, you will need to introduce her to your team members and inform that these members of your team will also contact her at home or during VHSND sessions to undertake – time-to-time ANC assessment, provide information and counselling and other necessary services such asTT immunization etc.

1. **Start with collecting the following history:**
   - Age of woman
   - Order of pregnancy
   - Birth interval
2. **Ask for Symptoms:**

   Normal symptoms during pregnancy – Nausea and vomiting, heartburn, constipation, and increased frequency of urination. These symptoms may cause discomfort to the woman.

   Examine symptoms of complications – Fever, persistent vomiting with dehydration, palpitations, tiredness, breathlessness at rest/on mild exertion, generalised swelling of body/facial puffiness, severe headache and/or blurring of vision, passing smaller amount of urine or burning micturition, leaking or bleeding per vagina, abnormal vaginal discharge/itching, high blood pressure detected in ANC, leaking for more than 12 hours without labour pain and decreased or absent foetal movements and presence of goitre.
3. **Take Obstetric History**– It is essential to ask the woman about her previous pregnancies or obstetric history to determine if there were any complications in previous pregnancies. Some complications may recur during the present pregnancy. Obtain the following information while taking the obstetric history:
   - Ask about the number of previous pregnancies. Confirm whether they were all live births, and if there was any still birth, abortion or any child who died.
   - Ascertain the date and outcome of each event, along with the birth weight, if known. It is especially important to know about the last pregnancy.
   - Obtain information about any obstetric complications and events in the previous pregnancies. The complications and events to be inquired about are as follows:Recurrent early abortion, post-abortion complications, hypertension, pre-eclampsia or eclampsia, Ante-Partum Hemorrhage (APH), breech or transverse presentation, obstructed labour, including dystocia, perineal injuries/tears, Excessive bleeding after delivery and puerperal sepsis.
   - Ascertain whether the woman has had any obstetrical operations (caesarean sections/instrumental delivery/vaginal or breech delivery/manual removal of the placenta).
   - Ask for a history of blood transfusions.
4. **Ask for any Current/Past Systemic Illnesses**– Find out whether the woman has or is suffering from any of the following:High blood pressure (hypertension), diabetes, breathlessness on exertion, palpitations (heart disease), chronic cough, blood in the sputum, prolonged fever (tuberculosis), renal disease, thyroid dysfunction (Hypothyroidism and Hyperthyroidism) or any previous thyroid surgery, convulsions (epilepsy),

attacks of breathlessness or asthma, jaundice, malaria and any other illnesses, e.g., Reproductive Tract Infection (RTI), Sexually Transmitted Infection(STI) and HIV/AIDS.

5. **Family history of systemic illness** – Ask the woman whether there is a family history of hypertension thyroid dysfunction, diabetes or tuberculosis,asthma,thalassemia or whether anybody in the family has received repeated blood transfusions.If present, such a history predisposes the woman to developing these problems during pregnancy (e.g., hypertensive disorders of pregnancy and gestational diabetes).

   You must also ask if anybody in the family has had twins and/or given birth to an infant with congenital malformation, as the presence of such a history in the family increases the chances of the woman giving birth to a child with the same condition.

6. **History of Drug Intake or Allergies** – It is important to find out if the woman is allergic to any drug, or if she is taking any drug that might be harmful to the foetus.

7. **History of Intake of Harmful Substances** – Ask the woman if she chews or smokes tobacco and/takes alcohol. The woman should be advised to stop consuming alcohol and using tobacco during pregnancy or even after the delivery because it may cause other problems/complications, such as addiction and/or cancer. Further, passive smoking can harm the foetus.

Indications for Referral based on history of pregnant woman

Refer pregnant women to the 24-hour PHC for ANC and delivery:

a. **If you identify any symptoms of complications**

b. **If you identify the following from previous obstetric history:**

- Stillbirth or neonatal loss
- Three or more spontaneous consecutive abortions
- Obstructed labour
- Premature births, twins, or multiple pregnancies
- Weight of the previous baby <2500 g or >4500 g
- Admission for hypertension or pre-eclampsia/eclampsia in the previous pregnancy
- Surgery on the reproductive tract
- Congenital anomaly
- Treatment for infertility
- Spinal deformities, such as scoliosis/kyphosis/polio
- Rh negative in the previous pregnancy

c. **If you identify any past systemic illness**

d. **If there is history of thalassemia**

c. Physical Examination

This activity needs to be conducted during all the visits. The initial readings may be taken as a baseline with which the later readings are to be compared.

General examination involves following steps:

Look for Pallor:

Presence of pallor indicates anemia. Examine the woman's conjunctiva, nails, tongue, oral mucosa and palms. Increase in pallor is linked with worsening anemia and should be verified with haemoglobin estimation and other investigations to identify the needs for referral to the PHC-Medical Officer in case anemia worsens.

Look for Jaundice:

1. Jaundice is a yellowish staining of the skin and sclera (the whites of the eyes), caused by high levels of the chemical bilirubin in the blood. Jaundice is not a disease, but a sign that can occur in many different diseases.
2. Look for yellowish discoloration of the skin and sclera. The colour of the skin and sclera vary depending on the level of bilirubin. When the bilirubin level is mildly elevated, they are yellowish. When the bilirubin level is high, they tend to be brown.

Measure and record Pulse:

The normal pulse rate is 60–90 beats per minute. **If the pulse rate is persistently high or low, with or without other symptoms, the woman requires medical attention at the PHC/FRU.**

Measure and record Respiratory rate:

Normal respiratory rate is 18-20 breaths per minute. **If the RR is above 30 breaths per minute and pallor is present, it indicates severe anemia, heart disease or other associated medical problems. She must be immediately referred to the PHC-Medical Officer for further investigation and management of any illness that may be present.**

Look for Oedema:

- Oedema (swelling), which appears in the evening and disappears in the morning after a full night's sleep, could be a normal manifestation of pregnancy.
- Any oedema of the face, hands, abdominal wall, and vulva is abnormal. Oedema can be suspected if a woman complains of abnormal tightening of any rings on her fingers.
- If there is oedema in association with high blood pressure, heart disease, anaemia or proteinuria, the woman should be referred to FRU.
- Non-pitting oedema indicates hypothyroidism or filariasis and requires immediate referral to FRU for investigations.

Measure and record Blood Pressure:

- Measure the woman's blood pressure at every visit **(Annexure 2)**. This is important to rule out hypertensive disorders of pregnancy.
- Hypertension is diagnosed when two consecutive readings taken four hours or more apart show the systolic blood pressure to be 140 mmHg or more and/or the diastolic blood pressure to be 90 mmHg or more.
- High blood pressure during pregnancy may signify Pregnancy-Induced Hypertension (PIH) and/or chronic hypertension.
- If the woman has high blood pressure, check her urine for the presence of albumin. The presence of albumin (+2) together with high blood pressure is sufficient to categorise her as having pre-eclampsia. Refer her to the PHC-MO immediately.
- If the diastolic blood pressure of the woman is above 110 mmHg, it is a danger sign that points towards imminent eclampsia. The urine albumin should be estimated at the earliest. If it is strongly positive, the woman should be referred to the FRU IMMEDIATELY.
- If the woman has high blood pressure but no urine albumin, she should be referred to the PHC Medical Officer.
- A woman with PIH, pre-eclampsia or imminent eclampsia requires hospitalisation and supervised treatment at a 24-hour PHC/FRU.
- CHO/ANM/ASHA must keep in touch with the woman or her family and undertake appropriate follow up of these cases.

Measure and record weight:

- A pregnant woman's weight should be taken at each visit. The weight taken during the first visit/registration should be treated as the baseline weight.**(Annexure 2)**
- Normally, a woman should gain 9-11 kg during her pregnancy. Ideally after the first trimester, a pregnant woman gains around 2 kg every month.
- An inadequate dietary intake can be suspected if the woman gains less than 2 kg per month. She needs to be put on food supplementation and counselled for adequate dietary intake. Lowweight gain usually leads to Intrauterine Growth Retardation (IUGR) and results in the birth of a baby with a low birth weight.
- Excessive weight gain (more than 3 kg in a month) should raise suspicion of preeclampsia, twins (multiple pregnancy) or diabetes. Take the woman's blood pressure and test her urine for proteinuria or sugar. If her blood pressure is high, i.e., more than 140/90 mmHg, and her urine has proteins or sugar, refer her to the PHC-Medical Officer.

Nutritional Assessment:

Pregnant women should be routinely monitored during their ANC visits at facility and community level. After the registration process, a three-point algorithm should be followed by front line health workers to screen and manage pregnant women:

- **Assess (Screen)** - Take history, measure all vitals, look for all clinical signs, lab investigations.
- **Classify**- The pregnant women will be classified as per table 2 below:

Categories	Not at Nutritional Risk	At-Nutritional Risk	At Severe Nutritional Risk and Medical Risk
Age	≥20 years and	18-<20 years or	<18 years or
Height	≥150 cm and	145-149.9 cm or	<145 cm [or
Body Mass Index (if pregnancy <20 weeks)	BMI 18.5-22.9 Kg/m^2 or	**Thinness:** BMI 16-18.49 Kg/m^2 or	**Severe thinness:** BMI <16 Kg/m^2 or
		Overweight: 23-24.99 Kg/m^2] or	**Obese:** 25 Kg/m^2 or
Gestational weight gain	2 kg/month, second trimester onwards		<1kg/month [8,9] and >3 kg/month second trimester onwards or
Haemoglobin level	≥11g/dl	7-10.9 g/dl	<7 g/dl or
Any medical risk/ clinical signs	No sign of night blindness/visible Goitre/ skeletal fluorosis and No medical risk	Signs of night blindness/ pallor: eyes/tongue/ nails/palm/visible Goitre/ skeletal fluorosis	Symptoms suggesting medical illnesses

- **Supplement/Counsel/Refer**- Depending on the classification, supplementation, counselling and/or referral should be done. Management of pregnant women can be done through interventions given in section 2.4.
- **Prophylaxis during Pregnancy**

Preventive Measures				
Intervention	**Composition**	**Dose Regime**	**Timing & Duration**	**Condition**
Tablet Folic Acid	500 microgram	One tablet once a day	1st trimester (once pregnancy confirmed)	Neural tube defects in foetus
Tablet Iron Folic Acid (IFA)	60 mg Iron and 0.5 mg Folic Acid	One tablet once a day	In second and third trimester of pregnancy for 6 months (180 tablets) and continued for 6 months after delivery (180 tablets) taken after meals preferably after dinner	Anemia
Injection Tetanus Toxoid (TT)	0.5 ml Tetanus Toxoid	2 injections one month apart OR One Booster (I/M in upper arm)	1st dose at ANC registration, followed by 2nd dose after one month. Give only Booster if immunised with 2 injections in previous pregnancy within last 3 years	Maternal and Neonatal Tetanus

Tablet Calcium	500 mg calcium and 250 IU Vitamin D3	One tablet twice a day (total 1 gm calcium daily)	From second trimester (14 weeks) onwards throughout pregnancy for 6 months (360 tablets) and continued for 6 months after delivery (360 tablets) taken in between meals Iron folic acid tablet and calcium tablets should not be taken together at the same time. There should be a gap of at least 2 hours between IFA and calcium for better absorption of both. Calcium should not be taken immediately after a meal.	Pregnancy Induced Hypertension and Preterm Births
Tablet Albendazole (Deworming)	400 mg	One tablet once only (under observation)	After 1st trimester (after 12 weeks)	Worm infestation, anemia, malnutrition
Insecticide Treated Bed-Nets (ITN)			At 1st ANC visit	Malaria

Look for Symptoms of thyroid dysfunction or the presence of goitre:

Uncontrolled hypothyroidism during pregnancy can lead to preeclampsia, anaemia, miscarriage, low birth weight baby, stillbirth, and rarely congestive heart failure.

- Look for the symptoms of hypothyroidism: Feeling tired, unable to stand cold temperatures, hoarse voice, swelling of the face, weight gain, constipation, skin and hair changes, including dry skin and loss of eyebrows, carpal tunnel syndrome (hand tingling or pain), slow heart rate, muscle cramps and irregular menstrual periods.
- Routine screening for hypothyroidism during pregnancy is not recommended. A pregnant woman with symptoms of hypothyroidism, a history of hypothyroidism, or with other endocrine system conditions or high-risk pregnant woman should be screened for hypothyroidism.
- ASHA/ANM will identify pregnant women at risk for hypothyroidism and refer to SHC-HWC and counsel them for timely testing and follow up. You should make sure that periodic visits are made as per schedule by PW diagnosed with hypothyroidism and that there are no dropouts.
- You should inform PHC-MO, in case a pregnant woman who has been diagnosed with hypothyroidism is moving out of the area, a detailed report should be given to her regarding the management plan so that she is able to follow up and continue her treatment wherever she goes.

Breast examination:

- Observe the size and shape of the nipples for the presence of inverted or flat nipples. Try and pull out the nipples to see if they can be pulled out easily. If the nipples are inverted, the woman must be advised to pull on them and roll them between the thumb and index finger.
- A 10cc or 20cc disposable plastic syringe can also be used for correcting inverted nipples. Cut the barrel of the syringe from the end where the needle is attached. Take out the plunger and put it in from the opposite

end, which is the cut end of the syringe. Push the piston forward fully, and gently place the open end of the barrel in such a way that it encircles the nipple and areola. Pull back the plunger, thus creating negative pressure. The nipple will be sucked into the barrel and pulled out in the process.

- Look for crusting and soreness of the nipples. If these are present, the woman must be advised on breast hygiene and the use of emollients such as milk cream.

The breasts must be palpated for any lumps or tenderness. If there are lumps or tenderness, refer the woman to the MO.

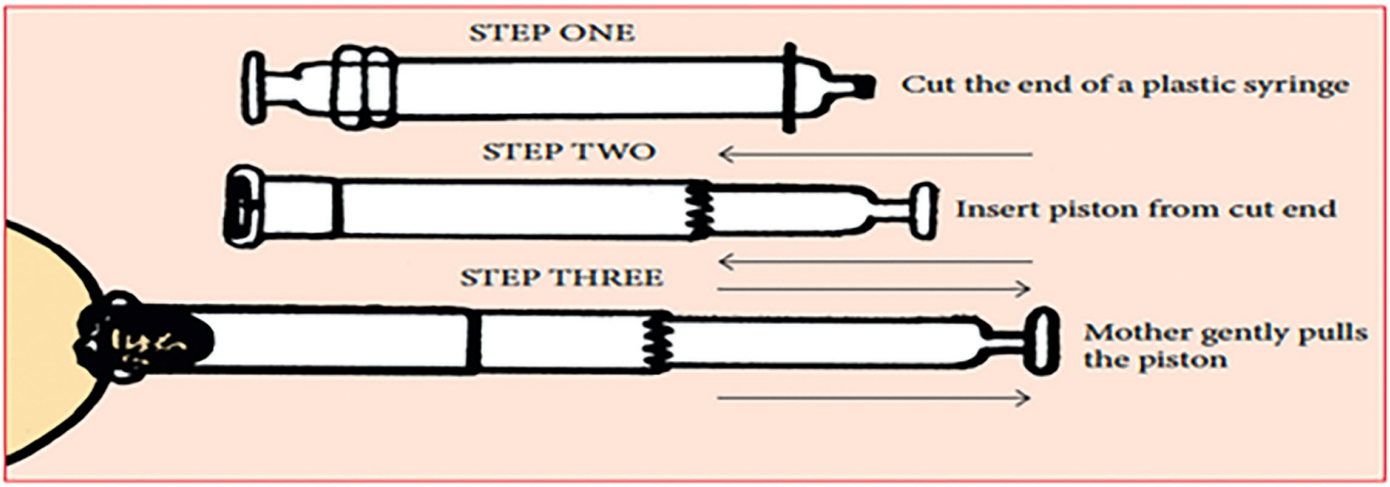


Figure 1: Correcting an inverted nipple using a syringe

c. Abdominal Examination

Abdominal examination helps you to monitor the progress of pregnancy andfoetal growth, check for foetal lie and presentationand auscultate foetal heart sounds.

Preparation for abdominal examination- Ensure privacy, examination room should be well lit and airy,woman is asked to empty her bladder,explain the women about the procedure/process,to make her comfortable keep talking to her,she lies supine with legs partially flexed,stand on her right side and palpate the uterus with warm hands.

Steps for abdominal examination:

1. Measuring Fundal height:

This indicates the progress of pregnancy and foetal growth. The uterus becomes an abdominal organ after 12 weeks of gestation. The gestational age (in weeks) corresponds to the fundal height (in cm) after 24 weeks of gestation. The normal fundal height is different at different weeks of pregnancy. Follow the following steps for measuring fundal height

- Divide the abdomen into parts by imaginary lines to estimate the gestational age through the fundal height.
- The most important line is the one passing through the umbilicus.
- Divide the lower abdomen (below the umbilicus) into three parts, with two equidistant lines between the symphysis pubis and the umbilicus.
- Similarly, divide the upper abdomen into three parts, again with two imaginary equidistant lines, between the umbilicus and the xiphisternum.

- Keep the ulnar border of curved left hand on woman's abdomen parallel to symphysis pubis. Start from xiphisternum and gradually proceed towards symphysis pubis lifting the hand between each step till a bulge/ resistance of uterine fundus is felt. Mark the level of fundus.
- Remember that while measuring the fundal height, the woman's legs should be kept straight and not flexed.

See where the fundus of the uterus is and judge according to the indicators given below in figure 2:

12th week	Just palpable above the symphysis pubis
16th week	At lower one- third of the distance between the symphysis pubis and umbilicus
20th week	At two-thirds of the distance between the symphysis pubis and umbilicus
24th week	At the level of the umbilicus
28th week	At lower one- third of the distance between the umbilicus and xiphisternum
32nd week	At two-thirds of the distance between the umbilicus and xiphisternum
36th week	At the level of the xiphisternum
40th week	Sinks back to the level of the 32nd week. but the flanks are full, unlike that in the 32nd week

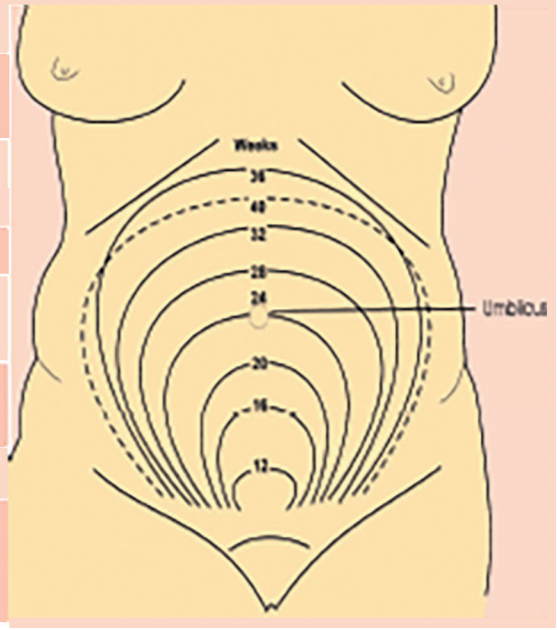


Figure 2: Measurement of Fundal Height

If there is any disparity between the fundal height and the gestational age as calculated from the LMP or if there is a difference of 3 cm or more or if there is no growth compared to the previous check-up, then it should be considered significant. Such cases require further investigation and should be referred to the MO.

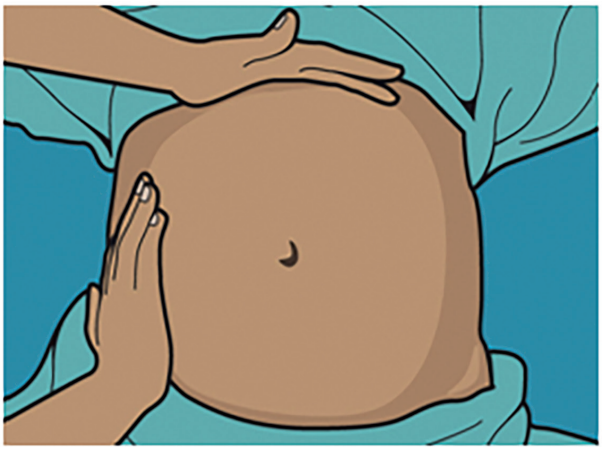


Figure 3: Assessment of Fundal Height

If the height of the uterus is more or less than that indicated by the period of amenorrhea, the possible reasons could be as follows, given in table below:

Height of the uterus more than that indicated by the period of amenorrhea:	*Height of the uterus less than that indicated by the period of amenorrhea:*
• Wrong date of LMP • Full bladder • Multiple pregnancy/large baby • Polyhydramnios • Hydrocephalus • Hydatidiform mole	• Wrong date of LMP • IUGR • Missed abortion • Intrauterine Death (IUD) • Transverse lie

2. Foetal lie and Presentation:

Determining the foetal lie and presentation is relevant only in late pregnancy (32 weeks onwards). Before that, it is important to only palpate the foetal parts while conducting an abdominal examination.

The normal lie at term in the majority of pregnancies is longitudinal, with a cephalic presentation. Any other lie is abnormal, and the woman must be referred to an FRU for the delivery.

Palpation to determine foetal lie and presentation

- The pelvic grips (four in number) are performed to determine the lie and the presenting part of the foetus. The grips are Fundal grip, Lateral grip, Superficial pelvic grip and Deep pelvic grip (shown in figure 4).
- Palpate for the foetal lie and assess whether it is longitudinal, transverse or oblique. Remember that even if a malpresentation is diagnosed before 36 weeks, no active management or intervention is recommended at that point of time. Advise the woman to go in for an institutional delivery.
- All health workers should be able to recognise a transverse lie. Missing it can be disastrous because there is no mechanism by which a woman with a transverse lie can deliver normally, i.e., vaginally. The woman needs an elective caesarean section, i.e., she must not go into labour. She should, therefore, be referred to an FRU where emergency obstetric services and facilities for a caesarean section are available.

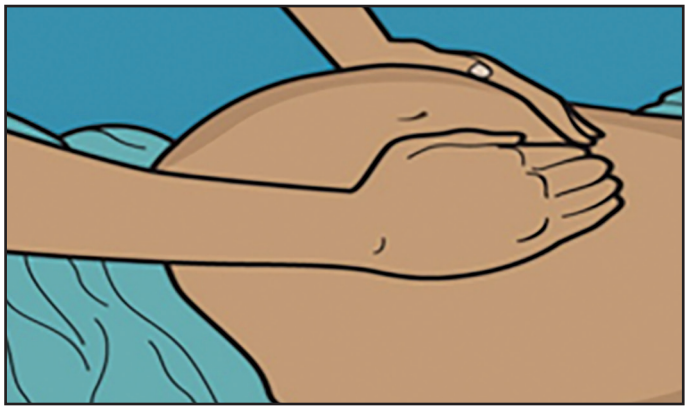
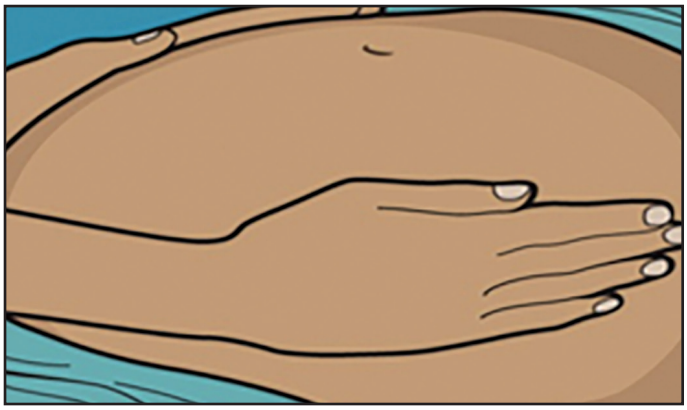
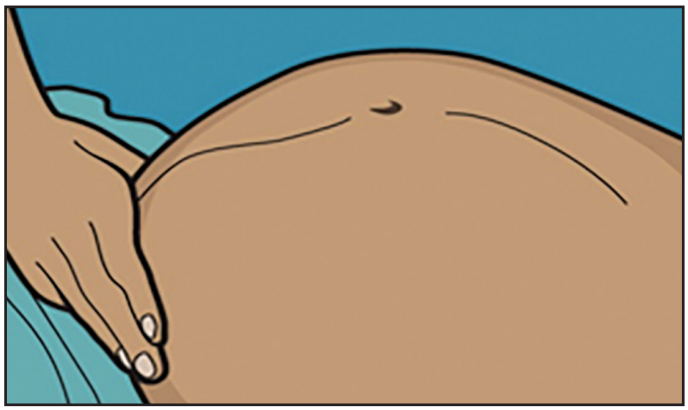
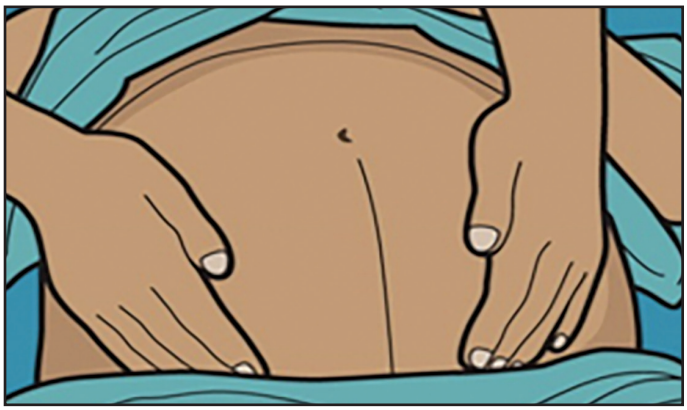
Fundal Palpation/Fundal Grip: Helps to determine lie and presentation of foetus	**Lateral Palpation/Lateral Grip:** Helps to locate foetal back
	
First Pelvic Grip/Superficial Pelvic Grip: Helps to determine whether head or breech is presenting at pelvic brim	**Second Pelvic Grip/Deep Pelvic Grip:** Helps to know the degree of flexion of head
	

Figure 4: Four grips to determine the foetal lie and presentation

3. Foetal Movements:

- Foetal movement are reliable sign of foetal well-being
- These are felt around 18-22 weeks of pregnancy (felt earlier in multigravida than primigravida)
- Normally 10-12 foetal movements should be felt by the pregnant woman in a day
- Decreased foetal movements may be an indication of foetal distress
- Pattern of foetal movement may change prior to labour due to reduced space. But foetal activity should continue throughout pregnancy and labour

4. Foetal Heart Sound (FHS) and Rate (FHR)

- FHS is heard per abdomen by stethoscope/fetoscope after 24 weeks of pregnancy
- Normal FHR is 120-160 beats per min
- FHR < 120 beats per min or > 160 beats per minindicates foetal distress and calls for referral
- Best heard on the side of the back of the foetus
- In vertex presentation FHS is best heard midway between the line joining the umbilicus and the anterior superior iliac spine on the side of the back
- In breech presentation FHS is heard above the umbilicus
- Count the FHS for one full minute (FHR)

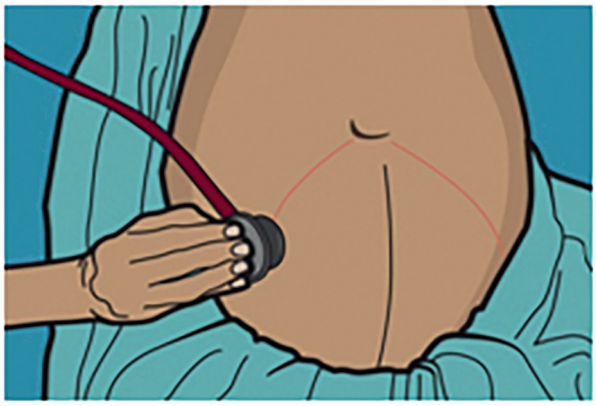
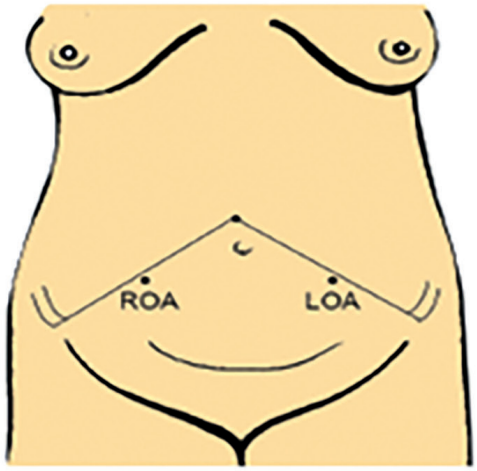
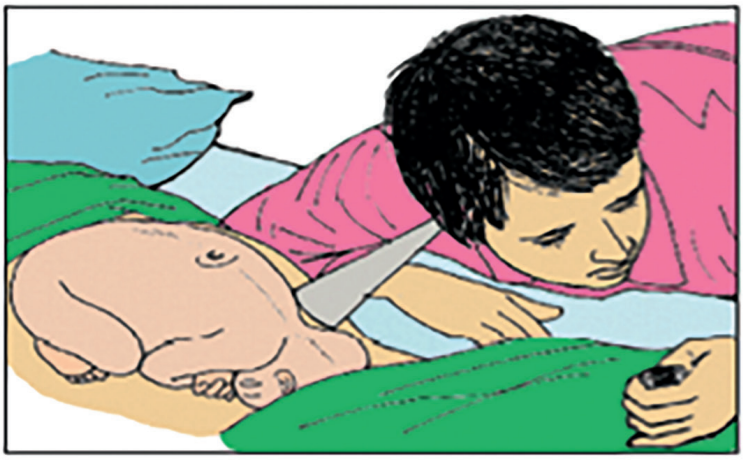


Figure 10: Auscultation of FHS

Figure 11: Location of FHS using foetoscope





(Note: ROA right occipitoanterior
LOA left occipitoanterior)

Key points to remember

- An abdominal examination and auscultation of FHS must be recorded during each visit to monitor progress of pregnancy, foetal viability and growth
- Maintain privacy and obtain verbal consent before examination
- The bladder should be emptied before examination
- During palpation, ensure that the woman partially flexes her legs and knees
- foetal lie and presentation may be ascertained in palpation during the 3rd trimester
- Correlate the fundal height in weeks with LMP and also correlate with fundal –symphysis pubic height in cm

d. Vaginal Examination

Vaginal examination is a tool to assess the cervix's favourability for induction or to confirm the progress of labour by assessing the cervical dilatation. Detailed step wise procedure is enclosed in **annexure 3.**

Vaginal examination should not be carried out if there is any history of vaginal bleeding, previous history of miscarriage, and early rupture of membrane.Prior to the procedure, an abdominal assessment and auscultation of the foetal heart should be undertaken.

Indications for referral based on Physical Examination of Pregnant Woman
Refer the pregnant woman to 24-hour PHC/FRU for further examination in following cases:

a. If you identify any symptoms of complications

b. If you identify the following from physical examination

- Severe anemia (Hb less than 7gm/dl or paleness inside eyelids and fingernails)
- Jaundice (yellowish discoloration of skin and conjunctiva or high bilirubin level)
- Pulse rate >90 beats/min or <60 beats/min
- Respiratory rate > 30 breaths/min along with anemia
- Oedema of face, hands, abdominal walland vulva or tightening of finger rings
- Oedema with high blood pressure, heart disease or proteinuria
- Non pitting oedema with hypothyroidism or filariasis
- Pregnancy induced hypertension (BP more than 140/90 mm Hg)
- Pre-eclampsia (High BP along with albuminuria)
- Imminent eclampsia (Diastolic pressure above 110 mm Hg with albuminuria)
- Excessive weight gain (more than 3kg/month) along with pre-eclampsia or diabetes
- Foetal growth retardation
- Multi-foetal pregnancy
- Lump or tenderness in breast
- Uterus height more than 3cm different from gestational age
- No foetal movement/heart sound
- Foetal distress
- Breech presentation and foetal lie other than longitudinal

e. Laboratory Investigations

Lab investigations that will need to be undertaken at the level of HWC-SHCs for ANC assessment are as follows:

a. Pregnancy Detection Test (refer section 2.1)

b. Haemoglobin Test **(See Annexure 5)**

c. Complete Urine Analysis – urine test for albumin and sugar **(see Annexure 6)**

d. Blood sugar testing

e. Testing for Malaria if the woman complains of fever with chills **(See Annexure 9)**

f. HIV (Antibodies to HIV 1 and 2)

g. RDT for HBsAg

h. RDT for Syphilis

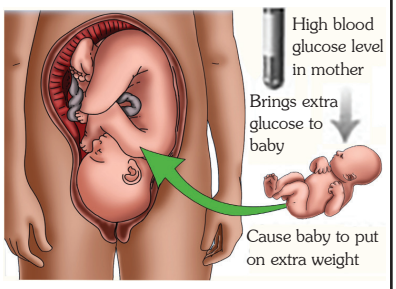
Blood sugar Examination for Gestational Diabetes Mellitus:

Urine Test for the presence of sugar	To diagnose women with gestational diabetes

Gestational diabetes (GDM) is a condition of high blood glucose levels among women during pregnancy. It usually disappears after the birth of the baby.

Risk factors

- Obesity - with a BMI of 30 or over
- Family history of Type 2 diabetes
- If the mother had previously delivered larger babies (4 kilograms or more)
- If the woman has high blood pressure



Complications of Gestational Diabetes

- An extra large baby, which can cause a difficult delivery, possible nerve damage, and even stillbirth.
- Later development of type 2 diabetes in the mother and the baby.

Testing for GDM is recommended twice during ANC by ANM/CHO by using plasma calibrated glucometer. The first testing should be done during first antenatal contact as early as possible in pregnancy. The second testing should be done during 24-28 weeks of pregnancy if the first test is negative. There should be at least 4 weeks gap between the two tests. The test is to be conducted for every pregnant woman even if she comes late in pregnancy for ANC at the time of first contact. If she presents herself beyond 28 weeks of pregnancy, only one test is to be done at the first point of contact. If the test is positive at any point, refer to PHC-MO. Detailed steps of performing blood sugar examination are enclosed in **Annexure 7.**

Management of GDM at HWC-SHC – All PW who test positive for GDM for the first time should be started on Medical Nutrition Therapy (MNT) for 2 weeks.Management through MNT described in **Annexure 8**.

Rapid Diagnostic Test for Syphilis:

- Availability of Point-of-Care (POC) testing at Sub-centres and outreach sessions such as Village Health Sanitation and Nutrition Days (VHSNDs) for all pregnant women and newborns to prevent maternal syphilis and congenital syphilis in newborns.
- All pregnant women should be tested for syphilis in the first ANC visit itself, which should be as early as possible. The steps of syphilis examination described in Annexure 10.
- For all syphilis-positive women detected during ANC by either POC or RPR, their newborns should be tested by RPR at PHC/CHC.
- Women who are at high risk for syphilis, those who live in areas of high prevalence of syphilis, or those who were untested earlier, should be screened again in the third trimester or at the time of delivery
- The CHO/ANM will record the test results in the MCP card and RCH register. All positive cases should be followed up for treatment.

Rapid Diagnostic Test for HBsAg: Rapid diagnostic test for hepatitis is a visual, rapid, sensitive and accurate one step immunoassay for the qualitative detection of Hepatitis B Surface Antigen (HBsAg) in human serum or plasma. Detail steps are enclosed in **Annexure 11**.

Rapid Diagnostic Test for HIV/AIDS: The test is a screening test for anti-HIV-1 & anti-HIV-2. Detail steps are enclosed in **Annexure 12**.

You will need to refer the pregnant woman to PHC for the following tests that need to be conducted during the pregnancy: Blood group and Rh type, Total Leucocyte Count, Differential Leucocyte Count, Platelet Count, Bleeding and Clotting Test, Serum Bilirubin, Thyroid test, VDRL/RPR (Rapid Plasma Reaginand Ultrasound).

Along with examination and investigations, you may also notice some common problems during the pregnancy and take appropriate actions as per table 3 given below:

Table 3: Common Problems of Pregnancy and action to be taken at SHC-HWC by CHOs:

Symptoms	Signs/ investigations	Most probable diagnosis	Action(s) to be taken
Heart Burn and Nausea		Reflux oesophagitis	• Advise the woman to avoid spicy and oily foods. • Ask her to take cold milk during attacks. • If severe, antacids may be prescribed.
Vomiting during the first trimester 		May be physiological (morning sickness)	• Advise the woman to eat small frequent meals; avoid greasy food; eat lots of green vegetables; and drink plenty of fluids. • If vomiting is excessive in the morning, ask her to eat dry foods, such as roti/ paratha, biscuits, or toast, after waking up in the morning.
Excessive vomiting, especially after the first trimester	The woman may be dehydrated—dry tongue, loss of skin turgor, decreased urine output in severe cases.	Hyper- emesis gravidarum	• Start IV and refer to 24 hour PHC/ FRU
Palpitations, easy fatiguability, breathlessness at rest 	Conjunctival and/or pallor of the palm present Hb <7g/dl	Severe anaemia	• Refer her to the MO at FRU for further management. • Advise her to have a hospital delivery.

Puffiness of the face, generalised body oedema 	Check protein in urine. Check BP. If BP >140/90 mmHg on 2 readings and proteinuria absent	Hypertensive disorder of pregnancy	• Advise her to reduce workload and to rest. • Advise on danger signs. • Re-assess at the next antenatal visit or in one week if more than eight months pregnant. • If hypertension persists after one week or at next visit, refer to hospital or MO.
	If diastolic BP is ≥90 mmHg on two readings and 2+ proteinuria	Pre-eclampsia	• Refer to hospital. • Revise birth plan.
 Puffiness of the face, generalised body oedema Severe headache Blurred vision Epigastric pain Reduced urine output	If diastolic BP is ≥110 mmHg and 3+ proteinuria	Severe Pre-eclampsia	• Give Injection Magsulf, 5 g (10 ml), deep IM, in each buttock. • Refer urgently to PHC/FRU.
Increased frequency of urination up to 10-12 weeks of pregnancy		May be physiological due to pressure of the gravid uterus on the urinary bladder	• Reassure her that it will be relieved on its own.
Increased frequency of urination after 12 weeks, or persistent symptoms, or burning on urination	Tenderness may be present at the sides of the abdomen and back. Body temperature may be raised.	UTI	• Refer the woman to the MO at the PHC.

Constipation		Physiological	• Advise the woman to take more fluids, leafy vegetables and a fibre rich diet. • If not relieved, give her Isabgol (2 tablespoons to be taken at bedtime, with water or milk). • Do NOT prescribe strong laxatives as they may start uterine contractions
Pain in abdomen	Fainting Retropubic/ suprapubic pain	• Ectopic pregnancy • UTI	• Refer the woman to the MO at the FRU.
Bleeding P/V, before 20 weeks of gestation 	• Check the pulse and BP to assess for shock. • Ask for history of violence	• Threatened abortion/ spontaneous abortion/ hydatidiform mole/ ectopic pregnancy • Spontaneous abortion due to violence	• If the woman is bleeding and the retained products of conception can be seen coming out from the vagina, remove them with your finger. • Start IV fluids. • Refer her to the MO of a 24-hour PHC/FRU. • Put her in touch with local support groups. • Do NOT carry out a vaginal examination under any circumstances.
Bleeding P/V, after 20 weeks of gestation	Check the pulse and BP to assess for shock.	Antepartum haemorrhage	
Fever 	Body temperature is raised Peripheral smear for malarial parasite +ve	Site of infection somewhere, including possible sepsis Malaria	• Refer her to the MO at 24-hour PHC/ FRU. • If malaria is diagnosed, refer her to the PHC for management of malaria according to the NVBDCP guidelines
Decreased or absent foetal movements 	FHS heard and is within the normal range of 120-160/ minute. FHS heard, but the rate is 160/ minute FHS not heard	Baby is Normal. Foetal distress Intrauterine foetal death	• Re-assure the woman. • Repeat FHS after 15 minutes. • If the FHS is still out of the normal range, refer her to the MO at 24-hour PHC/FRU • Inform the woman and her family that the baby might not be well. • Refer her to the MO at 24-hour PHC/ FRU.

Abnormal vaginal discharge, with or without abdominal pain	Vaginal discharge with or without odour	RTI/STI	Refer the woman to the MO. Advise her on vaginal hygiene, i.e., cleaning the external genitalia with soap and water.
Leaking of watery fluids P/V.	Wet pads/cloths	Premature Rupture of Membrane (PROM)	• Refer the woman to the MO at FRU
• Eyes roll • Face and limbs twitch • Body gets stiff and shakes • Fists clinched 		Convulsions/ Fits	• Refer the woman to the MO at FRU
• Skin rashes with Itching • Presence of pus-filled boils 		Scabies and Boils	• For boils, advice the woman to apply hot fermentations to the area thrice daily. • If no improvement after two days, refer to PHC • For scabies, refer to PHC

2.3 Interventions

a. Tetanus Toxoid Vaccination or Tetanus and adult Diphtheria Vaccination

Tetanus Toxoid (TT) vaccine has been replaced with Tetanus and adult diphtheria (Td) vaccine. The use of Td rather TT is recommended during pregnancy to protect against maternal and neonatal tetanus and diphtheria during prenatal care.

Available TT will be used first before starting use of Td. The route, site, dose of td injection is same as TT.

- A pregnant woman must get td/TT (0.5ml, deep intramuscular in upper arm) during the first antenatal visit.
- The 2nd injection should preferably be given at least at one month after first dose.
- If woman receives first dose after 38 weeks of pregnancy, then the second dose may be given in the postnatal period, after a gap of 4 weeks.
- If mother received two td/TT doses in last pregnancy and mother gets again pregnant within 3 years than only one dose of td/TT is given called as Booster dose.
- Inform her that there may be a slight swelling, pain, or redness at the site of the injection for a day or two.

b. Prevention and Management of Anemia (Nutritional and Non-nutritional)

Anemia is a condition in which the number of red blood cells, (RBCs) and consequently their oxygen-carrying capacity, is insufficient to meet the body's physiological needs. Anemia is a significant public health challenge in India. It results from one or more of the following:

- Defective red cell production
- Increased red cell destruction or blood loss

Anemia during pregnancy is associated with premature birth, intra and post-partum haemorrhage, low birth weight, stillbirths and maternal deaths.

In 2018, the MoHFW launched the Anemia Mukt Bharat (AMB) strategy to reduce the anemia prevalence in six target age groups, namely children 6-59 months, children 5-9 years, adolescents 10-19 years, pregnant women, lactating women and women of reproductive age (15-49 years). The strategy adopts a multi-pronged 6x6x6 approach to address both nutritional and non-nutritional anaemia through continuum of care.

Types of anaemia:

1. **Nutritional Anemia:** It is caused due to deficiency of micro-nutrient such as minerals (iron, zinc, copper, selenium etc.) and vitamins (Folic acid, Vit. B12, Vit. B6)
2. **Non-nutritional Anemia:** Due to haemoglobinopathies (thalassemia and sickle cell anemia), Soil Transmitted helminths inflammation, fluorosis and malaria and chronic diseases such as tuberculosis etc.

Most common prevalent nutritional deficiency in India is iron deficiency anemia (50%)

Grading of anaemia as per WHO is as mentioned in Table below:

Population	Anemia		
	Mild	Moderate	Severe
Pregnant women	10.0-10.9gm/dl	7-9.9 gm/dl	<7gm/dl

Nutritional anemia:

The cause, signs and symptoms of nutritional anemia is as under:

Table 9: Causes, signs and symptoms of Nutritional Anemia

Causes of nutritional anaemia:	Signs and symptoms of anaemia:
• Inadequate intake of the dietary iron • Improper absorption of iron • Loss of iron from the body • Worm infestations	• Tiredness and weakness • Breathlessness • Pale face, nails, tongue and conjunctiva of eyes • Lack of concentration • Reduces capacity to work thus decreased productivity • Limits learning ability • Causes loss of appetite • Affects the growth and development • Increases vulnerability to infections due to decrease in immunity

Non-nutritional anemia:

Non-nutritional anemia can be due to chronic blood loss in conditions such as heavy menstruation and/or haemorrhoids. Non-nutritional anemia can also be due to haemoglobinopathies such as sickle cell disease and thalassemia. In areas endemic for malaria, fluorosis and haemoglobinopathies, non-nutritional anemia is a common finding.

In the endemic areas, special focus should be given to integrate screening and treatment of anemia, along with screening and treatment of malaria, haemoglobinopathies and fluorosis respectively.

Prevention & Control of anaemia: Intake of adequate and balanced nutrition will cover all the required nutrients to prevent nutritional anaemia.

Sources of dietary iron: Iron from food comes in two forms: heme and non-heme. Heme is found only in animal flesh like meat, eggs and fish etc. Non-heme iron is found in plant foods like whole grains, nuts, seeds, legumes, and leafy greens. Non-heme iron is also found in animal flesh (as animals consume plant foods with non-heme iron) and fortified foods.

Heme and non-heme sources of dietary iron

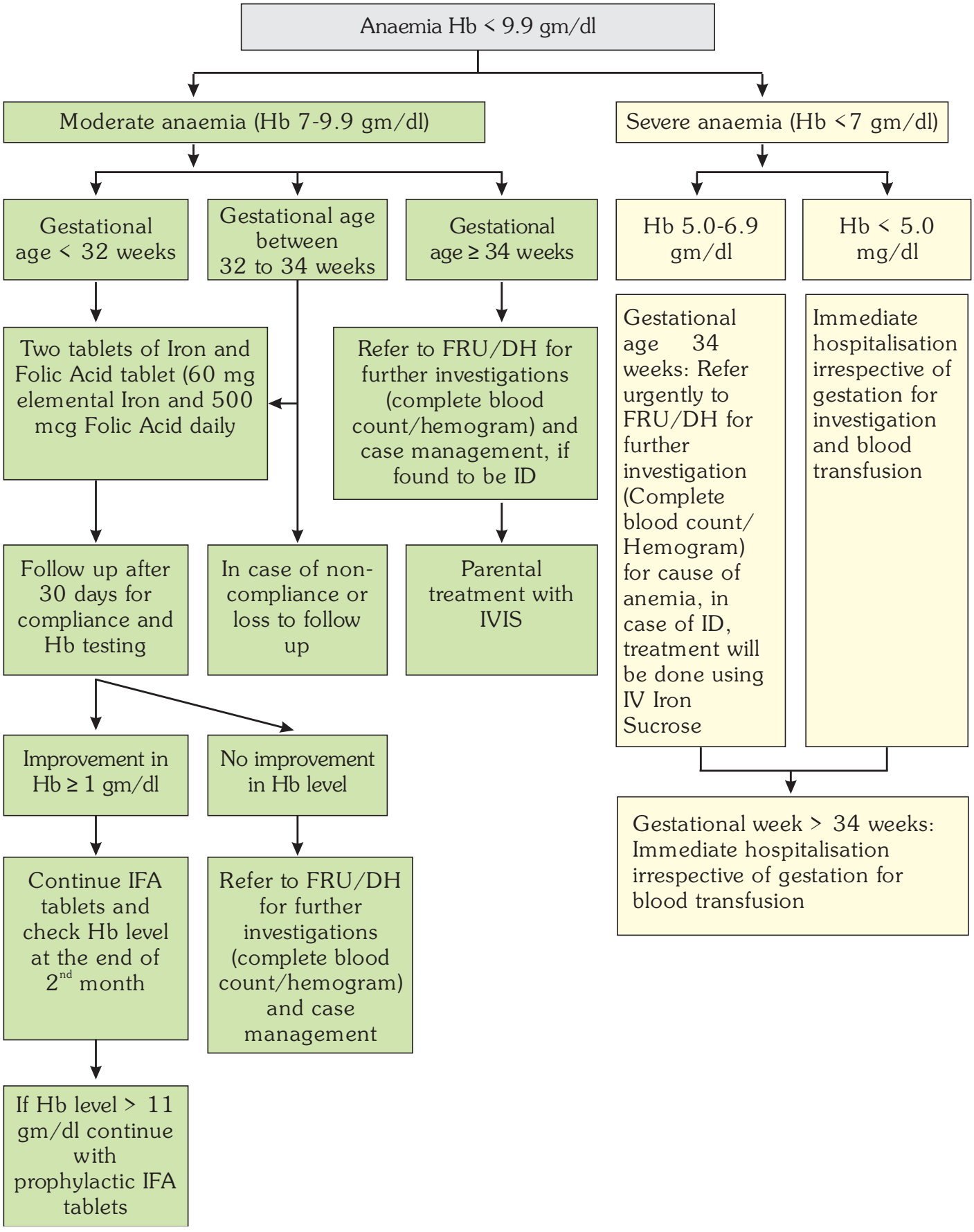
Other than dietary supplements, management of nutritional (Iron deficiency) anemia through iron folic acid supplementation should be done as per the flow chart given below:

For mild anemia:

If Haemoglobin is 10–10.9 gm/dl (mild anemia)	
First level of treatment (at all levels of care)	• Two tablets of Iron and Folic Acid tablet (60 mg elemental Iron and 500 mcg Folic Acid) daily, orally given by the health provider during the ANC contact
Follow-up	• Every 2 months for compliance of treatment by health provider at regular ANC clinics/PMSMA/VHSND platform/home visits. • The contact is to be utilised by the health provider to also conduct haemoglobin estimation of the anemic cases using digital invasive hemoglobinometer. • If haemoglobin levels have come up to normal level (Hb>10.9 gm/dl), discontinue the treatment and switch to prophylactic IFA dose.

If no improvement after first level of treatment	• If no improvement in haemoglobin (<1 g/dl increase) after two months of treatment, refer to First Referral Unit (FRU)/District Hospital (DH) for further investigation (Complete Blood Count/Hemogram) and case-specific management.
If Haemoglobin is 7-9.9 gm/dl (moderate anemia)	
First level of treatment (at all levels of care)	• Two tablets of Iron and Folic Acid tablet (60 mg elemental Iron and 500 mcg Folic Acid) daily, orally given by the health provider during the ANC contact
Follow up	• Every month for compliance of treatment by health provider at regular ANC clinics/PMSMA/VHSND platform. • The contact is to be utilised by the health provider to also conduct haemoglobin estimation of the anemic cases using digital invasive hemoglobinometer every month. • If haemoglobin levels have come up to normal level (Hb>10.9 gm/dl), discontinue the treatment and continue with the prophylactic IFA dose.
If no improvement after first level of treatment	• If no improvement in haemoglobin (<1 g/dl increase) after two months of treatment, refer to First Referral Unit (FRU)/District Hospital (DH) by health provider. • The case to be referred to FRU/DH for further investigations (Complete Blood Count/ Hemogram) to ascertain the cause of anemia. If anemia is due to iron deficiency and poor compliance with oral iron therapy and period of pregnancy is more than 34 weeks, it can be treated with either Iron-Sorbitol-Citric acid given IM or IV iron. Women with Hb< 8 g/dl and period of gestation 36 weeks or beyond may require blood transfusion.
If Haemoglobin is 5.0–6.9 gm/dl (severe anemia)	
First level of treatment	• Management of severe anemia in pregnant women will be done by the medical officer at PHC/CHC/FRU/DH • For severely anemic pregnant women with haemoglobin less than 5 g/dl, immediate hospitalisation irrespective of period of gestation where round-the-clock specialist care is available. She will require hospitalisation for care till Hb crosses 8 g/dl or till delivery.

In case of moderate and severe anemia:



c. Calcium Supplementation and Nutritional Intervention

- The calcium supplementation in pregnancy reduces incidence of pre-eclampsia and other hypertensive disorders in pregnancy. It is therefore important to take one tablet daily twice a day containing 500 mg of elemental calcium and 250 IU vitamin D3 started from 14 weeks of pregnancy upto six months post-partum.
- One calcium tablet should be taken with the morning/afternoon meal and the second tablet with the evening/ night meal. It is not advisable to take both calcium tablets together with iron because calcium interferes with iron absorption. Calcium tablets should not be taken empty stomach since it causes gastritis.
- Nutritional Intervention – Encourage the mother to include milk and milk rich foods in diet, fox tail millet (ragi), til, etc.

d. Deworming

- Hook worm infestation also leads to iron deficiency anemia in pregnant women. It is therefore important to take a single dose of 400 mg of Albendazole at second trimester of pregnancy. It would be provided at VHSND by ANM and at HWC-SHC by CHO.

e. Malaria Prophylaxis and Treatment

- No prophylaxis is recommended, but insecticide-treated bed nets or Long-Lasting Insecticidal Nets (LLIN) should be given on a priority basis to pregnant women in malaria-endemic areas. These women should be counselled on how to use the LLINs.
- In high malaria-endemic areas, pregnant women should be routinely tested for malaria at the first antenatal visit. Screen the woman for malaria every month by conducting the rapid diagnostic test even if she does not manifest any symptoms of malaria.
- If a pregnant woman shows symptoms of malaria at any time, she should be tested. If the result is positive, refer her to the PHC-HWC for treatment.

Roles and Responsibilities of CHO in Care during Pregnancy:

1. Clinical Functions

- Facilitate, undertake, and monitor early registration (first trimester) of pregnancy within 12 weeks.
- Ensure minimal 4 ANC assessment for all pregnant mothers and identify high-risk pregnancies or those with complications. These could be done by MPWs as outreach sessions or by you at HWCs. However, you should undertake the ANC assessment of all pregnant women in your service area especially in the last trimester of pregnancy.
- Actively facilitate referral for high-risk cases and followup all these cases same as per the management plan suggested by PHC MO.
- Undertake and ensure necessary counselling of all pregnant women on importance of ANC, institutional delivery, signs of labour, recognising danger signs during pregnancy, prevention of anemia, consumption of IFA/calcium, nutritional counselling etc.
- Ensure completion of all necessary lab investigations to be undertaken during pregnancy.
- Facilitate and monitor for enrolment in AWC for supplementary nutrition.
- If a pregnant woman comes to SHC-HWC directly your role will be:

- ➢ Register the pregnant woman in RCH register
- ➢ Provide all essential components of Full ANC at SHC-HWC:
  - At least 180 IFA tablets
  - Two doses of TT/Td injection
  - History taking & physical examination
  - Abdominal Examination
  - Nutrition and Family planning Counselling
  - Lab investigations

- Help the women to plan and prepare for birth (Birth preparedness/micro birth plan).
- Identify and track the high-risk pregnant women and counsel them to go for regular anti natal check-ups at PHC by medical officer.
- Follow up of HRP to ensure institutional delivery.
- Mapping of all referral sites for institutional delivery and management of complications.
- Educate the PW/family members about signs of labour and danger signs of obstetric complications, where to go if an emergency arises, and how to arrange for transportation, money, and blood donors in case of an emergency and entitlements under government schemes such as JSY, JSSK, PMSMA, SUMAN and PMVVY etc.
- Counselling on essential newborn care practices (breast feeding, keeping baby worm, neonatal sepsis)and clarify the myths/misconceptions about newborn care
- If pregnant woman is HIV positive, tie up with nearest Integrated Counselling and Testing Centre (ICTC) for prevention of parent to child transmission

2. Public Health Functions

- Ensure that ANM/ASHA maintain the line list of HRP women, and they must be individually tracked for getting their routine medicines, periodic consultation, and timely referrals.

3. Managerial Functions

- Ensure that ASHAs and MPWs are able to identify all pregnant women within the HWC service area especially those from remote villages, marginalised and vulnerable sections of the community.
- Support ASHAs/MPWs in completing micro-birth planning for all pregnant mothers.
- Inform regarding entitlements for pregnant mothers such as JSY,JSSK, PMSMA, SUMAN, PMMVY and facilitate registration of all eligible pregnant mothers to avail the maternity benefits provided by the government.
- Ensure that ASHA provide follow-up visits after delivery to mother and child as per HBNC/HBYC.
- Provide at least 10% joint visits to high-risk cases with your team and 2 VHSND visits per month to support your team and provide genuine feedback after the visits and resolve any issues if they are facing at field level.
- Ensure that quality services are provided at VHSND by using VHSND supervision checklist such as services provided, availability of necessary equipment and drugs.
- Ensure that all commodities required for outreach services are available with ASHAs and ANMs such as family

planning commodities, ASHA drug kit, misoprostol, MCP cards and IEC material.

- Ensure that all records of RCH register/ANMOL, VHSND, MCP card, maternal death and household visits are maintained by ANM/ASHA
- Plan refresher trainings of primary care team with PHC-MO in RMNCAH+N, communicable and NCDs.
- Ensure that all drugs, diagnostics, equipment and consumables are available at HWC-SHC as per guidelines.
- Update records of PW in sub-centre reporting format, RCH register, HMIS (if desktop is available) and ensure recording of complete information in MCP cards.
- Ensure the completeness of data and send timely to the PHC/Block level so that DEO enter data in RCH portal timely.

Chapter 4: Counselling during Pregnancy

As a CHO, one of your key roles will be to ensure that all pregnant women receive the necessary counselling either by you at HWC-SHC or through your team members during VHSND, outreach ANC sessions.

All pregnant mothers need to be counselled for the following:

1. Birth preparedness for safe institutional delivery and Schemes and Entitlement for pregnant mothers offered by the government
2. Early identification of complications – recognising danger signs during pregnancy, labour and after delivery/ abortion
3. Nutritional Counselling
4. Importance of Breastfeeding
5. Sex during pregnancy
6. Prevention of Domestic violence
7. Post-natal Family Planning

a. Planning and Preparing for Birth (Birth Preparedness)

What is Birth Preparedness?

This is a method of planning in advance by the pregnant mother and her family for a safe and comfortable delivery and for care after delivery. ASHAs help every family make this plan in consultation with the ANM. You would need to ensure that this micro birth planning is completed for every pregnant woman either at HWC-SHC or at the community level by ASHAs/MPWs.

Micro-birth planning has the following components:

- Registration of pregnant woman and filling up of the Maternal and Child Protection
- Card and JSY card/below poverty line (BPL) certificates/necessary proof or certificates for the purpose of keeping a record.
- Informing the woman about the dates of antenatal visits, schedule for TT injections and the EDD.
- Identifying the place of delivery and the person who would conduct the delivery.
- Identifying a referral facility and the mode of referral.
- Taking the necessary steps to arrange for transport for the beneficiary.
- Making sure that funds are available to the ANM/ASHA.

When should a birth preparedness plan be ready?

It should be ready as early as possible after confirming the pregnancy, and in consultation with the family (husband, mother-in-law, or other decision makers). You should review the plan in the third trimester (after seventh month) with the family, ASHA and the ANM. At this time, the choice of institution and the transport should be finalised. Details of the activities to be carried out while planning and preparing for birth are:

- **Informing and completing registration of pregnancy:** During the woman's first antenatal visit, MPW will fill up the MCP card and the RCH register. She will inform her of the dates of her subsequent antenatal visits and emphasize the importance of making all these visits in time.

- **Identifying the appropriate health facility for the delivery:** All pregnant women must be encouraged to opt for an institutional delivery. Explain to the woman why delivery at a health facility is recommended and emphasize the following:
  - Complications can develop at any time during pregnancy, during delivery or in the postnatal period.
  - These complications are not always predictable. If they are not handled by professionals at the health facility, they can cost the mother and/or the baby their life.
  - Since a health facility has staff, equipment, supplies and drugs, it can provide the best care. It also has a referral system should the need for referral arise.
- If there are no complications and mother and her family are reluctant or unable to go to the 24x7 PHC or if it is too far away and if your HWC-SHC is a delivery point and facilities of labour room and prompt referral are available you can tell the mother to avail delivery care in your HWC.
- **If there are no complications or not a high-risk case for developing complications and the mother and family insist on delivering at home, despite counselling:** You could work with the PHC-MO to enable a delivery SBA trained ANM. This should be agreed to only if you are sure that the family can organise transport and funds at very short notice and you and delivery conducted by SBA trained ANM are able to arrive within 30 minutes of the onset of labour at the home/Sub-Centre and should be able to stay through the process of labour and for a few hours afterwards. A team of two or three women with experience in attending labour would be helpful.
- **Recognising the signs of labour:** Advice the woman to go to the health facility or inform the ASHA to contact you and ANM if the woman has any one of the following signs, which indicate the start of labour:
  - A bloody, sticky discharge from the vagina ('show')
  - Painful uterine contractions increasing in duration, frequency and intensity with the passage of time.
- **Arrangement for referral transport:** Delay in reaching a health care facility is one of the major 'delays' responsible for maternal mortality. It is, therefore, necessary to ensure the following:
  - If the woman has decided to deliver at a health facility, provide her the contact details of 108 and other government referral transport available to ensure that a vehicle is available to transport her to the health facility whenever required.
  - The contact number of the ambulance or vehicle provided by the state, private or any other provider, should be available with You/ANM/ASHA, and should be communicated to the pregnant woman and her family members.
  - If a vehicle is not available in the village, help of the panchayat, village health committee, Mahila Mandals, youth groups or any other such groups can be taken to decide on how to obtain a vehicle in case of an emergency.
- **Finances:** The woman and her family should be assisted in calculating an estimate of expenses of the delivery and related aspects (such as transport). They should also be advised to keep an emergency fund or have a source for emergency funding in case of complications. Keep in mind the various schemes that are available for assisting women with transportation facilities or providing funds for maternal health (such as the JSY, JSSK) and whatever other schemes may have been launched in your state. Help the woman and her family access these schemes and collect the allocated funds to pay for the delivery.Also, keep yourself up to

date on any new schemes that may be launched by the GoI and the state government from time to time.

b. Complication Readiness—Recognising Danger Signs During Pregnancy, Labour and after Delivery/Abortion - You must ensure screening of all high-risk pregnant women and facilitate their institutional deliveries at appropriate health facility with prior information to the newborn care unit.

3. Vaginal Bleeding

- Early pregnancy-before 20 weeks of pregnancy
- Late pregnancy-after 20 weeks of pregnancy or Ante-Partum Haemorrhage (APH)

Vaginal bleeding in early pregnancy:

The probable causes could be a threatened or spontaneous abortion, an ectopic pregnancy or a hydatidiform mole.

a. Incomplete spontaneous abortion

The following are the signs of incomplete spontaneous abortion:

- There is heavy bleeding and lower abdominal pain.
- There is a history of expulsion of the Products of Conception (POC).
- Abdominal examination shows the presence of uterine tenderness, and the fundal height is less than the period of gestation.

Management:

- If retained POC are seen in the vagina, remove them gently with a finger. The procedure must be carried out under aseptic conditions.
- If the bleeding does not stop and/or the woman is in shock, establish an intravenous line immediately and give intravenous fluids rapidly.
- Send the woman to the MO with a referral slip.

b. Complete abortion

The following are the signs of complete abortion:

- There is light bleeding or there has been heavy bleeding which has now stopped.
- There is lower abdominal pain.
- There is a history of expulsion of POC.
- Abdominal examination shows a uterus that is softer than normal, and the fundal height is less than the period of gestation.

Management:

- Observe the woman for 4-6 hours. Advise her to take rest.
- If the bleeding decreases or stops, explain the facts to her, reassure her and advise her to go home after you have checked her vital signs.
- Advise her to return to you or the MO if the bleeding recurs.

c. Threatened abortion

The following are the signs of threatened abortion:

- There is light bleeding.
- The woman complains of lower abdominal pain.
- There is no history of expulsion of POC.
- Abdominal examination shows the uterus to be softer than normal, and the fundal height corresponds to the period of gestation.
- On P/V examination, the cervical os is found to be closed.

Management:

- If the bleeding decreases or stops, explain the facts to the woman, reassure her and advise her to go home after you have checked her vital signs.
- Advise her to avoid strenuous exercise/work and to avoid sexual intercourse.
- Advise her to take bed rest.
- Send her to the MO with a referral slip for further advice.

Vaginal bleeding in late pregnancy (APH):

The most serious causes are placenta praevia (placenta lying at or near the cervix), abruptio placentae (detachment of the placenta before the birth of the foetus) or a ruptured uterus. ***Any bleeding (light or heavy) at this time of pregnancy is dangerous.***

Remember:

P/V should not be performed in women who have bleeding during pregnancy beyond 20 weeks.

Management:

A woman with placenta praevia, abruptio placentae or ruptured uterus should not be managed at the SHC-HWC because there are no facilities for blood transfusion or surgical intervention, if required. **Refer such a woman immediately to an FRU** equipped with facilities for surgical obstetrics, blood transfusion and anaesthesia after establishing an intravenous line.

2. Pregnancy Induced Hypertension

- PIH includes:
  - Hypertension—systolic blood pressure of 140 mmHg or more and/or diastolic blood pressure of 90 mmHg or more, on two consecutive readings taken four hours or more a part.
  - Pre-eclampsia—hypertension with proteinuria
  - Eclampsia—hypertension with proteinuria and convulsions
- Measure the woman's blood pressure during every antenatal and postnatal visit. If it is high (more than 140/90 mmHg), check it again after four hours. If the situation is urgent, the blood pressure should be measured after one hour.
- If the woman has hypertension, check her urine for the presence of proteins. The combination of a raised blood pressure and proteinuria is sufficient to categorise the woman as having pre-eclampsia.

- Refer the woman to the 24x7 PHC/FRU so that she can receive anti-hypertensive medication. She should be managed at home as per the advice of the MO.
- Keep in touch with the woman or her family and undertake appropriate follow-up of these cases.

3. Convulsions—Eclampsia

- Eclampsia is characterised by:
  - Convulsions
  - High blood pressure (a systolic blood pressure of 140 mmHg or more and/or a diastolic blood pressure of 90 mmHg or more)
  - Proteinuria +2 or more.
- If the woman has convulsions, offer supportive care. The initial management of convulsions includes the following:
  - Ensure that the airway is clear and she is breathing well.
  - If the woman is unconscious, position her on her left lateral side to reduce the risk of aspiration (vomitus and blood).
  - Clean the mouth and nostrils by applying gentle suction and remove the secretions.
  - Remove any visible obstruction or foreign body from her mouth.
  - Keep a padded mouth gag between the upper and lower jaw to prevent tongue bite (do not attempt this during a convulsion).
  - Keep her in the left lateral position.
  - Refer and accompany the woman to the FRU, if possible. Manage any convulsions that may occur on the way.

If SHC-HWC is a delivery point: Administer the first dose of Magnesium Sulphate injection as per standard protocol. Immediately arrange to refer the woman to an FRU and ensure that she reaches the FRU as early as possible, preferably within two hours of receiving the first dose of Magnesium Sulphate injection. If delivery is imminent, you may not have the time to transport the woman to an FRU. In this case, deliver the baby after giving the first dose of Magnesium Sulphate injection. After the delivery, you must refer her, together with the baby, to the FRU for further management.

c. Health and Nutritional Counselling

Counselling messages for pregnant women:

- At least 4 ANC check-ups along with one additional check up on 9th of every month under the PMSMA during entire pregnancy should be attended.
- Benefits of ANC registration including timely identification and treatment of pregnancy related problems, information on safe institutional delivery, nutrition and lifestyle, provision of IFA, calcium and deworming tablets, tetanus diphtheria vaccination, government entitlements should be explained.
- To achieve optimal weight gain (10-12kg) during pregnancy, at least one food item from all five food groups (cereals, pulses (sprouts), soy products, animal

products such as milk and milk products/ egg/chicken, fish/meat, fruits and vegetables) should be consumed everyday.

- At least 3 main meals and 2 nutritious snacks should be consumed, second trimester onwards.
- Supplementary nutrition provided by the Anganwadi centre should be consumed regularly along with daily diet.
- During pregnancy consumption of iron-folic acid (red coloured) tablet prevents anemia. Consumption of vitamin C rich foods like lemon, guava, orange and amla facilitates absorption of iron. The pregnant women should be informed about the importance of dietary diversity and encouraged to consume locally available nutritious food.
- Consumption of calcium (white coloured) tablets prevents pre-eclampsia/eclampsia (high blood pressure, convulsions).
- Vitamin A is helpful in improving the eyesight, increasing immunity of body. Foods rich in vitamin A such as green leafy vegetables, yellow and orange coloured fruits, milk and milk products, tomato, egg, liver etc. should be consumed.
- Consumption of double fortified salt is beneficial for the cognitive development of the baby. In case of using iodized salts, it should be used along with fortified rice, wheat flour, oil and milk preparations.
- Personal hygiene should be maintained to prevent infections. Maintaining oral health, washing hands, safe drinking water, use of clean fuel for cooking should be emphasized upon.
- Importance of family support during pregnancy should be emphasized.
- Adequate rest for 2 hours in the day and 8 hours of sleep at night daily and heavy objects should not be lifted.
- At least thirty minutes of brisk walking/ light exercise should be done.
- Consumption of alcohol, beedi, cigarette, gutkha, tobacco should be avoided as it can have deleterious effect on the foetus.
- Early (within 1 hour of birth) and exclusive breastfeeding (till 6 months) should be promoted.
- Information on government schemes like JSSK, ICDS, NRLM/SRLM, PDS and JSY, PMMVY should be given.
- At least 3 years gap should be maintained between 2 pregnancies using family planning methods that are available free of cost at any public health facility.

Table 4: Counselling messages for high risk pregnant women	
Anemia	• Intake of iron rich food like green leafy vegetables (Chaulai and drumstick leaves etc.), whole grains, meat, fish, jaggery, nuts etc. • Tannins in tea and caffeine in coffee and calcium supplements should be avoided with or immediately before or after meals as they reduce iron absorption. • Adding vitamin C rich foods (such as amla, lemon, tomato, guava etc) to regular diet can improve the absorption of iron • Though the tablets should be taken preferably early in the morning on an empty stomach, she may take the tablets with meals or at night. This will help avoid nausea. • She should not worry about black stools. This is normal while taking IFA tablets. • If she has constipation, ask her to drink more water. These side-effects are not serious. • She should avoid taking the tablets with tea, coffee or milk as they reduce the absorption of iron. • Vit. C increases iron absorption. The IFA tablet can preferably be taken with Vit. C rich source such as Lemon water, amla etc. • Tablets containing calcium should not be taken at the same time as IFA tablets, as the absorption of iron is reduced in the presence of calcium. There should be a minimum of two-hour gap in consumption of IFA and calcium tablet. • Although IFA tablets may make a woman feel less tired than before, advise her not to stop the tablets despite feeling better. • She should return to you if she has problems in taking IFA tablets. In areas endemic for haemoglobinopathies, sensitisation of the population on screening for haemoglobinopathies through CBC and monitor treatment compliance to be ensured by ANM. • Refer the identified cases of haemoglobinopathies to higher centres for further confirmation and treatment. In areas endemic for malaria, with the help of ASHA and ANM, ensure every household in the village is provided with LLIN. • Oversee the availability of IFA, supply chain, adverse events reporting for the catchment area and sharing about the gaps found, if any, with MO of concerned PHC. • Regular physical activity is required for maintaining good metabolism so that the food ingested is properly assimilated and utilised to have a healthy body and healthy baby. Regular physical activity is also important for reducing stress. Other activities like yoga sessions etc also aid in maintaining hormonal balance, improving flexibility of body and reducing mental stress. **Yoga Sessions:** Invite the pregnant women to yoga sessions at HWC-SHC

Hypertension	• At least 4 servings of calcium-rich foods like dairy products (milk, paneer, curd), soya milk, whole pulses, whole cereals, green leafy vegetables and ragi/nuts • Potassium-rich foods like ragi, wheat, Bengal gram, cowpea, moong, peas, red gram, colocassia, coriander seeds, fenugreek seeds, musambi, apricots, banana, cherries, etc. • Small and frequent meals should be taken • Avoid fasting or missing any meal • Plenty of water (2-3 litre/day) should be taken to keep the bowels regular • Intake of processed foods, rich in fat, salt and sugar should be restricted • Keep salt intake to less than 6 grams/day (approximately 1tsp full/day) • Regular physical activity should be done (e.g., yoga, walking, etc.) for 30 minutes
Gestational Diabetes Mellitis	• Refined carbohydrate foods like sweets, fruit juices, table sugar, starchy vegetables, etc. should be avoided • Carbohydrate foods should be spread through the day over 3 small meals and 2-3 snacks each day to maintain blood glucose levels • Fried foods should be avoided. Instead serve steamed, boiled or sautéed food • Whole fruits should be preferred over juices • Prefer fish or chicken over red or organ meat • Fibre should be increased in the diet by including salad, beans, non- starchy vegetables, whole fruit, whole grain cereals, whole pulses, flax seeds and oat bran as they help control blood sugar levels • Drink water, buttermilk, soups, and other unsweetened healthy beverages instead of soda or fruit juices • Intake of processed foods, rich in fat, salt and sugar should be restricted specially pickles, chutneys, murabbas • Regular physical activity must be encouraged (e.g., yoga, walking, etc.) like 30 minutes of walk, two times a day.

Do's and Don'ts of Nutrition in Pregnancy

Do's	Don'ts
Frequent meals of nutritious food- around 1/4th times extra than the normal diet	Avoid bulky food
Take biscuits, rusks or other carbohydrate rich foods early in the morning to avoid morning sickness.	Avoid stale, spicy and fatty foods
Make your diet rich in whole grains, fruits, vegetables, and lean protein	Avoid taking medication without consultation
Include fibre rich food in diet	Avoid fast food and caffeinated drinks
Take in plenty of water, rest for atleast 2 hours during the day in addition to 8-hour rest at night	Avoid alcohol intake

Use iodised salt for cooking or double fortified salt for cooking and consumption of fortified products (rice/ wheat flour/oils/milk)	Don't do strenuous work
Consume folic acid, IFA, Calcium and Albendazole tablet as advised by the health worker	

d. Counsel regarding Breastfeeding

Importance of Breastfeeding for Newborn and Mother

Benefits of early initiation of breastfeeding to newborn

- Early initiation of breastfeeding is extremely important for establishing successful lactation as babies are normally very alert and responsive within one hour after delivery. They are ready to suckle and attach to the breast easily.
- Early initiation also provides the benefits of colostrum to the baby. Colostrum is the first yellow and thicker breastmilk secreted in small amounts in the first 3-4 days and it contains high concentration of protective immunoglobulins and cells. It acts as the first natural immunization for newborn. The numerous benefits of colostrum and early initiation of breastfeeding are as under:
  - » Provides all the necessary nutrients in right amount for the baby's growth
  - » Protects the baby against diarrhoea, respiratory problems and other infections
  - » It is richer in Vitamin A and K than normal breastmilk
  - » It helps to prevent jaundice in the newborn
  - » It helps to clean baby's intestine
  - » Breastfeeding enhances the emotional bond between child and the mother and provides warmth, love and affection

Benefits of Breastfeeding to Mothers

- It reduces risk of PPH (excessive post-delivery bleeding) and thus prevents anemia.
- Breastfeeding has protective effect against breast and ovarian cancers.
- Obesity is less common among breastfeeding mothers; breastfeeding helps the mother regain her normal figure.
- Breastfeeding satisfies the mother emotionally.
- Exclusive breastfeeding has a contraceptive effect for first few months.

Key messages on breastfeeding to mothers:

- Advocacy on breastfeeding and providing information on correct breastfeeding practices: Mothers and caregivers are to be counselled on breastfeeding as the gold standard feeding option for babies.
- During third trimester, breast examination needs to be done mandatorily. Examination of the breasts to be conducted for diagnosis and management of difficult breast conditions – flat nipples, inverted nipples, sore nipples, cracked nipples, engorgement of breast, mastitis, etc., for appropriate and timely management of any problems.
- Counselling on importance of colostrum feeding and role of early initiation of breastfeeding in establishing exclusive breastfeeding initiation of early skin-to-skin contact with the newborn. It provides warmth, helps in bonding of mother and child, and also stimulates breast milk production

- Practices of giving pre-lacteal feeds must be discouraged due to its harmful effects on both mother and newborn. (Anything given to the baby to drink before starting breastfeeding is called prelacteal feeding. This can be sugar water, honey, glucose, water, gur, janam-ghutti, saunf-water or ajwain water etc.)
- Prelacteal feeds may lead to infection, interfere with the success of breastfeeding and the baby will not get the advantages of colostrum feeding.
- Mother should be advised to seek support if mother faces any problem in breastfeeding from health workers – ASHA/ANM/CHO/MO. (You may refer to the module on newborn, infant and child health services for details of breastfeeding and management of breast-feeding problems.)
- Specific counselling and management if mother is HIV positive. Provide information on where to seek further advice and support for breastfeeding.
- Counselling on infant feeding for working mothers, mother with condition of not enough milk, mothers on medication or with specific illnesses must be ensured.
- Counselling on importance of exclusive breastfeeding for six months for health and development of newborn and infants.

e. Sex during Pregnancy

- It is safe to have sex throughout pregnancy, as long as the pregnancy is uncomplicated.
- Some women experience a decreased desire for sex during pregnancy. The husband should be informed that this is normal and the woman's consent should be sought before engaging in sex.
- Some couples find engaging in sex uncomfortable during pregnancy. The husband must see to the comfort of the woman while engaging in sexual activities.
- Advice couples to have safe sex and use condoms especially if the woman has discharge or itching in the vaginal area or the husband has urethral discharge or experiences burning while urinating.
- The couple should be advised to abstain from having sex during the first six weeks postpartum or longer if the perineal wounds have not healed by then.

f. Domestic Violence

- The husband and immediate family members of the pregnant woman should be briefed about the serious consequences that violence could have on the pregnancy, on the woman's health and on the physical and mental health of the child to be born. The woman herself should be counselled in private and enabled to access support systems from within or outside the family, during and after the pregnancy. Health workers should be alert to signs of continuing violence even in the post-partum period

g. Family Planning

- Pregnancy is the best period for family planning counselling as it gives the couple time to think about and choose the method they would want to use after the birth of their baby. Ask about the couple's plans for having more children. If they desire more children, then advise them that a gap of 3-4 years between pregnancies is healthy for the mother and the child.
- The couple should be given advice on the range of contraceptive methods available to them. You, ASHA and MPW can explain about the suitable contraceptive methods during pregnancy based on the details provided in family planning module.

Chapter 5: Postnatal Care for Mothers

The first 42 days after birth is the postnatal period and is crucial for the mother and the newborn. First 48 hours, followed by the first one week are the most crucial period asmost of the fatal and near-fatal maternal and neonatal complications occur during this period. Evidence has shown that more than 60% of maternal deaths take place during the post-partum period.

5.1 Number and timing of post-partum visits:

Every pregnant woman and her newborn should be examined either by you or your MPWs as per the following schedule. In case woman is unable to come to HWC, MPW should visit the mother for completing these examinations.

Visits	After home delivery	After delivery at PHC/FRU
	Delivery at HWC-SC	(Woman discharged after 48 hours)
First visit	1st day (within 24 hours)	NA*
Second visit	3rd day after delivery	3rd day after delivery
Third visit	7th day after delivery	7th day after delivery
Fourth visit	6 weeks after delivery	6 weeks after delivery

*In case the mother and the newborn return home before 24 hours, then PNC visit should be planned on 1st day for institutional delivery.

As a CHO,you can either undertake postnatal examination yourself or for some reason if the mother could not visit HWCs you make sure that MPWs visit mother's household, complete these visits, and update information in MCP Card and RCH register.

5.2 First visit for mother

A. History-taking

This is especially important if you were not present for the delivery. Review the events at labour and birth to identify any risk factor or events during the birth that may be important in the management of the mother and the baby. Ask the following:

1. Where did the delivery take place?
2. Who conducted the delivery?
3. Is there a history of
    a. Complication during delivery?
    b. Bleeding(confirm number of pads should be less than 5/day)?
    c. Convulsions or loss of consciousness?
    d. Pain in thighs and abdomen?
    e. Dribbling or retention of urine?
    f. Any breast tenderness?
4. Has the mother started breastfeeding the baby?
5. Has she started her regular diet?
6. Are there any other complaints?

B. Examination

- Check the woman's pulse, blood pressure, temperature, and respiratory rate.
- Check for the presence of pallor.
- Conduct an abdominal examination. Normally, the uterus will be well contracted, i.e., hard and round. If it is soft and uterine tenderness is present, then refer the woman to the FRU.
- Examine the vulva and perineum for the presence of any tear, swelling or discharge of pus. If any of these is present, refer the woman to the FRU.
- Examine the pad for bleeding to assess if the bleeding is heavy and see if the lochia is healthy and does not smell foul (for puerperal sepsis). If these signs are present, refer the woman to the FRU.
- Examine the breasts for any lumps or tenderness, check the condition of the nipples and observe breastfeeding. If the woman has any complaints regarding the condition of her breasts, refer her to the MOs at PHC/FRU.

C. Counselling during first visit

Give the woman and her family the following advice:

Post-partum care and hygiene

- She should have someone near her for the first 24 hours to take care of her and the baby.
- She should wash the perineum daily and after passing stools.
- The sanitary pads must be changed every 4-6 hours or more frequently if there is heavy lochia. This is essential to ensure that the woman does not contract any infection.
- Cloth pads should be washed with soap and water and dried in the sun. It is, however, preferable to use sanitary pads, which can be thrown away.
- Bathe daily.
- Wash her hands before and after handling the baby, especially after cleaning and before feeding the baby.
- Take enough rest and sleep.
- Rooming in of the mother with the baby is advisable. Advise the mother on how to look after her newborn, e.g., how to bathe the newborn, maintain warmth and exclusive breastfeeding.

Nutrition

She should increase her intake of food and fluids. Advise her to refrain from observing taboos that exist in the community against nutritionally healthy foods (e.g., the taboo against eating solid food for six days).Talk to the woman's family members, such as her husband and mother-in-law, to encourage them to ensure that she eats enough and avoids heavy physical work. Advice on regular intake of IFA and Calcium tablets.

Contraception

- Advise the couple regarding the return of fertility. Advise the couple on birth spacing or limiting the size of the family.
- Advice the couple to abstain from sexual intercourse for about 6 weeks post-partum, or till the perineal wounds heal.

Breastfeeding

Benefits of exclusive breastfeeding and continued breastfeeding to newborn, infants and children

- It provides complete nutritional staple to the infant up to the age of six months, up to half of nutritional requirements between 6-12 months and up to one-third, between 12 and 24 months.
- Breastmilk contains adequate calories and provides the right kind of proteins, fats, lactose, vitamins, iron and other minerals, enzymes, and water in the amounts necessary for the baby.
- Breastmilk contains enough water which is sufficient for very dry and hot climates.
- Breastmilk has many anti-infective properties and protects the child against several infections including diarrhoea and pneumonia. Moreover, it is easily digested and is free from contaminants and incurs no additional cost to families.
- Breastfeeding helps in environment protection as it is natural and no industrial processing is involved.
- Breastfed babies are less prone to have diabetes, heart disease, eczema, asthma and other allergic disorders and adult onset NCDs.
- Benefits on raising I.Q. – adds up to 3 IQ points across all income levels which improves academic performance, long term earnings and productivity.

Key points to remember regarding breastfeeding during PNC

- Counselling on exclusive breastfeeding for six months. Baby should be fed on demand and 'cues', such as suckling movements and suckling sounds should be identified before the baby cries.
- Let the newborn suckle from only one breast at each feed and continue at that breast until she/he finished by him/herself, so that she/he gets adequate amount of fat-rich hindmilk. Feed from the other breast during the next feed.
- Every mother, especially for the first time should receive breastfeeding support from the Doctors/CHO/ Nursing staff or community health worker (in case of home delivery) with regards to correct positioning, attachment, latching and management/treatment in case of common breastfeeding/lactation problems such as breast engorgement, cracked nipple, fissures and delay in 'coming in' of milk.
- In case of operative birth, the mother should be motivated and supported to initiate breastfeeding within first hour of birth.
- If breastfeeding is still not initiated, ask the reason for not initiating the breastfeeding and then assist her in breastfeeding the baby immediately.
- Baby should not be given water or any liquid other than breastmilk unless medically indicated. Emphasise that breast milk is enough in quantity to satisfy the baby's hunger and that the baby does not even require water while being breastfed.
- Examine for breast conditions such as cracked nipple, inverted nipple etc. and management if required. Breastfeeding positions and problems are explained in detail in Newborn and Infant Module.
- Observe breastfeeding and check if there is proper attachment and effective suckling. The mothers and caregivers should be informed that breastfeeding is the gold standard feeding option for babies.
- Breastfeed frequently, i.e., at least 6-8 times during the day and 2-3 times during the night.

- Counselling on infant feeding for working mothers, mother with condition of not enough milk, mothers on medication or with specific illnesses must be ensured for appropriate management and referral, if required.
- Counselling on infant feeding options in context of HIV (for mother identified as HIV positive) during antenatal period and after birth.
- Ensuring IEC/BCC material on early initiation of breastfeeding and exclusive breastfeeding is available in local language.

Registration of birth

Explain the importance of getting the birth of the baby registered with the local panchayat. This is a legal document. The child will require the birth certificate for many purposes in the future, e.g., school admission.

5.3 Second and third visits for mother

A. History-taking

A similar history needs to be taken as during the first visit. Apart from the questions asked during the first visit, also ask the mother the following:

- Is there continued bleeding P/V? This, i.e., post-partum bleeding occurring 24 hours or more after delivery, is known as 'delayed' PPH. Refer to the PHC/CHC/DH.
- Is there foul-smelling vaginal discharge? This could be indicative of puerperal sepsis.
- Has there been any fever?
- Is there a history of swelling (engorgement) and/or tenderness of the breast/issues in breast feeding?
- Is there any pain or problem while passing urine (dribbling or leaking)? Is there fatigue and is she 'not feeling well'?
- Does she feel unhappy or cry easily? This indicates post-partum depression, and usually occurs 4-7 days after delivery. Assure her that everything will be fine and refer her to the MO only if the problem persists.
- Are there any other complaints?

B. Examination

- This is similar to the examination conducted during the first visit. During second and third PNC visit for women who have undergone c-section, an examination of post-caesarean section surgical site for any signs of surgical site infection like fever, purulent (pus) discharge in, or coming from the wound (including evidence of an abscess) or any reopening of the surgical wound or painful, spreading erythema surrounding the surgical site should be noted and managed/referred accordingly.

C. Management/counselling

Diet and rest

- Inform the mother that during lactation, she needs to eat more than her normal pre-pregnancy diet. This is because she needs to regain her strength during the period of exclusive breastfeeding and also for her baby to derive its full nutritional requirements from breast milk.
- She should be advised to take foods rich in calories, proteins, iron, vitamins and other micro-nutrients (milk and milk products, such as curd and cottage cheese; green leafy vegetables and other seasonal vegetables; pulses; eggs; meat, including fish and poultry; groundnuts; ragi; jaggery; fruits, such as mango, guava, orange, sweet lime and watermelon).

- She should be counselled to consume one IFA and one calcium tablet each daily for at least 6 months after delivery.
- The taboos on food imposed by the family and community are usually stronger and greater in number in the post-partum period and during lactation than during pregnancy.
- These should be enquired into, and the mother should be advised against following them if they are harmful to her and/or her baby.
- The mother needs sufficient rest during the post-partum period; to be able to regain her strength. Advise her to refrain from doing any heavy work during the post-partum period, and to focus solely on looking after herself and her baby. Her family members should also be advised to ensure this.

Contraception

- Inform the mother that whenever her periods begin again and/or she stops exclusive breastfeeding, she can conceive even after a single act of unprotected sex.
- Check if the couple is using any contraceptive method and inform the couple about the various choices of contraceptive methods available and help them choose the method most suitable to them.

Chapter 6: Recording and Reporting for Reviewing ANC Services

Community Health Officer worker has the role of a supervisor and manager apart from their clinical responsibilities. It is critical for them to understand the records and reports being maintained at various levels/areas of services by the services provides. They must know how to review these documents for their complete and correct information. This review will also help the CHO to know the status of ANC services at his facility, outreach sessions and help in taking necessary action based on the gaps/challenges identified as per his/her observations.

After the review, the Community Health officer must acknowledge and compliment the service providers doing quality work and reporting and encouraging others to fill the records as and when they are meant to be filled. Few of the important documents a medical officer should review during his supportive supervision visits and monthly review meetings are as follows:

Records and reports	When to fill/submit	By whom	Review and action by
MCP card	For each pregnant woman at each visit	ANM	MO
RCH register	For each pregnant woman at each visit	ANM	MO/MOIC
Form 6	At every month end	ANM	MO/MOIC
Form 7a, 7	At every month end	SN/LHV	MOIC
Form 8a, 8	At every month end	SN/LHV/HM	MOIC

6.1. Mother and Child Protection Card

Mother and Child Protection (MCP) card is meant for the record of each pregnant woman's antenatal care record. This card has to be filled for each pregnant woman by the service provider giving antenatal care. The woman must be encouraged to bring this card to the facility or outreach (VHSND) session whenever she comes for her ANC check-up

6.2 RCH Register

This register has columns to document the details of the antenatal care of each woman seen on a particular ANC day/session. The details of the woman must be entered immediately as she is examined and her antenatal care interventions are completed for that visit before she leaves the facility. This will help the provider to fill all the relevant columns for ANC for the woman on the day of the visit and while she is there. Filling this register at the end of the ANC day/session must be avoided as that may lead to missing out on the important information of the pregnant woman. Also, there will be chance of wrong entries. This missed/wrong information will cause filling of incorrect details in the monthly reporting format at the end of the month. The MO must ensure that the providers are filling the RCH register completely and correctly for each pregnant woman by telling them its importance.

6.3 Monthly Reporting Formats

Form 6, 7a, 7 and 8 should be used during monthly review meetings.

While conducting review meeting with the ANMs and ASHAs of his/her catchment area, community health officer should use the form 6 **(annexure 13 form 6)** which is filled and submitted at the end of each month by the ANM. The performance of ANM as well as any gaps in logistics/supplies can be assessed through this format.

To understand the performance of his/her catchment area, medical officer should regularly review the form 7 (**annexure 14 form 7**) for PHC and form 8 for CHC/SD/DH.

6.4 Providing Feedback During Review Meetings/Supportive Supervision Visit

Providing feedback to the staff of the facility and the field area is one of the major tasks as a supervisor and mentor to ensure quality service delivery. The quality of the feedback helps the staff to either work with high motivation and trust in his/her support to them or get demotivated and feel insulted. This communication depends heavily on good interpersonal communication. CHO must view himself or herself as a team leader responsible for improving the knowledge and skills of his/her staff by supporting them by identifying gaps and guiding to improve them than to just find fault in their work. The medical officer must keep the following points in mind while providing constructive and supportive feedback to the staff.

Key points for providing effective feedback

- It should be provided in a non-threatening and supportive manner.
- Tone of voice should be authoratative but mild and firm and not harsh.
- Should make the service provider feel comfortable while receiving feedback.
- It should be timely, specific and clear.
- For constructive and supportive feedback, provide positive points first and then the gaps which need improvement and how to improve.
- It should be helpful to the service provider in identfying gaps and their solutions or how to do the task differently and in a better way.
- Never point out any mistakes of the service providers in front of the clients.
- Try to understand the challenges faced by the service providers working in their area and address them in the best possible way.
- Can be given individually and in a group setting also.
- Always recognise and praise the work of the service providers done well to keep them motivated and happy.

Annexure 1 : Service delivery framework

	Role of ASHA	Role of MPW	Role of CHO
Maternal Health Services	• Preparation of eligible couples list in the village • Identification of pregnant mother and to facilitate their registration • Ensuring ANC check-ups by home-to-home visits • Support MPWs in organisation of VHSND • Mobilisation of pregnant woman for accessing ANC services at VHSND or PMSMA site • Counsel women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception and prevention of common infections. Supporting health service delivery through home visits, first-aid, and immunization sessions • Create awareness and provide information to the community on determinants of health such as nutrition, basic sanitation and hygienic practices, healthy living and working conditions • Ensure notification of maternal death	• Ensure early identification of pregnancies and registration preferably within first trimester • Ensure at least 4 ANC check-ups along with essential diagnostics and medications • Counselling of pregnant women on micro-birth planning, birth preparedness, danger signs of pregnancies and nutrition • Identification of high-risk pregnancies and prompt referral • Conduct institutional delivery and referral for complicated cases • Provide post-partum care during VHSND and through home visits • Mentoring of ASHAs and AWW on maternal health services • Facilitate and support beneficiary in incentivisation (JSY, PMMYJ) • Ensure notification & facilitate verbal autopsy in MDSR • Ensure regular updation in RCH portal	• Provide facility-based antenatal, intranatal and postnatal services • Ensure basic management, referral and follow-up of HRPs through MPW/ASHA • Support MPW in ensuring 100% registration of pregnancies within catchment area in first trimester • Support MPW in ensuring 100% complete ANC for all pregnant women in catchment area • Mentor ASHAs, AWW and MPWs for providing maternal health services • Supportive supervision visits to the VHSNDs/ villages in the catchment area to ensure optimum coverage of maternal health services • Ensure availability of drugs, diagnostics, consumables and equipment essential for providing maternal health services at HWC. • Ensure monthly review based on HMIS indicators

Annexure 2 : Blood Pressure Measurement

Steps	
1.	Select the type of blood pressure instrument.
2.	Check that the bulb is properly attached to the tubing and there are no cracks or leakage.
3.	Ask the person to sit on a chair or lie down on her left side or slightly tilt to the left on a flat surface.
4.	Place the apparatus on a horizontal surface at the level of the person's heart.
5.	Note any zero error, and replace with a functional sphygmomanometer.
6.	Tie the cuff 3 cm above the elbow, placing both the tubes in front.
7.	Raise the pressure of the cuff to 30 mmHg above the level at which pulse is no longer felt.
8.	Release pressure slowly and listen with stethoscope keeping it on brachial artery at the elbow.
9.	Note the reading where the sound is heard (systolic pressure).
10.	Follow the sound and note reading where the sound disappears (diastolic).
11.	Deflate and remove the cuff; close the mercury column knob.
12.	Record the reading on the MCP card.
13.	In the case of an electronic sphygmomanometer, tie the cuff in the same way and keep the arms stable.
14.	Press the ON button and both systolic and diastolic pressure will be displayed automatically on the screen.

Annexure 3 : Weight and Height Recording

Steps: Weight Recording	
1.	Keep the weighing scale on a hard, flat surface and check for zero error before taking the weight.
2.	Ask the woman to stand straight on the weighing scale, looking ahead and holding her head upright.
3.	Read the scale from the top.
4.	Record the weight to the nearest 100 g.
5.	Record the findings on the MCP card.
Steps: Height Recording	
1.	Keep the stadiometer (height measuring scale) on the floor against wall. Identify how much is each division.
2.	Ask the woman to stand straight on the stadiometer, looking ahead and holding the head upright.
3.	Tell the woman to place the legs together, bringing the ankles and knees together.
4.	Read the scale.
5.	Record the height to the nearest 0.1 cm/mm (depending upon the stadiometer used).
6.	Explain results to the patient and record on MCP card.
7.	What is the importance of checking height during ANC visit.

Annexure 4 : Pelvic/Vaginal Examination

Steps	
1	**Keep the following equipment ready:** • Sterile/surgical gloves • Apron • Boiled and cooled/sterile swabs in Dettol • 0.5% chlorine solution for decontamination
2	Ask women to pass urine and lie down with her knees flexed and legs apart.
3	Cover her to maintain privacy and then uncover the genital areas.
4	Wash your hands with soap and water and wear sterile gloves.
5	**Check the vulva for the presence of:** • Mucus discharge • Excessive watery discharge • Foul smelling discharge
6	Clean the vulva from above downwards with one gloved hand (not the examining hand) by using swab.
Examining the vagina –Examining the cervix and deciding the stage of labour	
1	Use the thumb and forefinger of the left hand to part the labia majora, so that the vaginal opening is clearly visible. Gently insert the index and middle finger of examining hand into vagina.
2	Keep other hand on the women's lower abdomen just above the pubic symphysis. When examining finger reach the end of vagina, turn your fingers upwards so that they come in contact with cervix.
3	Feel the cervix. It should be soft and elastic, and closely applied to the presenting part.
4	Measure the dilatation of cervical os by inserting your middle and index finger into the open cervix and gently opening the fingers to reach the cervical rim (distance in cm between the outer aspects of both examining finger). • 0 cm indicates a close external cervical os • 10 cm indicates full dilatation
5	**Deciding stages of labour:** • If the cervix is dilated 1-3 cm, and the contractions are weak and less than 2 in 10 minutes, this is the first stage of labour; but the woman is not in active labour yet. • If the cervix is dilated >3 cm, but not fully, the woman is still in the first stage of labour. However, she is now in active labour. • Full cervical dilatation (10 cm; the cervix is no longer felt on vaginal examination), a bulging thin perineum, a gaping vagina and anus, and the head visible through the introitus, even in between contractions indicate the second stage of labour, and that delivery is imminent. (see annexure – describe vaginal examination procedure in detail)

6	**Feel the application of the cervix to the presenting part:** • If the cervix is well applied to the presenting part, it is favourable sign. • If the cervix is not well applied to the presenting part, you have to be alert.
7	**Feel the membranes:** • Intact membranes can be felt as bulging balloon during a contraction through the dilating os. • Feel the umbilical cord, if it is felt, it is a case of cord presentation and requires urgent referral to FRU. • If the membrane has ruptured, check whether the amniotic fluid is clear or meconium stained.
8	**Assessing the pelvis:** • Try to reach the sacral promontory if the head is not engaged. If the sacral promontory is felt, the pelvis is contracted. Refer the women to FRU for specialist care. • If the sacral promontory is not felt, trace downward and feel for sacral hollow. A well curved sacrum is favourable. • Spread your two fingers to feel the ischial spines. If both ischial spines can be felt at same time, the pelvic cavity is contracted. Refer to FRU for further care.
9	Gently remove your fingers from the vagina and immerse your gloved hand in 0.55 of chlorine solution and dispose in leak proof container/plastic bag.

Annexure 5 : Haemoglobin estimation

Steps	
1.	Keep all the necessary items ready: Digital hemoglobinometer with batteries or charger, micro cuvettes or strips, lancets, alcohol swab/sprit cotton, sterile gloves, tissue paper, biohazard container to dispose the used lancets, micro cuvettes/strips.
2.	Turn "ON" the hemoglobinometer: ***In cuvette based hemoglobinometer*** After the monitor shows three dashes, pull the cuvette holder in its loading position. Fill the microcuvette in one continuous process. The correct amount of blood (10 µl) is drawn into the microcuvette. The microcuvette should be completely filled. Wipe away any excess blood on the outside of the microcuvette tip. Check for air bubbles in the filled microcuvette. If present, use a new microcuvette. Place the filled microcuvette in the cuvette holder (within 40 seconds after filling the cuvette). Push the cuvette holder to its measuring position. Read and record the result. Remove and discard the microcuvette in the appropriate bio-hazard container. Push the cuvette holder back into the instrument. ***If strip based hemoglobinometer is used,*** the system will undergo an auto-check and auto calibration after which the battery level, date, time and strip's batch code are displayed within 2 seconds. Enter the code mentioned on the strip bottle. The meter would flash 'strip' symbol on the display. Insert a fresh test strip into the meter with the arrows on the strip facing up andpointing towards the display. Ensure the correct positioning of the strip with the guiding V notch. The meter would flash 'drop' symbol on the display. Allow the second drop of the blood to fall tocompletely cover the white coloured test area. Read and record the result. Remove the used teststrip from the meter and dispose in appropriate biohazard container.
3.	Wash hands and wear loose gloves.
4.	Choose the third (middle) or fourth (ring) finger of the non-dominant hand of the beneficiary for the finger prick. Avoid the thumb and little finger. Avoid fingers with thick calluses. Avoid fingers with tight rings as they may constrict blood flow.
5.	Ask the subject to rub their hands to promote blood flow.
6.	Wipe the fingertip with the alcohol pad and let it air dry completely. *Do not blow on the finger to dry the alcohol. Do not wipe off the alcohol. Do not perform the finger prick until alcohol has completely evaporated.*
7.	Hold the finger firmly just below the centre of the fingertip.
8.	Press and trigger the lancet flat and firmly against the finger at the puncture sites away from the midline.
9.	Discard lancet in biohazard container.
10.	Release pressure and allow a full drop of blood to collect on finger.
11.	Once a drop of blood has collected on the finger, use the cotton or tissue to wipe away the first drop of blood.
12.	Use the second or third drop of blood for estimation of haemoglobin

Annexure 6 : Urine testing for Sugar and Albumin

Steps	
1.	Keep all the necessary items ready: urine specimen collection bottles/containers and dipsticks.
2.	Check the expiry date on the kit and carefully read the instructions before use.
3.	Remove one strip from the bottle and screw the cap tightly.
4.	Completely immerse the reagent area of the strip in the urine and remove it immediately.
5.	Remove the strip of the urine and tap at the edge of container to remove excess urine.
6.	**For glucose:** compare the blue reagent area against the colour chart area on the bottle and record the finding (time as per manufacturer's instruction).
7.	**For urine albumin:** compare the yellow reagent area against the colour chart area on the bottle and record the finding (time as per manufacturer's instruction).
8.	Dispose of strip and urine as per GoI protocol.

Annexure 7 : Blood Sugar Testing by Glucometer

Steps	
1	**Preparatory Steps of performing blood sugar examination:** • Single step testing using 75 g oral glucose and measuring plasma glucose 2 hour after ingestion. • 75g glucose is to be given orally after dissolving in approximately 300ml water whether the PW comes in fasting or non-fasting state, irrespective of the last meal. The intake of the solution has to be completed within 5 minutes. • A plasma standardised glucometer should be used to evaluate blood glucose 2 hours after the oral glucose load. • If vomiting occurs within 30 min of oral glucose intake, the test has to be repeated the next day, if vomiting occurs after 30 minutes, the test continues. • The threshold plasma glucose level of 140 mg/dL (more than or equal to 140) is taken as cut off for diagnosis of GDM.
2.	**Preparing Lancing Device for Blood sample:** • Wash your hands and the sample site with soap and warm water. Rinse and dry thoroughly. • Unscrew and remove the adjustable tip. • Insert a new disposable lancet firmly into the carrier. • Twist off and set aside the protective cover of the disposable lancet and replace the adjustable tip. • Choose a depth of penetration by rotating the top portion of the adjustable tip until the setting number matches the arrow. • To cock the lancing device, hold the tip in one hand. Pull the sliding barrel on with the other hand. The lancing device is cocked when you feel a click.
3.	**Using lancing device at fingertip sampling site** • Place the cocked lancing device against the pad of the finger. The best puncture sites are on the middle or ring fingers. Choose a different site each time you test. Repeated puncturing at the same sample site may cause pain or skin calluses. • Press the release button. Remove the device from the finger. Wait a few seconds.
4.	**Testing your blood glucose level** • Insert a test strip with contact bars facing up into the test strip port. Push the strip gently until the meter beeps. Then the symbol will appear on the screen. Use your lancing device to get blood sample. • A minimum volume of 0.5 microlitre is needed to fill the confirmation window. After the symbol appears on the screen, apply the blood sample to the narrow end of the test strip until the meter beeps.

5.	**Normal reference values** RBS:70-110 mg/dl FBS: 70- 99mg/dl PPBS:<140mg/dl
6.	**Viewing test results in meter memory** • The test result will appear after the meter counts down from 5 to 1. The result will be automatically stored in the meter's memory. If the test strip is removed after the test result is displayed, the meter will automatically switch off after 3 seconds. Discard used test strips safely in biohazard containers. • The meter memory can store up to ten (10) results at one time. The results will be saved in the order it was measured, and you can view stored results by pushing the button. When the button is pushed, number '1' will appear on the screen for one second, and then the result will be shown. • This is the most recent test result that is saved in the memory. To go on to the second recent result, press the button again. Now number '2' will appear for one second and the next result will be displayed. By repeating this process, you can go through to result number 10 which is the oldest data saved in the memory. • To exit from the memory mode, press and hold down the button for about two (2) seconds. The meter will turn off.

Annexure 8 : Medical Nutrition Therapy

The meal plan composition:

- The recommended composition of the GDM mother diet is ~50%-60% calories from carbohydrate, 10-20% from protein, and 25-30% from fat.
- The distribution of calories, particularly carbohydrates, makes a difference in the postprandial blood sugars. The total intake of carbohydrates should be controlled and monitored and carbohydrate foods with a lower glycaemic index should be emphasised.

Important tips for planning meals for GDM mother

- A mother should follow discipline regarding meal timings. Eating heavy at one meal or skipping any meal or fasting for long hours should be avoided. She should include all food groups in her daily diet, i.e., cereal, pulses, milk and milk products, fruits, vegetable, and fats. For non-vegetarian mothers, eggs, low-fat meat like well-cooked fish or chicken can be included. Meal plan should be divided into 3 major meals (breakfast, lunch and dinner) and 2-3 mid-day snacks.

Breakfast

- A pregnant woman should start her day with a healthy breakfast. She should never skip her breakfast. Breakfast should consist of 1-2 carbohydrate servings (like chapati/dalia/sandwich/poha/idli etc.) as mentioned in exchange list along with one serving from protein rich foods (like milk/curd/paneer/egg etc.).

Lunch/dinner

- In lunch and dinner, the thali/plate can be divided in two halves.
- Fill the first half with vegetables like bottle gourd, ridge gourd, lettuce, broccoli, spinach, carrots, green beans, tomatoes, celery, cabbage, mushrooms etc., as vegetable provide fibre which helps in controlling post prandial glucose level.
- The remaining half should be divided into two equal th parts.
- The portion of the plate can be filled with protein rich food like dal, soy nuggets, tofu, eggs, paneer, chicken, fish etc.
- The remaining can be filled with chapati, brown rice, bread, cereals etc.
- Mother should have at least 1 serving of low fat, sugar-free yoghurt, curd or milk.
- It is also important for a mother to have at least 1 serving of fruits like guava, apple, berries or any citrus fruits.
- Carbohydrate serving in lunch and dinner should be between 2 to 3. Taking heavy meals should be avoided.
- Skipping lunch and dinner and taking meal at irregular time should be avoided.

Mid-day snack

- Along with major meals a pregnant woman should consume at least 2-3 healthy mid-day snacks.
- One to two carbohydrate serving can be taken in mid-day snack.

- A mother should maintain 2-3 hours gap with major meal when taking mid-day snack.
- Eating fried foods or junk foods or food with high amount of free sugars should be avoided.
- Some options for snack could be murmura chat, sprouts, vegetable dalia, vegetable poha, idli, vegetable uttapam, besanchilla with low amount of oil etc.

General tips

- Fried foods should be avoided;the mother should rather steam, boil or sauté food in a non-stick pan.
- Whole fruits should be preferred over juices.
- Prefer fish or chicken over red or organ meat.
- Fibre should be increased in the diet by including salad, beans, non-starchy vegetables, whole fruit, whole grain cereals, whole pulses.
- A mother should drink water, buttermilk, soups, soy milk and other unsweetened healthy beverages instead of soda or fruit juice.

Annexure 9 : Rapid Diagnostic Test (RDT) for Malaria

Steps to prepare the thick and thin smear	
1.	Select the ring finger of the left hand.
2.	Clean with antiseptic or sterile wipes.
3.	Dispose of the cotton swab as per GoI protocol.
4.	Allow the finger to airdry.
5.	Puncture at sides of the flesh pad of the finger avoiding the centre and the tip of the finger.
6.	Allow the blood to come up automatically.
7.	Don't squeeze the finger.
8.	Hold the slide by the edges.
9.	Touch the drop of blood with a clean slide.
10.	Collect 3 drops to prepare a thick smear and 1 drop for a thin smear. Place the thin and thick smear at either end of the slide.
11.	To prepare a thin smear, touch a single drop of blood with the edge of the slide.
12.	Keep the slide in front of the second drop and allow the blood to spread.
13.	Hold it at an angle of 45 degrees and spread with a rapid but not brisk movement.
14.	Write the slide number on the same side as the thin smear.
15.	Spread the drop of blood with the corner of the slide to make a circle or a square of approximately 1 cm in diameter.
16.	Wrap and send the slide to the laboratory for staining and to be examined under the microscope.
Steps for malaria testing using the rapid diagnostic test kit (RDT)	
1.	Store the kits at the recommended temperature.
2.	Check that the RDT kit is not damaged.
3.	Check the expiry date on the kit.
4.	Remove the RDT packaging and take the dropper from the foil pouch and place it on a flat, dry surface.
5.	Label the RDT with the patient's ID and the date the test was performed.
6.	Allow the reagents to reach room temperature if kept in cold chain.
7.	Select the finger for puncture, clean with spirit swab and allow to air-dry.
8.	Puncture the finger with a sterile lancet.
9.	Slowly add 1 drop of blood to the sample well and add 2 drops of the assay diluents.
10.	As the test begins to work, a purple colour will be seen moving across the result window in the centre of the test device.
11.	Interpret test* result at 5-20 mins (do not interpret after 20 mins) as per the manufacturer's instructions.

*Interpretation of the result for monovalent RDT kit:	
Negative result	If only one line (band) appears, the test has worked and the patient is negative for malaria.
Positive result	If 2 lines (bands) appear within15-20 mins, **the person is suffering from P. falciparum malaria.**
Invalid result	If no line appears within 15-20 mins, **discard and repeat the test.**
***Interpretation of the result for bivalent RDT kit:**	
Negative result	If only 1 line (band) appears at C (control),the test has worked and the patient is negative for malaria
Positive result	If 2 lines (bands) appear within 15-20 mins at C (control) and T1, **the person is suffering from P. falciparum malaria.**
Positive result	If 2 lines (bands) appear within 15-20 mins at C (control) andT2, **the person is suffering from P. vivax malaria.**
Positive result	If 3 lines (bands) appear within 15-20 mins at C (control), T1 and T2, **the person is suffering from both P. falciparum and P. vivax malaria.**
Invalid test	If no line appears within 15-20 mins, **discard and repeat the test.**

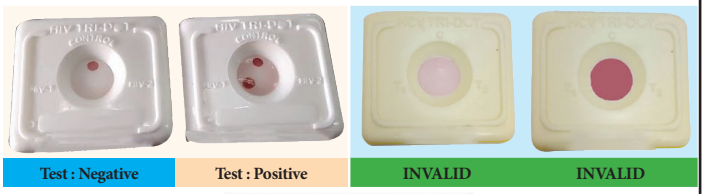
Annexure 10 : Rapid Diagnostic Test for Syphilis

Steps	
1.	**STORAGE:** The test syphilis test kit should be kept in the refrigerator to maintain the temperature at 2 C to 8 C. If a refrigerator is not available at the sub-centre, then the kits should be kept at the PHC to maintain cold chain and be brought to the VHSND or outreach sessions while ensuring that cold chain is maintained.
2.	**PROCEDRE:** • Remove test device from foil pouch. • Add 20 uL whole blood to the sample well and 3-4 drops of assay diluent. • Interpret test results within 10 minutes. • Negative result: presence of only one purple colour band visible within the result window. • Positive result: Presence of both 'T' and 'C' bands visible within the result window. • Invalid result: No purple band visible within the result window.

Annexure 11 : Rapid Diagnostic Test for Hepatitis B

Steps	
1.	**SAMPLE/SPECIMEN COLLECTION & STORAGE** • Test should be performed on human serum or plasma only immediately after collection. • If not tested immediately, specimen should be refrigerated at 2-8 C up to 3 days following collection. • If testing within 3 days is not possible, specimen should be stored frozen at 20 C. • Haemolysed specimen or specimen with microbial contamination should be discarded and fresh aliquot should be collected.
2.	**TEST PROCEDURE:** Procedure should be followed as per kit manual. Briefly, the procedure is as follows: • Bring the required number of test foil pouches and specimen to room temperature prior to testing. • Take out device from the foil pouch. • Label the test card with patient's name or identification number. • Add 2 drops (70 µl) of human serum/plasma specimen into the sample well using the dropper provided (use separate dropper/microtip for each specimen). • Allow reaction to occur during the next 20 minutes. • Read results at 20 minutes. • Discard the test kit immediately after reading result at 20 minutes, considering it to be potentially infectious.
3.	**INTERPRETATION OF RESULT** **REACTIVE:** Appearance of pink coloured line, one each in test region "T" and control region "C" indicates that the sample is REACTIVE for HBsAg. **NON-REACTIVE:** Appearance of one distinct pink line in the control region "C" only, indicates that the sample is "NON-REACTIVE" for HBsAg. **INVALID:** When neither control line nor the test line appears on the membrane, the test should be treated as invalid which maybe because of following reasons: a. Improper storage at temperature other than the recommended temperature. b. Wrong procedure. c. Long atmospheric exposure of the test device after opening the pouch. The test should be repeated using a new test card and test sample.

Annexure 12 : Rapid Diagnostic Test for HIV/AIDS

Steps	
1	**Materials and reagents:** HIV TRI-DOT test device, buffer solution, Protein- A conjugate. Negative control, positive control, sample dropper
2	**Storage:** Store the entire kit at 2-8 C in the coolest and driest area available. Do not use the kit beyond the expiry date. Do not freeze the kit components.
3	**Specimen/ sample collection** • Collect blood in a clean dry sterile vial and allow to clot • It is recommended that fresh sample should be used if possible. • If serum is not to be assayed immediately, it should be stored at 2-8 C or frozen at minus 20 C (-20 C). • Haemolysed specimen or specimen with microbial contamination should be discarded and fresh aliquot should be collected.
4	**Procedure:** Procedure should be followed as per kit manual. Briefly, the procedure is as follows: • Add **3** drops of Buffer Solution to the centre of the device • Hold the dropper vertically and add 1 drop of patient's sample 50µl (serum or plasma) using the sample dropper provided (use a separate sample dropper for each specimen to be tested). • Add **5** drops of Buffer Solution. • Add **2** drops of Protein-A Conjugate directly from the conjugate vial. • Add **5** drops of Buffer Solution and read results. • Read results immediately and discard the device considering it to be potentially infectious.
5	**Interpretation of results:** **NON-REACTIVE:** If only one Dot (only the Control Dot) appears, the specimen is non-reactive for antibodies either to HIV-1 or HIV-2. Interpret sample as non-reactive. **REACTIVE:** • If two Dots, one for the control and the other for HIV-1appear, the specimen is reactive for antibodies to HIV-1. • If two Dots, one for the control and the other for HIV-2appear, the specimen is reactive for antibodies to HIV-2. • If all the three Dots, one each for control, HIV-1 & HIV-2 appear, the specimen is reactive for antibodies to HIV-1 & HIV-2.  Test : Negative Test : Positive INVALID INVALID  Test : Positive **INVALID TEST:** If no Dot appears after the test is complete, either with clear background or with complete pinkish/purple background as, the test indicates ERROR. This may indicate a procedural error or deterioration of specimen/reagents or particulate matter in the specimen. The specimen should be tested on a new device.

Annexure 13 : Monthly Format for Sub Centre and Equivalent Institutions

Ministry of Health & Family Welfare
(Monitoring & Evaluation Division)
Monthly Format for Sub Center and Equivalent Institutions

State:			Due for Submission on 5th of following Month
District:		Month	
Block:		Year	
City/ Town/ Village			
Facility name			
Facility type	Public ◉ ○ Private		
Location	Rural ○ ○ Urban		

		Numbers reported during the month
Part A	**REPRODUCTIVE AND CHILD HEALTH**	
M1	**Ante Natal Care (ANC) Services**	
1.1	Total number of pregnant women registered for ANC	
1.1.1	Out of the total ANC registered, number registered within 1st trimester (within 12 weeks)	
1.2	**Tetanus Toxoid (TT) Immunisation to Pregnant Women (PW)**	
1.2.1	Number of PW given TT1	
1.2.2	Number of PW given TT2	
1.2.3	Number of PW given TT Booster	
1.2.4	Number of PW given 180 Iron Folic Acid (IFA) tablets	
1.2.5	Number of PW given 360 Calcium tablets	
1.2.6	Number of PW given one Albendazole tablet during the 2nd trimester	
1.2.7	Number of PW received 4 or more ANC check ups	
1.2.8	Number of PW given ANC Corticosteroids in Pre Term Labour	
1.3	**Pregnant women (PW) with Hypertension (BP>140/90)**	
1.3.1	New cases of PW with hypertension detected	
1.3.1.a	Out of the new cases of PW with hypertension detected, cases managed at institution	
1.4	**Pregnant women (PW) with Anaemia**	
1.4.1	Number of PW tested for Haemoglobin (Hb)	
1.4.2	Number of PW having Hb level<11 (tested cases)	
1.4.3	Number of PW having Hb level<7 (tested cases)	
M2	**Deliveries**	
2.1	**Deliveries conducted at Home**	
2.1.1	**Number of Home Deliveries attended by**	
2.1.1.a	Number of Home Deliveries attended by Skill Birth Attendant(SBA) (Doctor/Nurse/ANM)	
2.1.1.b	Number of Home Deliveries attended by Non SBA (Trained Birth Attendant(TBA) /Relatives/etc.)	
2.1.2	Number of PW given Tablet Misoprostol during home delivery	
2.1.3	Number of newborns received 7 Home Based Newborn Care (HBNC) visits in case of Home delivery	
2.1.4	Number of Institutional Deliveries conducted	
2.1.4.a	Out of total institutional deliveries number of women discharged within 48 hours of delivery	
2.1.4.b	Number of newborns received 6 HBNC visits after Institutional Delivery	
M3	**Pregnancy outcome & details of new-born**	
3.1	**Pregnancy Outcome (in number)**	
3.1.1	**Live Birth**	
3.1.1.a	Live Birth - Male	
3.1.1.b	Live Birth - Female	
3.1.2	Number of Pre term newborns (< 37 weeks of pregnancy)	
3.1.3	Still Birth	
3.2	Abortion (spontaneous+	

Monthly - Subcenterl of 5

Annexure 14 : Monthly Format for PHC and Equivalent Institutions

Ministry of Health & Family Welfare
(Monitoring & Evaluation Division)
Monthly Format for PHC & Equivalent Institutions

State:			Due for Submission on 5th of following Month
District:		Month	
Block:		Year	
City/ Town/			
Facility name			
Facility type	Public ● ○ Private		
Location	Rural ● ○ Urban		

		Numbers reported during the month
Part A	**REPRODUCTIVE AND CHILD HEALTH**	
M1	**Ante Natal Care (ANC) Services**	
1.1	Total number of pregnant women registered for ANC	
1.1.1	Out of the total ANC registered, number registered within 1st trimester (within 12 weeks)	
1.2	**Tetanus Toxoid (TT) Immunisation to Pregnant Women (PW)**	
1.2.1	Number of PW given TT1	
1.2.2	Number of PW given TT2	
1.2.3	Number of PW given TT Booster	
1.2.4	Number of PW given 180 Iron Folic Acid (IFA) tablets	
1.2.5	Number of PW given 360 Calcium tablets	
1.2.6	Number of PW given one Albendazole tablet during the 2nd trimester	
1.2.7	Number of PW received 4 or more ANC check ups	
1.2.8	Number of PW given ANC Corticosteroids in Pre Term Labour	
1.3	**Pregnant women (PW) with Hypertension (BP>140/90)**	
1.3.1	New cases of PW with hypertension detected	
1.3.1.a	Out of the new cases of PW with hypertension detected, cases managed at institution	
1.4	**Pregnant women (PW) with Anaemia**	
1.4.1	Number of PW tested for Haemoglobin (Hb)	
1.4.2	Number of PW having Hb level<11 (tested cases)	
1.4.3	Number of PW having Hb level<7 (tested cases)	
1.4.4	Number of PW having severe anaemia (Hb<7) treated	
1.5	**Pregnant women (PW) with Gestational Diabetes Mellitus (GDM)**	
1.5.1	Number of PW tested for Blood Sugar	
1.5.2	Number of PW tested positive for GDM	
1.5.3	Number of PW given insulin out of total tested positive for GDM	
1.6	**Pregnant Women (PW) with Syphilis**	
1.6.1	**Point of Care (POC) tests conducted for Syphilis**	
1.6.1.a	Number of PW tested using POC test for Syphilis	
1.6.1.b	Number of PW tested positive using POC test for Syphilis	
1.6.2	**Veneral Disease Research Laboratory (VDRL) / Rapid Plasma Reason (RPR) tests conducted**	
1.6.2.a	Out of the PW tested positive using POC test, numbers tested using RPR	
1.6.2.b	Number of PW tested using RPR as 1' test	
1.6.2.c	Number of PW tested positive using RPR as 1' test	
1.6.2.d	Out of the above (1.6.2 c) Number of PW treated for Syphilis using at least one Injection Benzathine Penicillin (2.4 million.	
1.6.3	Number of infant born to seropositive mother who received treatment	

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Namaste!

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National Health Systems Resource Centre

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