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**ASSESSMENT TOOL FOR THE QUALITY OF OUTPATIENT  
ANTEPARTUM AND POSTPARTUM CARE  
FOR WOMEN AND NEWBORNS**

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**2013**

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## **Abbreviations**

AIDS - acquired immunodeficiency syndrome  
AFV - amniotic fluid volume  
ALT - alanine aminotransferase  
ANC - antenatal care  
AST – aspartate aminotransferase  
CMV - cytomegalovirus  
DBP - diastolic blood pressure  
DHS - demographic and health survey  
EPC - effective perinatal care  
FMC - family medicine centers  
GBS - group B streptococci  
GERD - gastro esophageal reflux disease  
Hb - hemoglobin  
HELP - syndrome: H - hemolysis; EL - elevated liver enzymes; LP - low platelet count  
HIV - Human immunodeficiency virus infection  
IMPAC - Integrated Management of Pregnancy and Childbirth  
IMCI - Integrated Management of Childhood Illness  
IM - intramuscular  
IV - intravenous  
IUD - intrauterine device  
JSI/USAID - John Snow Incorporated /United States Agency for International Development  
LAM - lactational amenorrhea method  
MCH - maternal and child health program  
MoH - Ministry of Health  
MPS - Making Pregnancy Safer  
NICE - National Institute for health and clinical excellence  
NGO - non-governmental organisation  
Ob-Gyn - obstetrician & gynaecologist  
ORS - oral rehydration solutions  
PHC - primary health care  
PMTCT - preventing mother-to-child transmission of HIV  
PTD - preterm delivery  
SBP – systolic blood pressure  
SRH - sexual and reproductive health  
STI- sexually transmitted infection  
STD - sexually transmitted disease  
TB - tuberculosis  
USG - ultrasonography  
WHO - World Health Organization  
QoC - quality of care

## Introduction

### 1. Why quality of antenatal and postpartum care matters

*“The quality of care provided to the women and infants is a key determinant in maternal outcome and that simple change in practice can save many lives” (1).*

The notion that mothers and children are vulnerable groups was central to the primary health care movement launched in Alma-Ata, Kazakhstan, in 1978. Since the inception of the primary health care movement, maternal and child health has formed the backbone of health services that should be integrated, comprehensive, reaching out to all parts of the population. To meet primary health care objectives, health care for women and newborns should be underpinned by reproductive health programmes (such as family planning) and strongly linked with other key primary health care components (immunization, environmental health, nutrition, hygiene, emergencies and child survival), as well as to prevention and treatment of tuberculosis, malaria (in endemic areas), sexually transmitted infections (STIs) and HIV transmission. All of these services can be effectively and efficiently addressed by using maternal and newborn health services as the entry point (2).

Moving towards universal health coverage requires that health systems respond to the challenges of a changing world and growing expectations for better performance. This involves substantial reorientation and reform of the ways health systems operate in society today: those reforms constitute the agenda of the renewal of primary health care (PHC). Quality care requires health services to be organized accordingly, with close-to-client multidisciplinary teams that are responsible for a defined population, collaborate with social services and other sectors, and coordinate the contributions of hospitals, specialists and community organizations. The work done at country level and the analysis of current trends in maternal and neonatal health in the WHO European Region clearly indicate that improving quality of care is a key issue to be addressed to further improve maternal and infant outcomes (3-4).

As the United Kingdom’s National Institute for Health and Care Excellence (NICE) guidelines state: pregnancy is a normal physiological process and that, as such, any interventions offered should have known benefits and be acceptable to pregnant women (... women should be the focus of maternity care with an emphasis on providing choice, easy access and continuity of care. Care during pregnancy should enable a woman to make informed decisions, based on her needs, having discussed matters fully with the professionals involved (5).

The organization and content of care during pregnancy and after childbirth was discussed and researched substantially in recent years, as the WHO key document (6) indicates: we have better evidence about what works and what does not work to reduce maternal mortality, and the role that antenatal care can play. Many elements of antenatal care, such as routine monitoring of weight gain and measuring height, have not been shown to have any impact in reducing the risk of serious complications and maternal deaths. The risk approach, adopted as a way of identifying which women are most likely to develop serious complications, has been shown to have only limited effectiveness: most women who go on to develop life-threatening complications had no apparent risk factors; conversely, those identified as being at risk generally end up with uneventful deliveries. Other antenatal interventions, such as detection and treatment of anaemia and management of STDs, offer improvements in health without necessarily any equivalent reduction in the risk of maternal death. It has therefore become clear that antenatal care interventions, in and of it selves, cannot be expected to have significant impact on maternal mortality. There is now broad agreement that the focus of antenatal care interventions should be on improving maternal health, this being both an end in itself and necessary for improving the health and survival of infants. With this improved understanding has come a refocusing of maternal health programmes towards ensuring that women have access to care during the critical period around labour and delivery –when the most deaths occur – coupled with referral for the management of obstetric emergencies. Thus, safe motherhood programmes tend to prioritize the need for skilled care during delivery, including emergency obstetric care, rather than ensuring that all women receive antenatal care (6).

Nonetheless, there are potential benefits to be from some of the elements of antenatal care, and these benefits may be most significant in developing countries where morbidity and mortality levels among reproductive-age women are high. The antenatal period clearly presents opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being, and for their infants. For example, if the antenatal period is used to inform women and families about warning signs of potential pregnancy complications and about the risks of delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. The antenatal period provides an opportunity to supply information on birth spacing and family planning, which is recognized as an important factor in improving infant survival.

Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health.

Tetanus immunization during pregnancy can be life-saving for both mother and infant. The prevention and treatment of tuberculosis (TB), malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal care services (6).

Most antenatal care programmes in low-income countries were established along the lines of those used in high-income countries, with little adjustment for local conditions. In recent years, the underlying premise of much that is carried out under the heading of antenatal care has been called into question. It has emerged that few of the components of standard antenatal care regimens have been subjected to rigorous scientific evaluation to determine their effectiveness (6).

In 2001, WHO published the conclusions of a randomized controlled trial of a new model of antenatal care (8) and carried out a systematic review of other randomized trials that looked at the effectiveness of different models of antenatal care. This work has led to a growing consensus around key elements of antenatal care that are likely to improve maternal and/or perinatal health outcomes, though it is important to note that these outcomes tend to be either maternal and perinatal health or perinatal survival, not maternal survival. The new WHO model of antenatal care separates pregnant women into two groups: those likely to need only routine antenatal care (some 75% of the total population of pregnant women), and those with specific health conditions or risk factors that necessitate special care (25% of pregnant women). For the first group, a standard programme of four antenatal visits is recommended (with additional visits should conditions emerge which require special care).

The WHO guidelines are also specific as regards the timing and content of antenatal care visits according to gestational age. The guidelines stipulate that "only examinations and tests that serve an immediate purpose and that have been proven to be beneficial should be performed". These examinations include measurement of blood pressure, testing of urine for bacteriuria and proteinuria, and blood tests to detect syphilis and severe anaemia. Routine weight and height measurement at each visit is considered optional. But evidence based programming on the optimal number, timing and content of antenatal visits is not yet routine in most settings.

In practice, indicators of use are easier to define measure and interpret than indicators for access. Data on use of antenatal care are widely available from household surveys. Indicators on use of antenatal care services provide no information on the content or quality of the services. Despite the broad consensus on what the content and quality should be, it is generally recognized that the antenatal care services currently provided in many parts of the world fail to meet the standards recommended by the WHO. Some information on the content of care is now available from recent Demographic and Health Surveys (DHS) which included questions about antenatal interventions such as height and weight checking, blood pressure testing, and blood and urine testing. For the most part, however, the available data do not report on specific interventions or the quality of care.

The research and discussion on timing and content continues and a recently updated Cochrane systematic review “Alternative versus standard packages of antenatal care for low-risk pregnancy” (9), using new methods and with additional trial data, has shown a statistically significant increase in perinatal mortality associated with packages of antenatal care that are goal-oriented and based on reduced numbers of clinic attendances. In light of this report, on 9–10 November 2010, the WHO convened a technical consultation to discuss the implications of these findings which reached the following conclusions: in low- and middle-income countries, compared with the standard model of antenatal care, the goal-oriented, reduced-visits care approach was associated with a 15% higher risk of perinatal mortality. The reasons for the higher risk are not yet known. The contents of the antenatal care package may need to be adapted to each country's requirements prior to implementation in order to address relevant background health risks (9). Furthermore, WHO advises that implementation of a complex intervention package such as antenatal care should be monitored and audited with a focus on quality of care, i.e. evidence-based practices that are intended to be delivered through the programme, and maternal and perinatal outcomes, especially stillbirths. WHO plans to produce an updated evidence-based guideline on antenatal care that will be informed by these findings and other systematic reviews of interventions that may be effective in improving perinatal outcome during antenatal care. The updated evidence-based recommendations are likely to be finalized in 2013 (9).

With regards to the period after childbirth, the WHO “Postpartum care for the mother and the newborn” a practical guide takes a comprehensive view of maternal and newborn needs at a time which is decisive for the life and health both of the mother and her newborn. Taking women's own perceptions of their own needs during this period as its point of departure, the text examines the major maternal and neonatal health challenges, nutrition and breastfeeding, birth spacing, immunization and HIV/AIDS before concluding with a discussion of the crucial elements of care and service provision in the postpartum. The document ends with a series of recommendations for this critical but under-researched and under-served period of the life of the woman and her newborn, together with a classification of common practices in the postpartum into four categories: those which are useful, those which are harmful, those for which insufficient evidence exists and those which are frequently used inappropriately (10).

Details on specific components of care at PHC level are included in the Pregnancy Childbirth Postpartum and Newborn Care: a guide for essential practice, WHO Integrated Management of Pregnancy and Childbirth (IMPAC), 2009 (11) and Integrated Management of Childhood Illness (IMCI) guidelines, 2008 (12).

Additional guidance on components, benefits, potential impact, health system requirements needed to support the delivery of the intervention, policy, service delivery, indicators and key supplies and commodities needed at different levels of the health system, were issued in 2010 within the “WHO Packages of interventions for Family Planning, Safe Abortion Care, Maternal, Newborn and Child Health” (13) which summarizes:

## **Antenatal Care**

### **Components:**

- Essential preventive and promotive care in pregnancy including prevention of mother-to-child transmission of HIV (PMTCT);
- Management of complications during pregnancy.

### **Benefits:**

- Improves healthy practices;
- Prevents tetanus, syphilis and anaemia;
- Increases uptake of PMTCT;
- Provides opportunities for preventing malaria.

## **Postpartum Care Mother**

### **Components:**

- Essential promotive and preventive care following childbirth (24 hours to 6 weeks);
- Early identification and appropriate management of complications;
- Family planning/birth spacing;
- Care and counselling for HIV positive mother;
- Support for breast feeding.

### **Benefits:**

- Reduces maternal mortality and morbidity;
- Improves maternal and infant health by promoting birth spacing.

## **Postpartum Care Newborn**

### **Components:**

- Essential preventive interventions for the healthy newborn infant;
- Early identification and management of newborn problems, namely care for prematurely born or low birth weight infants.

### **Benefits and potential impact:**

- Maintains health of the majority of babies born healthy and ensure prompt detection and management of complications or problems and, hence, reduce mortality, morbidity and disabilities;
- It can reduce more than half of neonatal mortality when universally applied, saving up to 2 million newborn lives each year;
- Ensures a good start to life with practices and protections important for health, growth and development later in life.

Additional technical guidance on the core sexual and reproductive health (SRH) competencies that are desirable for use in PHC is in WHO publication (14). They reflect the attitudes, tasks, knowledge and skills that health personnel in PHC may need, to protect, promote and provide SRH in the community. These competencies serve as the first step for policy-makers, planners, service organizations and academic/ training establishments, to understand and meet both the education/training requirements and the service-delivery support needed by SRH staff to provide safe, quality SRH care.

## **2. Methodology of development of Quality of Care (QoC) assessment tools**

The primary aim of the WHO antepartum and postpartum care quality assessment tool is to aid ministries of health (MoHs), key partners and stakeholders, to carry out an evaluation of care provided at facility level in a systematic and participatory way, to identify areas that need to be improved and to develop relevant action plans.

The tool, which was developed as a complement to the maternal and neonatal hospital care assessment tool, is primarily designed for country-wide comprehensive assessments of the quality of maternal and neonatal care (15). The assessment of a representative sample (to be determined depending the country's size, structure and distribution of health services) of services providing antepartum and postpartum care, provides results that can be generalized to the whole health network. The tool can also be used in a single facility for internal audit purposes.

The assessment process itself, the assessment findings and the relevant action plan should be seen as a component of a quality improvement strategy. By suggesting specific indicators and a scoring system to monitor quality of care, the tool can be used within performance-based and/or accreditation schemes. The tool is also useful to introduce the concepts of peer review, supportive supervision and professional audit and is an effective way of implementing the WHO guidelines and international standards in the clinical practice.



The development of the tool stems from the work carried out by the WHO Regional Office for Europe in implementing the Making Pregnancy Safer programme (1-2), and builds on the experience in the use of “Making Pregnancy Safer Assessment tool for the quality of hospital care for mothers and newborn babies” (15) in several countries of the WHO European Region and in some countries in other regions.

### **Principles of the tool:**

The informing principles of the tool are the following:

- based on evidence-based international standards and guidelines;
- capable to guide the collection of key information in a homogeneous and valid way;
- to involve health service managers and health professionals in identifying problems and possible solutions;
- to provide key information regarding quality care to MoH and managers at local level on issues that need to be addressed at higher administrative or policy level;
- to give voice to the users and to allow health managers and professionals to take into account their views in identifying and addressing deficiencies in quality of care.

The tool was also designed to allow a comprehensive assessment of the four key principles identified by the WHO European Strategic Framework for Making Pregnancy Safer (MPS):

- be based on scientific evidence and cost/effective;
- be family centred, respecting confidentiality, privacy, culture, belief and emotional needs of women, families and communities;
- ensure involvement of women in decision-making for options of care;
- ensure a continuum of care from communities to the highest level of care.

### **Reference standards**

The Effective Perinatal Care training package (16), developed by the WHO Regional Office for Europe and JSI/USAID, the WHO IMPAC Manuals developed by the global MPS programme, and other publications (see list of references) are the main source for reference standards. When other sources were used to cover items that are not covered by the above materials, the relevant references are mentioned.

### **Structure of the tool**

The tool is intended to allow an action-oriented careful assessment of all the main areas of which have an impact on quality of antepartum and postpartum care such as infrastructure, availability drugs and supplies, staffing, organization of services, guidelines, case management, information provided to users, referral system, etc. Over 400 items are included.

### **Sources of information and scoring system**

The tool includes four different sources of information: data and statistics, medical records, direct observation, and interviews with staff and with patients/users of the services. Through a combination of different sources of information, the tool allows to single out those areas and specific items that represent an obstacle to deliver quality of care.

Each item is evaluated with the information gathered by different sources to reach an overall score, ranging from 3 to 0:

3 = good or standard care

2 = need for some improvement to reach standard care (suboptimal care but no significant hazard to health or of basic principles of quality care)

1 = need for substantial improvement to reach standard care (suboptimal care with significant health hazards)

0 = need for very substantial improvements (totally inadequate care and/or harmful practice with severe hazards to the health of mothers and /or newborns)

### **3. Main steps for the use of the tool**

#### **Adaptation and use**

The tool is a generic framework that needs to be adapted to the epidemiology and, even more important, to the health system structure and capacity at country level. The tool was designed to be used in different PHC facilities, such as polyclinics, the outpatient departments of hospitals, including small district hospitals as well as tertiary care centres. It is therefore necessary that the team of national and international assessors, when planning the assessment, identify the sections of the tool to be used in different settings, since not all the antenatal care diagnostic and treatment medical technologies included in the tool may be relevant. In these cases, the corresponding items or sections of the tool will be classified as not applicable (n.a.). The adaptation may include deleting specific items and sections, choosing a different standard (for example, using as a standard the country adaptation of international standards).

#### **Composition of the assessment team**

Assessing antenatal and post-partum care requires specific disciplinary backgrounds such as obstetrics, nursing/midwifery, and paediatrics/neonatology, as well as capacity to interview the users of the services, as well as staff members. The composition of the assessment team should therefore reflect the national initiatives and include all these competences. The key professional backgrounds should be represented both in the national and in the international components of the assessment team. National assessors need to get acquainted with the assessment tool and methods, as well as background references, prior to the first round of visits, and they must be supervised by experienced international assessors until they are fully acquainted with the tool and have acquired the appropriate principles, skills, practice and attitude of confidential and supportive peer-to-peer assessment.

#### **Organization of the assessment visit**

Written information should be sent to all services that will be assessed on the purpose of the assessment and the proposed agenda prior to the visit. The visit starts with an introductory briefing to the staff and managers, on the objectives and methods of the assessment. The presentation should emphasise that the assessment is part of an initiative to support improving the quality of care, that its purpose is to identify areas of care that need to be improved and to identify what actions should be taken at local level and at higher administrative level, including the ministerial level. It should be explained that confidentiality, ethical principles and respect of the rights of patients and the staff are main guiding principles of the assessment. It would be important to ask for collaboration while both staff and users are interviewed about routines and practices in the health facility and that the assessor(s) would like to directly observe clinical practice, examine recent and past clinical records, and logbooks.

The visit covers all relevant aspects of the service, including pharmacy and laboratory where existing and patronage/home visits to newborn babies. The visit is considered over when sufficient information is collected to assess all the items of the tool that are considered applicable to the health service. The duration of the visit will consequently vary, depending on the size of the service, from one to one and half day per facility.

The assessors should establish by direct observation if clinical protocols exist and are implemented, whether drugs equipment and supplies are available, and whether they are actually available for free when they are included in national packages for MCH. They should also verify the quality of the information provided by the hospital staff to patients by checking with patients after the contact.

#### **Feedback at facility level and reporting at country level**

A feedback meeting is held in the facility at the end of the assessment and is aimed to involve all staff in discussing the findings and the suggested actions. By its participatory nature, and particularly through its final session, the approach is aimed at building awareness among staff and managers about quality issues as well as the potential for improvement.

Interviews with mothers about the quality of care provided to them and their babies will represent a novelty to most professionals. Taking into account the views of pregnant women and mothers on the various aspects of care represents *per se* a way to promote mother and family-friendly attitudes among staff, to promote health literacy, to involve women into decisions regarding their own health making, and to build awareness among them about their own rights.

After the assessment each facility should receive a full report summarizing findings and recommendations. A comprehensive written report will be prepared and delivered to the MoH for identifying areas for strengthened and priority actions. When developing the report all health facilities should be mentioned to thank the staff for their involvement and time. However barriers are generalised without mentioning specific health facilities.

It is recommended to use the WHO health system framework to frame the recommended actions. This will help harmonize approaches across health facilities and assessors.

### **Action plan**

Standards and assessment tools are essential, but not sufficient *per se* to promote a sustained effort towards quality improvement. A third crucial component of quality development is represented by the existence of driving forces capable to stimulate change.

Since the commitment of managers and health professionals at facility level is a major determinant of change, it is crucial that an action plan, including tasks and responsibilities of the various staff members as integral part of the assessment process. A suggested framework for the definition of an action plan at health facility level is included in the tool.

### **Debriefing and action plan**

1. Discuss the main findings of the assessment with the senior management and staff of the health facility, providing details as appropriate to illustrate the point.
2. Incorporate the views of pregnant women and mothers who have been interviewed.
3. Allow time for managers and staff to present their perception of the findings.
4. Discuss what actions, which are under the responsibility of local managers and staff, could be taken to improve the quality of care for those areas and specific items that the assessment identified as most deficient.
5. Prioritize actions taking into account the health impact (avoidable morbidity and mortality), and feasibility.
6. Develop a plan of action, using the following framework provided at the end of the tool, which includes actions needed, impact on health, feasibility for areas identified as most in need.

### **Steps**

As an example, in the WHO European Region, the quality of care assessment were planned and carried out as follows:

- The tool and methods was introduced by WHO to MoH, and a request followed by MoH was to carry out PHC QoC assessment; possible partners to support this activity were identified, contacted and involved.
- A collaborative effort among MoH and the WHO Regional and Country Office was carried out to identify the team of national experts in line with criteria and experience in implementing evidence based practices and WHO recommendations in maternal and neonatal health care.
- This national team met to get acquainted with the tool and propose adaptation issues, which were discussed with the WHO Regional Office for Europe and international experts.
- After MoH selected the facilities to be assessed, primary health care centers' managers were informed about dates, agenda and scope of the visit.
- A copy of the first section of the PHC assessment tool (table 1) was sent in advance to each of the selected health facilities, with the request to fill using data of the previous year.
- Upon arrival in each site, the assessors' team met local health authorities.
- The visits to each facility started with a plenary meeting with all relevant staff, where the assessment

- team's members introduced themselves and the scope and methods of the visit.
- The optimal duration of the visits was around one to one and half day for each facility assessed, which included feedback meeting with the staff and filling the forms.
- The assessment team members evaluated the relevant areas jointly with PHC staff and according to the assessment tool. The team visited all services, including patronage/home visits for newborn babies and parts of each facility; they met patients and staff, and analyzed in depth statistics, log books and clinical records. They discussed the process of implementation of evidence based practices, contributing factors, difficulties, together with facility's managers and staff. Two/four team members (interviewers) interviewed pregnant women and mothers, as well as health care providers, collected and summarized findings.
- The assessment team met at the end of each facility's visit to discuss findings, to attribute scores (1 hour), and agree on main comments on strengths and areas to be improved.
- At the end of each visit, findings and main recommendations were presented by team members to facility's staff and managers, on main areas (midwifery, obstetrics, neonatology, as well as interviews of mothers and staff), and jointly discussed.
- Based on these, an initial agreement on priority actions for improvement at facility level was discussed and agreed.
- After completing all visits, the assessors met (one day) to compile, compare, discuss and finalize the results, in order to provide to each PHC center an electronic version of the assessment tool, filled with specific, detailed observations, scores and comments, and a cover letter with the summary of priorities for each area and the agreed actions.
- These documents were finalized, after the visit, by the national team, and each one is presented and discussed by assessors team members with staff in each of the facilities assessed.
- The team finally met (half day) to prepare summary of findings and recommendations, which constitute the basis for a written report, and prepare last meeting to present to the final meeting.
- On the last day, a meeting was held with representatives of MoH, key stakeholders, UN organizations, and key development partner organizations. Summary of overall findings and recommendations were presented, and priority actions at MoH level initially discussed.

After a period of implementation of the recommendations (one to two years), a second assessment is planned/recommended, using the same tool and methods and multidisciplinary team of assessors in order to identify achievements, obstacles and way forward to quality improvement.

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## Indicators

<b>Selected indicators for standalone antepartum and postpartum outpatients health facilities</b>	
Number of residents (served population):	
- Women	
- Newborns	
Number of served plots	
Average number of women on one plot	
Distance to the farthest populated locality	
Number of medical providers in the facility	
- Family doctors	
- Midwives	
- Nurses	
- Ob/Gyn	
- Paediatricians	
Number of pregnant women per year	
Percent of women with antenatal care beginning before 12 weeks	
Percent of pregnant women with 1-3 antenatal visits	
Percent of pregnant women with number of antenatal visits 4 and more>	
Percent patients with induced abortion before 12 weeks	
Percent patients with induced abortion after 12 weeks - before 22 weeks	
Percent patients with spontaneous abortion after 12 – before 22 weeks	
Percent of pregnant women with severe anemia Hb <70 g/l (7g%)	
Percent of pregnant women with anemia Hb from 70 to 110 g/l (11g%)	
Percent of pregnant women received folic acid supplementation in the first trimester of pregnancy	
Percent of pregnant women received prophylactic iron supplementation	
Percent of pregnant women with USG screening at 18-22 weeks	
Percent of pregnant women tested for syphilis	
Percent of pregnant women tested positive for syphilis	
Percent of pregnant women screened for HIV	
HIV prevalence (%) among pregnant women (or among women in fertile age, if only this information is available)	
Percent of women who received tetanus immunization	
Percent of pregnant and postpartum women transferred to higher level of care according to agreed indications	
Percent of postpartum women accessing modern contraception methods	
Percent of neonates receiving immunization according to national immunization guidelines	
Percent of infants exclusively breastfed for 6 months	
<b>Additional indicators for antepartum and postpartum outpatient health facilities attached to maternity hospital or department</b>	
Number of deliveries per year	
Percent of cesarean sections per year	
Percent of deliveries outside health care facilities	
Percent of deliveries without antenatal care (0 antenatal visits)	
Still birth rate (number of stillbirths per 1000 neonates, including live births and stillbirths)	
Perinatal mortality rate (number of stillbirths plus early neonatal deaths per 1000 total births)	
Maternal Mortality Ratio (number of maternal deaths per 100 000 live births)	
Percent of births < 37 completed weeks	
Percent of preterm births 22 – 28 weeks	
Percent of births < at the 28-34 weeks of pregnancy	

## 1. Facility support systems

### 1.1 Availability of statistical data and record keeping

Criteria	0	1	2	3	Comments
Existence and quality of paper based information system on patient flow					
Existence and quality of paper based information system on most important perinatal indicators					
Existence and quality of a computer based information system on patient flow					
Existence and quality of a computer based information system on most important perinatal indicators ( <i>i.e. proportion of women with ANC visit before 12 weeks, proportion of pregnant women with at least 4 ANC visits, MMR, PNM, SBR</i> )					
Existence and quality of a computer based information system on most important child indicators ( <i>i.e. proportion of neonates receiving immunization according to national immunization guidelines; proportion of infants exclusively breastfed for 6 months</i> )					
Periodical review and evaluation of statistics and indicators by the relevant professional teams ( <i>i.e. perinatal morbidity and mortality reviews, maternal morbidity and mortality reviews</i> )					
All records are clear and legible					
Medical records are dated					
All diagnoses and recommendations are clearly written in the notes					
Results of evaluations and laboratory tests are clearly identifiable in the records					
All drugs and treatments are clearly identifiable in the records					
Sufficient information from hospital admissions is available to staff providing antepartum care					
Information from antenatal and intrapartum records are available to staff providing care during postpartum period					
Mothers have their own perinatal cards					
Mothers carry or have any access to their children's cards					

## 1.2 Drug availability and use for outpatient antepartum and postpartum care for women and infants

	Antepartum and postpartum outpatient clinics	Any stockouts in last 3 months (check box if answer is <b>YES</b> )	Patient needs to buy herself at local pharmacy
<b>Analgetics</b>			
Acetylsalicylic acid			
Paracetamol			
<b>Medicines for anaphylaxis</b>			
Emergency drug kit for anaphylaxis (contains chlorphenamine, dexamethasone and epinephrine)			
<b>Antidotes</b>			
Calcium gluconate			
<b>Anticonvulsants</b>			
Diazepam			
Magnesium sulphate			
Phenobarbital			
<b>Antibacterials</b>			
Amoxicillin			
Ampicillin			
Benzathine benzylpenicillin			
Benzylpenicillin			
Cloxacillin			
Ceftriaxone			
Azithromycin			
Erythromycin			
Gentamicin			
Nitrofurantoin			
Metronidazole			
Spectinomycin			
Sulphamethoxazole trimethoprim Co- trimoxazole			
Ciprofloxacin			
Clindamycin			
<b>Antifungal medicines</b>			
Clotrimazole (vaginal)			
Fluconazole			
<b>Antiviral medicines</b>			
Aciclovir			
<b>Antiretroviral Drugs</b>			
Highly active antiretroviral therapy (HAART)			
<b>Anti Anaemic Drugs</b>			
Ferrous salt			
Ferrous salt + Folic acid			
Folic acid			
<b>Cardiovascular medicines</b>			
Labetalol			
Hydralazine			
Methyldopa			
Nifedipine (can also be used as tocolytic)			



<b>Disinfectants and antiseptics</b>			
Chlorhexidine			
Ethanol			
Polyvidone iodine			
Chlorine base compound			
<b>Oral rehydration</b>			
Oral rehydration salts, if possible low osmolarity (for glucose-electrolyte solution)			
<b>Vaccines *</b>			
Hepatitis B vaccine			
Tetanus vaccine			
BCG vaccine			
Rubella vaccine			
Influenza vaccine			
<b>Uterotonics and tocolytics</b>			
Oxytocin			
Misoprostol			
Ergometrine			
Mifepristone-misoprostol			
Nifedipine			
<b>Steroids for fetal lung maturity in preterm birth</b>			
Betamethasone			
Dexamethsone			
<b>Solutions correcting water, electrolyte and acid-base disturbances</b>			
Sodium chloride 0.9% Isotonic			
Sodium lactate, compound Solution			
Glucose 40-50%			
Sterile water for injection			
<b>Vitamins and minerals</b>			
Vitamin D			
Vitamin K			
<b>Contraceptive drugs and methods</b>			
Combined oral contraceptive pills			
Progestine only (mini-Pill)			
Medroxyprogesterone acetate (Depo-provera)			
Implantable hormonal contraception			
Condoms			
Diaphragm			
Intra-uterine device			

*\* The immunization schedules are different in countries. The list of vaccines should be discussed on the first meeting before assessment.*

Are there any expired drugs in the pharmacy or in the drug cupboard? Yes\_\_\_\_ No\_\_\_\_  
If yes please list which drugs are expired.

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Is cold chain respected for vaccines? Yes\_\_\_\_ No\_\_\_\_

### 1.2.1 List of drugs commonly used in obstetrical practice without proven effectiveness

	Available in the health facility (+/-)
Vit C	
Coccarboxylaze	
Adenosuine triphosphate	
Glucose	
Novokaine (intravenous)	
Atropin	
Vit E	
Papaverin	
Magne B6	
Deproteinized extract of calf blood, similar to EPO ( <i>Actovegin, manufactured by nycimed Austria GmbH is used for improving of placental circulation in Eastern Europe</i> )	
Diethylstilbestrol dipropionate ( <i>similar stilbestrol produced under the trade name SYNOESTROL Sinestrol is used for breast engorgement in Eastern Europe</i> )	
Metamizole sodium ( <i>DIPYRONE Dipiron, ANALGIN Analgin, NOVALGIN Novalgin, MELUBRIN Meluvrin</i> ) is produced and used for the treatment of pain in all countries of the WHO European Region)	
Drotaverinum ( <i>NOSPA-FORTE is manufactured by companies Chinoin (Hungary) and Sanofi Aventis (Slovakia) and used in eastern European countries as an antispasmodic and to treatment of pain</i> )	

Other drugs with unproved efficacy / safety

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### 1.3 Available functional equipment and supplies for antepartum and postpartum care

	+/-
Warm and clean room	
Examination table or bed with clean linen	
Light source	
Heat source	
<b>Hand washing</b>	
Clean water supply	
Liquid soap	
Nail brush or stick	
Disposable towels	
<b>Waste</b>	
Receptacle for soiled linens	
Bucket for soiled pads and swabs	
Container for sharps disposal	
<b>Sterilization</b>	
Instrument sterilizer	
<b>Miscellaneous</b>	
Wall clock	
Timer	
Torch with extra batteries and bulb	
Log book	
Medical records	
Refrigerator	
Icepacks and vaccine carriers	
Supplies for ORT (cups, spoons, measuring jars)	
<b>Equipment</b>	
Device for measuring blood pressure and stethoscope	
Body thermometer (with possibility to measure low temperature)	
Wall thermometer	
Changing table	
Fetoscope or doptone	
Baby weighing scale	
Infant stadiometer	
Adult weighing scale	
<b>Neonatal resuscitation kit</b> Ambu bag, 500 ml, masks, air tube for infant, aspiration set (handle, mechanical or electrical with single use catheters, sizes 8, 10 Fr), IV catheters, syringes, Adrenaline 0.1%, NaCl 0/9%)	
<b>Supplies</b>	
Gloves:	
- <i>Utility</i>	
- <i>Sterile or highly disinfected</i>	
Urinary catheter	
Syringes and needles, different sizes and volume	
IV tubing	
Swabs	
Gastric tube	
<b>Tests</b>	
Express test for syphilis	
Express test for HIV	
Strips to detect proteinuria	
Container for catching urine	
Resuscitation kits for adult: Eclampsia and Haemorrhage	

### 1.3.1 Laboratory support

	<u>Available at the clinic</u>	<u>Available near by at laboratory facility</u>	<u>Average time to get</u>	<u>Comments</u>
Haemoglobin				
Hematocrit				
Platelets				
Leukocytes count				
Blood grouping				
Rh status				
Rhesus antibodies				
Urine protein				
Urine microscopy				
Bacterioscopy (smear)				
Bacteriology (culture)				
Blood glucose				
Blood bilirubin				
Liver function tests				
Renal function tests				
Serologic test for syphilis				

Essential test during pregnancy and newborn care are free from charge?

Yes\_\_\_ No\_\_\_

Comments

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Tests are officially free but unofficial payments are requested?

Yes\_\_\_ No\_\_\_

Comments

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**1.4 Basic infrastructure**

	YES	NO	Comments
Facility is easily accessible to all categories of customers (elevator if it necessary, ramps for wheel-chair and pram)			
Is electricity continuously available?			
Is there a back-up power supply in the case of a power cut (i.e. diesel generator)			
Is running water continuously available?			
Is hot water continuously available?			
Is there a heat source on the facility?			
Is the obstetrical outpatient separate from the general outpatient department?			
Does the health facility have a separate, appropriately furnished room for antepartum classes?			
Does the health facility have a separate, appropriately furnished healthy baby room for counselling mothers?			
Are there sufficient and adequate toilets which are clean and easily accessible?			
Does the health staff has access to fully equipped hand washing facilities?			

Working hours of the obstetrical outpatient department: Time \_\_\_\_\_

Working hours of the paediatric outpatient department: Time \_\_\_\_\_

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

<b>Overall assessment - Support System institutions</b>	<b>Improvement required</b>			<b>Good</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>To be circled</b>				

Please indicate the quality of support of the process, noting one of the 4-digits, number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

## 2. Routine antepartum and postpartum care

### 2.1 Organization and provision of antepartum and postpartum care

Criteria	0	1	2	3	Comments
<b>Place and providers of antepartum care</b>					
Midwife and General Practitioner-led models of care are offered to women with an uncomplicated pregnancy					
Obstetricians and other specialists are involved in the care when complications arise					
<b>Continuity of care and referral</b>					
Antepartum and postpartum care is provided by a small group of care-providers with whom the woman feels comfortable					
Continuity of care is offered throughout the antepartum and postpartum period					
A clear referral system is established so that pregnant and postpartum women/newborns who require additional care are managed and treated by the appropriate specialist teams when problems are identified					
<b>Local documentation of care</b>					
Structured records are used for antepartum and postpartum care					
A standardized and national documentations are available and used					
Women receive individual perinatal card that includes the following information: <ul style="list-style-type: none"> <li>- results of clinical examinations and laboratory tests</li> <li>- gravidogram</li> <li>- signs and symptoms of complications</li> <li>- signs and symptoms of complications</li> <li>- addresses and phone numbers of facilities offering emergency obstetrical care</li> </ul>					

### 2.2 Principles of privacy and confidentiality for antepartum and postpartum care

Criteria	0	1	2	3	Comments
A private place for the examination and counseling is organized and available					
When discussing sensitive subjects, medical staff and patient (client) cannot be overheard					
Providers ask the woman's consent before discussing with her partner or family					
Confidential information about clients is not discussed with other providers, or outside the health facility					
Examination area is organized in a way that, during examination, the woman is protected from the view of other people ( <i>curtain, screen, wall</i> )					
All records are confidential and kept locked away					
Access to logbooks and registers is limited to responsible providers only					

### 2.3 Principles of education and communication for antepartum and postpartum care

Criteria	0	1	2	3	Comments
<b>Basic principles of prescribing and recommending treatments and preventive measures</b>					
The purpose and results of each investigation are clearly and completely explained by the medical providers					
Medical providers explain to the woman what the treatment is and why it should be given					
They explain to client that the treatment will not harm her or her baby, and that not taking it may be more dangerous					
Clear and helpful advice is given on how to take the drug regularly					
Explain how the treatment is given to the baby. Watch her as she does the first treatment in the clinic					
Explain the possible side-effects to the client. Explain that the most of them are not serious, and tell her how to manage them					
Advise client to return if she has any problems or concerns about taking the drugs					
Explore any barriers she or her family may have, or have heard from others, about using the treatment					
Discuss with the client the importance of buying and taking the prescribed amount. Help her to think about how she will be able to purchase this					
<b>Communicating with the woman and her companion (family)</b>					
Make the woman (and her companion) feel welcome					
Medical providers are friendly, respectful and non-judgmental at all times					
Use simple and clear language, taken into consideration educational level, cultural, religious and other needs of women					
Invite an interpreter if it necessary					
Encourage her and her family members to ask questions					
Ask and provide information related to her needs					
Support her in understanding her options and making decisions					
At any examination or before any procedure: - seek her permission and - inform her of what you are doing					
Summarize the most important information, including the information on routine laboratory tests and treatments					



## 2.4 First antepartum visit <sup>1,2</sup>

Criteria	0	1	2	3	Comments
Most women have the first antepartum visit before 12 weeks of pregnancy					
Women are clearly informed and receive appropriate written information about the likely number, timing and content of antepartum appointments associated with different options of care					
Women have an opportunity to discuss recommended schedule with their midwife or doctor					
Information about antepartum classes is offered					
Purpose and effectiveness of screening investigations offered during antepartum care is explained (asymptomatic bacteruria, 18-24 week ultrasound for dating and anomalies screening)					
A perinatal card is given (home based maternal records)					
<b>Assessment of risk factors</b>					
A clear list of risk factors (medical, social, psychological) is established and used and care providers take an appropriate medical, surgical, social and past obstetrical history					
Medical providers thoroughly collect obstetrical and other histories					
Medical providers offering antenatal care have sufficient skills to identify women that may need additional clinical, social or psychological support during pregnancy					
Formal risk scoring is not used to plan content of antenatal care					
Pattern of care for the pregnancy for women that need additional care is planned					
<b>Psychiatric screening, drug use and domestic violence <sup>1,7</sup></b>					
Health care professionals are alerted to the symptoms or signs of domestic violence					
Women are given the opportunity to disclose domestic violence in an environment in which they feel secure					
Women were asked early in pregnancy if they have had any previous psychiatric illnesses					
Women were have had a past history of serious psychiatric disorder are referred for a psychiatric assessment during the antenatal period					
Women were asked early in pregnancy about smoking					
Woman (or her partner) was asked about her partner smoking status					
Women were asked early in pregnancy about use of alcohol					
Women were asked early in pregnancy about use of illicit drugs					

<b>Danger signs and emergency care</b>				
Women are adequately informed about signs and symptoms of complications of pregnancy: - bleeding - preterm contractions - severe headache - convulsion - high temperature - fluid discharge before term pregnancy				
Women receive contact information of persons and facilities offering emergency care, and how to get there				
Women are asked to repeat offered information on danger signs and emergency plan				
<b>Estimation of gestational age <sup>7</sup></b>				
The date of the last normal menstrual period is asked and estimated date of confinement is provided				
Ultrasound scan is offered and undertaken within 18-22 weeks for dating and anomaly screening				
<b>Tests and evaluations offered during first appointment</b>				
Blood group and Rh status is determined <sup>7</sup>				
Screening for anaemia (Hb) <sup>2</sup>				
Screening for hepatitis B virus <sup>7</sup>				
HIV screening <sup>1,2</sup>				
Screening for rubella susceptibility <sup>7</sup>				
Screening for syphilis <sup>1,2</sup>				
BMI is measured (maternal height and weight taken) <sup>7</sup>				
Blood pressure (BP) <sup>1,2</sup>				
Urine is tested for proteinuria and midstream urine culture is done for detection of asymptomatic bacteruria <sup>1,2</sup>				
Symphysis – fundal height is measured if the first visit is after 24 weeks gestation and plotted on gravidogram				
Fetal heart is auscultated if the first visit is after 24 weeks gestation				
<b>Preventive measures</b>				
Pregnant women (and those intending to become pregnant) are informed that dietary supplementation with folic acid, before conception and up to 12 weeks of gestation, reduces the risk of baby neural tube defects (anencephaly, spina bifida). <sup>2,7</sup>				
Providers recommend a dose of 400 micrograms per day of folic acid.				
Providers recommend a dose of 5 mg per day of folic acid to women at high risk of neural tube defects (previous children with neural tube defects, diabetes, obesity and epilepsy).				
Iron supplementation is offered routinely in areas with high incidence of anemia <sup>2</sup>				
Iron supplementation is offered free of charge				
Women are informed that normal healthy				

women should not be routinely offered vitamin D (or other vitamin-mineral) supplementation during pregnancy. <sup>7</sup>					
Oral vitamin D supplements of 10 micrograms per day are offered to healthy pregnant women at risk of vitamin D deficiency (women with dark skin, women who usually cover their skin, women who eat a vegan diet and women in age group 19-24 years). <sup>7</sup>					
Deworming medications (albendazole, mebendazole) are offered once during pregnancy in areas with high burden of helminths infections according to national guidelines to help prevent anemia in second or third trimester					
Daily low dose of Aspirin (75-125 mcg) is recommended to women with a past history of pre-eclampsia or eclampsia (and other high risk factors) for the prevention of such complications.					
Calcium supplementations (1 g daily) is recommended to women who are calcium deficient with a past history of pre-eclampsia or eclampsia for prevention of pre-eclampsia or eclampsia					
Medical providers refer women with high risks of preeclampsia to Ob/Gyn for consultation. Following care can be done on primary antenatal care with Ob/Gyn together.					
Iodine supplementation					
Tetanus toxoid (TT) immunization status is checked and vaccination is offered if indicated according to national guidelines <sup>1,2</sup>					

### 2.5 Routine follow up antepartum visits, considerations for select infectious and non-infectious conditions<sup>1,2</sup>

Criteria	0	1	2	3	Comments
At least 4 antepartum visits are offered					
At all visits the providers:					
- check gestation age of pregnancy					
- ask where the women plan to deliver					
- ask about any vaginal bleeding, contractions or leaking of fluid since last visit					
- ask if the baby is moving					
The providers review, discusses and record the results of all screening tests undertaken					
The providers reassesses the planned pattern of care for the pregnancy and identifies women who need additional care					
Women have an opportunity to discuss issues and ask questions about offered information					
Women are informed about their next visit and the date of this visit is agreed					
All data are appropriately recorded in perinatal card					

Verbal information about antepartum classes is offered					
<b>Each visit includes the following routine examinations and tests:</b>					
- blood pressure					
- measurement and plotting of symphysis–fundal height (after 24 weeks) on gravidogram, assessment of it					
- auscultation of fetal heart rate					
- body weight in case of low BMI					
- urinalysis for protein in urine					
<b>Other investigations and counseling offered at different intervals/periods during pregnancy</b>					
Hemoglobin is determined at 28 -30 weeks <sup>2</sup>					
Screening for gestational diabetes is offered according to national guidelines at 24-28 weeks gestation (universal or risk based approach)					
Screening for syphilis is offered two times during pregnancy <sup>2</sup>					
Screening for HIV is offered two times during pregnancy <sup>2,3</sup>					
Anti Rh-antibodies are determined in Rh-negative women twice (the first visit and 27-28-th weeks of pregnancy) <sup>7</sup>					
<b>Providers do not offer routinely investigations listed below:</b>					
Routine antepartum pelvic examination <sup>7</sup>					
Repeated maternal weighting, except cases of low BMI					
Pelvimetry <sup>3</sup>					
Vaginal smear in absence of signs and symptoms of vaginal infections <sup>3</sup>					
Screening for cytomegalovirus (CMV) <sup>3,7</sup>					
Screening for toxoplasmosis <sup>3,7</sup>					
Screening for herpes simplex virus <sup>15</sup>					
Screening for Chlamydia. trachomatis <sup>7</sup>					
Screening for Hepatitis C <sup>7</sup>					
Screening for Streptococcus B <sup>3,7</sup>					
Screening for asymptomatic Bacterial vaginosis <sup>3,7</sup>					
Screening for preterm birth by cervical length (either by Ultrasound screening or vaginal examination) or using fetal fibronectin <sup>7</sup>					
Formal fetal movement count <sup>7</sup>					
Antenatal non-stress test for monitoring of fetal wellbeing <sup>7</sup>					
Ultrasound scanning after 24 weeks for monitoring of growth or fetal wellbeing <sup>3,7</sup>					
Umbilical artery Doppler Ultrasound scanning for monitoring of fetal wellbeing <sup>7</sup>					
Uterine artery Doppler Ultrasound scanning to predict preeclampsia <sup>3</sup>					
Biochemical tests <sup>10</sup>					
Blood coagulation tests					

<b>Late third trimester</b>				
Fetal position is determined after 36 weeks of pregnancy <sup>7</sup>				
External cephalic version is offered in breech presentation at 36-37 weeks of pregnancy <sup>7</sup>				
Women are referred to maternity facilities with 24 hour availability of emergency cesarean section in case of breech, transverse lie and previous uterine scar <sup>1,2</sup>				
The option of vaginal birth after cesarean section is discussed. Advantages and risks are correctly presented <sup>11</sup>				
Women are referred to maternity facilities at 41 weeks for postdates care				

## 2.6 Checking and managing particular non-infectious conditions<sup>1</sup>

Criteria	0	1	2	3	Comments
<b>Screening and management for pre-eclampsia</b>					
Blood pressure is measured at each visit, in sitting position and using correct methodology					
If diastolic blood pressure (DBP) is $\geq 90$ mm Hg or SBP $\geq 140$ mm Hg, measurement is repeated after 1 hour rest					
If DBP is $\geq 90$ mm Hg or SBP $\geq 140$ mm Hg on 2 readings, proteinuria is checked					
Women with preeclampsia (DBP $\geq 90$ -110 mm Hg, SBP $\geq 140$ mm Hg and proteinuria) are referred to higher level care facilities for specialist care					
Women with severe preeclampsia (DBP $\geq 110$ mm Hg or SBP $\geq 160$ mm Hg and proteinuria or any hypertension with any clinical signs (severe headache, blurred vision or epigastric pain) are referred urgently to higher level facilities after administration of magnesium sulfate and appropriate antihypertensive according to guidelines					
Medical providers inform women about symptoms and signs of severe preeclampsia: headache, problems with vision (blurring or flashing before the eyes) bad pain just below the ribs, vomiting, and sudden swelling of face, hands or feet					
<b>Providers do not offer routinely investigations listed below:</b>					
Bed rest and hospitalization are not currently recommended for women with isolated gestational hypertension					
Diuretics are not administered to prevent/treat pre-eclampsia					
Restriction of salt/fluid intake is not recommended					
Increasing/decreasing of protein and/or energy intake is not recommended					

Iron, folate, magnesium, zinc or fish oil supplementation is not prescribed for prevention of pre-eclampsia					
<b>Checking and treatment for anemia</b>					
The provider enquires about signs of severe anemia (tiredness, breathlessness, chest pain, palpitations, feeling faint)					
Provider looks at symptoms of severe anemia (conjunctival and palmar pallor, number of breaths in 1 minute)					
If signs and symptoms of severe anemia, Hemoglobin (Hb) is measured according to local guidelines and clinical judgment					
In case of severe anemia (Hb<7 /dl and / or severe pallor, dyspnea, breathlessness at rest, chest pain, palpitations) the provider: <ul style="list-style-type: none"> <li>- revises the birth plan as to deliver in a facility with blood transfusion services</li> <li>- gives a double dose of iron (60 mg twice daily) for 3 months</li> <li>- counsels on compliance with treatment and explains why the iron is being given</li> <li>- follows up in 2 weeks to check clinical progress, test results and compliance with treatment</li> <li>- refers urgently to hospital in late gestation</li> </ul>					
In women with moderate anemia (Hb 7-11 g/dl) the provider: <ul style="list-style-type: none"> <li>- gives a double dose of iron (60 mg twice daily) for 3 months</li> <li>- counsels on compliance with treatment and explains why the iron is being given reassesses at next antenatal visit. If anemia persists, refers to hospital</li> </ul>					
<b>Prevention of preterm delivery</b> <sup>3,7</sup>					
Medical providers refer women with high risk of preterm delivery for consultation to higher level facilities					
<b>Providers do not offer routinely investigations listed below:</b>					
Bed rest and hospitalization are not currently recommended for women at risk of PTD					
Sexual activity is not prohibited in women at risk					
Prophylactic oral betamimetics /magnesium sulphate/calcium supplementation are not given in women at risk					
Routine antenatal pelvic examination is not perform to predict preterm delivery					
Women with risk factors for preterm delivery are not admitted routinely during “critical periods” of pregnancy					
<b>Screening, prevention and management of RhD allo-immunisation</b> <sup>7</sup>					
Testing for blood group and RhD status is of-					

ferred in early pregnancy to all women					
If a pregnant woman is RhD-negative, her partner should be tested to determine whether the administration of anti-D prophylaxis is necessary					
Screening for anti Rh antibodies is offered to all RhD-negative pregnant women.					
All women are screened for atypical red cell alloantibodies in early pregnancy and again at 27-28 weeks regardless of their RhD status					
Routine antenatal anti-D prophylaxis is offered to all non-sensitized pregnant women who are RhD negative					
Pregnant women with clinically significant atypical red cell alloantibodies are referred to a specialist center for further investigation and advice on subsequent antenatal management					
<b>Pregnancy after 41 weeks</b> <sup>2,7</sup>					
Pregnant women are informed about the increased perinatal mortality after 41 weeks of pregnancy and advised to attend antenatal clinic if she is undelivered by 41 weeks of pregnancy					
A written protocol for management of pregnancies beyond 41 weeks of pregnancy is available					
Induction of labour is offered at pregnancy beyond 41 weeks to women with otherwise uncomplicated pregnancies					
Increased antenatal monitoring consisting of at least twice-weekly non-stress test and ultrasound estimation of maximum amniotic pool depth is offered from 42 weeks to women who decline induction of labour					
A vaginal examination for membrane sweeping is offered prior to formal induction of labour in pregnancies beyond 41 weeks					
<b>Fetal growth and wellbeing</b> <sup>7,8</sup>					
Formal fetal movement count is not recommended during pregnancy					
Women are informed to seek care if there is a sudden increase or decrease of fetal movements					
Symphysis-fundal height is measured and plotted on gravidogram correctly					
If there no positive trend on gravidogram the fetal growth scan is recommended					
Biochemical and hormonal tests are not used to monitor fetal wellbeing during pregnancy					
<b>Polyhydramnios</b>					
If polyhydramnios is suspected - USG scanning is recommended					
Polyhydramnios is diagnosed based on agreed USG criteria (an AFI of more than 24 cm or a single pocket of fluid of at least 8 cm deep)					
If the diagnosis is confirmed woman is re-					

ferred to higher level facilities for the consultation					
<b>Multiple pregnancy</b> <sup>2,7</sup>					
The provider appropriately counsels the women on maternal and fetal risks of multiple gestation (miscarriage, fetal death, preterm birth, discordant growth, twin-twin transfusion, malpresentation, operative vaginal delivery, cesarean section, anemia, postpartum haemorrhage, discomfort, GERD etc)					
Antenatal care is provided together with Ob/Gyn					
Bed rest, cervical suture, tocolysis, or any other interventions to prevent preterm birth in multiple pregnancies are not recommended					
Serial ultrasonographic evaluation every three to four weeks is indicated in multiple gestations					
If the diagnosis of discordant fetal growth is made the provider refers the woman to the hospital for consultation					
Multiple pregnancy deliveries should be planned in the higher level facilities					
<b>Checking and managing particular infectious conditions</b>					
<b>Checking HIV status</b>					
The provider asks the woman: - if she was tested for HIV - if yes, what is the result whether her partner has been tested					
In HIV positive women the provider: - ensures that she has visited certain specialist and received necessary information about prevention of maternal to child transmission (PMTCT) - enquires about antiretroviral (ARV) treatment prescribed and ensures that the woman knows when to start and how to take ARV drugs - enquires about the infant feeding options chosen - provides advice on additional care during pregnancy, delivery and postpartum - provides advice on correct and consistent use of condoms as well as other contraceptive methods - counsels on benefits of involving and testing the partner					
In women with unknown HIV status the provider: - provides key information on HIV - informs the woman about voluntary testing and counseling to determine HIV status - provides advice on correct and consistent use of condoms - counsels on benefits of the involving and					



testing the partner					
In women known to be HIV negative the provider: - provides key information on HIV - counsels on benefits of involving and testing the partner - counsels on the importance of staying negative by correct and consistent use of condoms					
<b>Identification and management of urinary tract infections</b>					
Screening test (culture) is performed in all women on the first visit. Criteria of diagnosis of asymptomatic bacteriuria is $10^5$ col/MU					
Infections of the low urinary tract are correctly treated (i.e. 5-7 days course of appropriate antibiotics; ampicillin/cephalosporin/nitrofurantoin can be used; (no need for hospitalization)					
Women with pyelonephritis are correctly diagnosed, given antibiotics and hospitalization is offered for treatment					
<b>Screening and adequate treatment for Syphilis</b>					
Screening test is performed in all women twice in pregnancy					
Women with syphilis are not hospitalized and isolated during pregnancy					
Women with syphilis are also screened and treated for the other sexually transmitted infections (STI)					
The woman is encouraged to bring her sexual partner for treatment					
The woman is advised on correct and consistent use of condoms to prevent new infection					
<b>Correct diagnosis and treatment of gonorrhoea</b> <sup>14, 16</sup>					
If there is a high prevalence of gonorrhoea in the population screening is performed					
Culture of the cervical secretion is used to make the diagnosis					
Appropriate treatment is given to women and the partner is tested and treated					
Women are not admitted to the hospital /not isolated					
Eradication of the infection is checked with a follow-up swab and culture 6 weeks after treatment					
<b>Management of other infections during pregnancy</b> <sup>14-17</sup>					
Screening for tuberculosis (TB) in pregnancy is performed among women from risk group of population					
Screening for Hepatitis B is performed in all pregnant women when specific immunoglobulin and vaccine are available					
General recommendations are given to pregnant women for prevention of					

Lysteriosis and toxoplasmosis					
No treatment is offered for carriers of cytomegalovirus (CMV)					
Primary CMV infection is diagnosed correctly and confirmed with appropriate tests					
Appropriate counseling about potential risks for fetus is offered to women with primary CMV infection					
Primary toxoplasmosis infection as diagnosed correctly and confirmed with appropriate tests					
Appropriate counseling about potential risks for fetus is offered to women with primary toxoplasmosis infection					
Women with genital herpes are not isolated and hospitalized					
Termination of pregnancy is offered to women diagnosed with Rubella in the first 16 weeks of pregnancy					
Vaccination for Rubella is offered to all seronegative women after childbirth, miscarriage and/or termination of pregnancy (TOP)					
Women with rubella are not hospitalized					
Correct diagnostic criteria are used to diagnose vulvovaginitis <sup>17</sup>					
A 1-week course of a topical imidazole is offered to treat vaginal candidiasis infections in pregnant women					
Oral drugs are not offered for treatment for vaginal candidiasis in pregnancy					

<p><b>Test and examinations that are routinely recommended</b></p> <p><i>Blood pressure measurement and urinalysis for protein</i></p> <p><i>Blood pressure measurement and urinalysis for protein should be carried out at each antenatal visit to screen for pre-eclampsia.<sup>7</sup></i></p> <p><i>Algorithm of measurement of blood pressure (BP see Annex „Testing practical skills”.</i></p> <p><b>Anemia</b></p> <p><i>Pregnant women should be offered screening for anaemia. Screening should take place early in pregnancy (at the first visit) and at 28 weeks when other blood screening tests are being performed. This allows enough time for treatment if anaemia is detected. [B]<sup>7</sup></i></p> <p><b>Blood group and RhD status</b></p> <p><i>Women should be offered testing for blood group and RhD status in early pregnancy. [B]<sup>7</sup></i></p> <p><b>Mesurement the symphysio-fundal height</b></p> <p><i>Symphysis-fundal height should be measured and recorded at each antenatal appointment from 24 weeks gestation to detect small for gestational age fetuses.<sup>7</sup></i></p> <p><b>Fetal abnormalities</b></p> <p><i>Ultrasound screening for fetal abnormalities should be routinely offered between 18 and 20 weeks.<sup>7</sup></i></p> <p><b>Syphilis</b></p> <p><i>Screening for syphilis should be offered to all pregnant women at an early stage in antenatal care because treatment of syphilis is beneficial to the mother and fetus. [B]<sup>7</sup></i></p> <p><b>HIV</b></p> <p><i>Pregnant women should be offered screening for HIV infection early in antenatal care because appropriate antenatal interventions can reduce mother-to-child transmission of HIV infection. [A]<sup>7</sup></i></p> <p><b>Asymptomatic bacteriuria</b></p>
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*Pregnant women should be offered routine screening for asymptomatic bacteriuria by midstream urine culture early in pregnancy. Identification and treatment of asymptomatic bacteriuria reduces the risk of preterm birth and diseases of pyelonephritis. [A]<sup>7</sup>*

#### **Hepatitis B virus**

*Serological screening for hepatitis B virus should be offered to pregnant women so that effective postnatal intervention can be offered to infected women to decrease the risk of mother-to-child transmission. [A]<sup>7</sup>*

#### **Rubella**

*Rubella susceptibility screening should be offered early in antenatal care to identify women at risk of contracting rubella infection and to enable vaccination in the postnatal period for the protection of future pregnancies.<sup>7</sup>*

There is high level evidence that routine, rather than selective, **ultrasound** in early pregnancy before 24 weeks enables better gestational age assessment, earlier detection of multiple pregnancies and improved detection of fetal abnormalities with resulting higher rate of termination of affected pregnancies. <sup>7</sup>

#### **Test and examinations not recommended routinely**

##### *Pelvic examination*

Routine antenatal pelvic examination does not accurately assess gestational age, nor does it accurately predict preterm birth or cephalopelvic disproportion. It is not recommended.<sup>7</sup>

##### *Measuring maternal weight*

Measuring maternal weight routinely during pregnancy is not effective for screening for small size of fetus or other complications. It should be abandoned as it may produce unnecessary anxiety with no added benefit.<sup>7</sup>

##### *Asymptomatic bacterial vaginosis*

Pregnant women should not be offered routine screening for bacterial vaginosis because the evidence suggests that the identification and treatment of asymptomatic bacterial vaginosis does not lower the risk for preterm birth and other adverse reproductive outcomes. [A]<sup>7</sup>

##### *Chlamydia trachomatis*

Chlamydia screening should not be offered as part of routine antenatal care, as there are no good evidence of its effectiveness.<sup>7</sup>

##### *Cytomegalovirus*

The available evidence does not support routine cytomegalovirus screening in pregnant women and it should not be offered. [B]<sup>7</sup>

##### *Toxoplasmosis*

Routine antenatal serological screening for toxoplasmosis should not be offered because the harms of screening may outweigh the potential benefits.<sup>7</sup>

##### *Hepatitis C virus*

Pregnant women should not be offered routine screening for hepatitis C virus because there is insufficient evidence on its effectiveness and cost effectiveness.[C]<sup>7</sup>

##### *Streptococcus Group B*

Pregnant women should not be offered routine antenatal screening for group B streptococcus (GBS) because evidence of its clinical effectiveness and cost effectiveness remains uncertain. [C]<sup>7</sup>

##### *Routine ultrasound after 24 weeks of pregnancy.*

Routine ultrasound after 24 weeks in low-risk pregnancy does not improve perinatal outcome and should not be recommended.<sup>7</sup>

##### *Biophysical tests to diagnose fetal growth restriction*

All biophysical tests, including amniotic fluid volume (AFV), Doppler, cardiotocography and biophysical scoring, are poor for the diagnosing a small or growth-restricted fetus.<sup>8</sup>

## 2.7 Antepartum counseling <sup>1</sup>

Criteria	0	1	2	3	Comments
Counseling on the importance of exclusive breastfeeding is provided during pregnancy					
Family planning counseling is given during the third trimester of pregnancy					
<b>Lifestyle considerations <sup>1,7</sup></b>					
<i>Working during pregnancy</i>					
Pregnant women are informed about their maternity rights and benefits					
A woman's occupation during pregnancy is ascertained to identify those at increased risk through occupational exposure					
Women receive information about possible occupational hazards during pregnancy					
<i>Nutrition</i>					
Women are advised to eat greater amount and variety of healthy foods, such as meat, fish, oils, nuts, seeds, cereals, beans, vegetables, cheese, milk					
The provider gives examples of types of food and how much to eat					
The provider spends more time on nutrition counseling with very thin women, adolescents and obese women					
Taboos about foods that are nutritionally important for good health are determined and women are advised against these taboos					
Family members are encouraged to help ensure the woman eats enough and avoids hard physical work					
Women are informed on food born infection and measures of protection					
Women are informed about the specific risks of smoking (as well as secondhand exposure ) during pregnancy (such as the risk of having a low birth weight baby, placental abruption and preterm birth)					
Women (and her partner) are encouraged to quit smoking during pregnancy and benefits of quitting for baby, her and him, at any stage are emphasized					
Women are correctly informed about risks of alcohol consumption: - that pregnant women should not drink during pregnancy as the amount of alcohol that is safe in pregnancy is unknown - that binge drinking (defined as more than 5 standard drinks on a single occasion) may be particularly harmful during pregnancy					
Women are informed that medicines should be used as little as possible during pregnancy and should be limited to circumstances where the benefit outweighs the risk					

Women are informed that long-haul travel (air, bus, car) is associated with an increased risk of venous thrombosis and that frequent ambulation and venous compression stockings should be encouraged as a preventive measure				
Women are informed about the correct use of seatbelts (three-point seatbelts 'above and below the bump, not over it').				
Women are informed that, if they are planning to travel abroad, they should discuss considerations such as flying, vaccinations and travel insurance with their midwife or doctor				
Pregnant women are informed that beginning or continuing a moderate course of exercise during pregnancy is not associated with adverse outcomes				
Pregnant women are informed that sexual intercourse in pregnancy is not known to be associated with any adverse outcomes				
Pregnant women are informed on safe sex and correct and consistent use of condoms				
<b>Minor symptoms</b>				
<i>Nausea and vomiting in early pregnancy</i>				
Women are informed that most cases of nausea and vomiting in pregnancy will resolve spontaneously within 16 to 20 weeks of gestation and that nausea and vomiting are not usually associated with a poor pregnancy outcome				
If a woman requests or would like to consider treatment, effective interventions to reduce symptoms are offered				
<i>Heartburn</i>				
Women who present with symptoms of heartburn in pregnancy receive correct information regarding lifestyle and diet modification				
Antacids are offered to women whose heartburn remains troublesome despite lifestyle and diet modification				
<i>Constipation</i>				
Women who present with constipation in pregnancy are provided information regarding diet modification, such as bran or wheat fibre supplementation				
<i>Haemorrhoids and Varicose veins</i>				
In the absence of evidence of the effectiveness of treatments for haemorrhoids in pregnancy, women are informed about diet modification				
If clinical symptoms remain troublesome, standard haemorrhoid creams are considered				
Women are informed that varicose veins are a common symptom of pregnancy that will not cause harm and that compression stockings can improve the symptoms but will not prevent varicose veins from emerging				
<i>Vaginal discharge</i>				
Women are informed that an increase in vagi-				

nal discharge is a common physiological change that occurs during pregnancy					
If this is associated with itch, soreness, offensive smell or pain on passing urine there may be an infective cause and investigations are considered					
<i>Backache</i>					
Women are informed that exercising in water, massage therapy and group or individual back care classes might help to ease backache during pregnancy					
<b>Developing a birth plan</b> <sup>1</sup>					
The providers clearly explain why facility birth is recommended by emphasizing the following points: - that any complication can develop during delivery and that complications are not predictable - a facility has staff, equipment, supplies and drugs to provide the best quality of care if needed					
review arrangements for delivery including: - how to get to facility - how much transportation and care will cost - who will accompany women as support person during labor and delivery - who will help while she is away to care for her home and other children					
Advice on when to go to the maternity facility					
The woman is advised on what to bring to the maternity : - home based maternal record - clean clothes for the baby - sanitary pads to be used after birth - food and water for her and the support person					

### 2.7.1. Antepartum classes and supporting the women with special needs<sup>1</sup>

Criteria	0	1	2	3	Comments
<b>Antepartum classes</b>					
Women are informed about the advantages and possibility of attending antepartum classes					
The information and schedule of antepartum classes is placed in a visible place at the facility					
There is a specially appointed staff in the facility to conduct antepartum classes					
These staff have good counseling and communication skills and knowledge on topics for patient education during pregnancy					
A special place / room exists in the facility for antepartum classes					
This place / room is clean, warm, sufficiently large and furnished / equipped for antenatal classes					

Informational materials on different aspects of prenatal education are available in the facility					
Topics for patient education are rationally distributed during pregnancy and cover following topics:					
In early pregnancy: <ul style="list-style-type: none"> <li>- Normal physiologic processes of gestation</li> <li>- Nutrition and diet, including folic acid and iron supplementation</li> <li>- Food hygiene, including avoidance of food born infections</li> <li>- How the baby develops during pregnancy</li> <li>- Exercise, including pelvic floor exercises</li> <li>- Lifestyle advice including smoking cessation; recreational drug use and alcohol consumption</li> </ul>					
In the late second-early third trimester: <ul style="list-style-type: none"> <li>- Place of birth</li> <li>- Labour and delivery</li> <li>- Partnership</li> <li>- Relaxation techniques</li> <li>- Care pathway</li> <li>- Breastfeeding</li> </ul>					
In late pregnancy: <ul style="list-style-type: none"> <li>- Preparation for labour and birth</li> <li>- Recognition of active labour stage</li> <li>- Care of baby</li> <li>- Breastfeeding technique</li> <li>- Postnatal self-care</li> <li>- Awareness of baby blues and postnatal depression</li> <li>- Postpartum contraception</li> </ul>					
Husbands / partners are encouraged to participate during antepartum classes					
Patient education efforts are documented in the office record					
<b>Women with special needs</b>					
There are clear recommendations and pathways of referral for women with special needs to another level of care or support groups/organizations					
When giving support to the woman with special needs, the provider: <ul style="list-style-type: none"> <li>- creates a comfortable environment and uses a gentle and reassuring tone of voice</li> <li>- guarantees confidentiality and privacy</li> <li>- conveys respect and is not judgmental</li> <li>- gives simple, direct answers in clear language</li> <li>- provides information according to the woman's situation which she can use to make decisions</li> <li>- is a good listener and patient</li> </ul>					
<b>Interacting with an adolescent</b>					
Encourages the girl to ask questions and tell her that all topics can be discussed					

Understands adolescent difficulties in communicating about topics related to sexuality (fears of parental discovery, adult disapproval, social stigma etc)					
Supports adolescent when discussing her situation and ask if she has any particular concerns					
Helps the girl consider her options and to make decisions which best suit her needs: <ul style="list-style-type: none"> <li>- advise that delivery in a hospital or birth center is highly recommended and why</li> <li>- reinforce why prevention of STI or HIV/AIDS is important for her and her baby</li> <li>- advise of importance of birth spacing and family planning options</li> </ul>					
<b>The woman living with violence</b>					
encourages the woman to tell what is happening and ask direct questions to help her to tell the story					
listens to her in a sympathetic manner, without blame and accusation					
helps to assess her present situation: if she thinks she or her children are in danger, explores together the options to ensure safety					
helps to identify local sources of support (within family, friends, local community, NGOs, shelters or social services)					
offers an opportunity for another appointment					
Any forms of abuse identified or concerns about violence are appropriately documented					
Staff is trained to deal with and respond appropriately to needs of women living with violence					
Health care staff is aware about violence against women and its prevalence in the community					
Posters, leaflets and other information that condemn violence and tell about groups that can provide support are displayed in the facility					
Contacts with local organizations working to address violence are established and functional					

## 2.8 Routine postpartum maternal care

Criteria	0	1	2	3	Comments
<b>Postpartum examination of the mother</b>					
The provider asks the woman: <ul style="list-style-type: none"> <li>- when and where she delivered</li> <li>- type of delivery</li> <li>- how she is feeling/coping</li> <li>- if she has any pain, fever or bleeding after her delivery</li> <li>- about decisions on contraception</li> </ul>					



- if she is breastfeeding - if she has any problems with breasts or breastfeeding - if she has resumed sexual activity					
The provider checks the records for: - any complications during delivery - any received treatment - HIV status					
Blood pressure and temperature are measured					
The provider looks at the vulva and perineum for any tears, swelling and pus. If cesarean section was performed the incision site is also checked for any swelling, redness or pus.					
The provider looks at the pad for bleeding and lochia					
The provider assess for pallor					
The provider looks at the breasts for any signs of infection					
The provider advises on postpartum care and hygiene, and counsels on nutrition and breastfeeding					
The provider advises on the importance of sufficient interval between birth and family planning					
The provider informs the woman and family on danger signs and when to seek care					
The provider gives any treatment or prophylaxis due: (ex. tetanus immunization if she has not had full course)					
The provider asks about smoking her and her partner. Women and partner are encouraged to quit smoking. Provider explains benefits of quitting for children, their health.					
The provider advises women to visit health center within 4-6 weeks.					
<b>Anaemia</b>					
Hb is measured if there is a history of bleeding or clinical signs of anemia (conjunctival pallor, breathlessness or dyspnoea, chest pain, palpitations)					
If Hb is <7 g/dl a double dose of iron (60 mg twice daily) for 3 months is offered and follow up in 2 weeks to check clinical progress and compliance with treatment is arranged					
If Hb is 7-11 g/dl a double dose (60 mg twice daily) of iron for 3 months is offered and follow up in 4 weeks to check clinical progress and compliance with treatment is arranged					
<b>Lower urinary tract infection</b>					
Appropriate oral antibiotic is given					
Women are encouraged to drink more fluids					
Follow up visit in 2 days and if there is no improvement, refer to hospital					
<b>Urinary incontinence</b>					
Examination is performed to check for perineal trauma					

Appropriate oral antibiotics for lower urinary tract infection are given					
If conditions persists more than 1 week, the woman is referred to the hospital					
<b>Postpartum depression</b>					
The provider asks the following question: - How have you been feeling recently? - Have you been in low spirits? - Have you been able to enjoy the things you usually enjoy? - Have you had your usual level of energy, or have you been feeling tired? - How has your sleep been? Have you been able to concentrate (for example on newspaper articles or your favorite radio/TV programs)?					
If the diagnosis is Postpartum depression the provider provides emotional support and <b>refers the woman urgently to the hospital</b>					
If the diagnosis is postpartum blues the provider: - assures the woman that this is very common - gives emotional encouragement and support - counsels partner and family to provide assistance to the woman					

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

Overall assessment - Routine antepartum and postpartum care	Improvement required			Good
	0	1	2	3
<b>Circle it</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

## 2.9 Postpartum newborn care

Criteria	0	1	2	3	Comments
<b>Postpartum examination of the newborn</b>					
Medical providers collects information about mother, age of child, gestational age of pregnancy during the delivery, pregnancy history and complaints					
The provider assesses breathing (baby must be calm)					
The provider pays attention on the child's posture and muscle tone					
Draws attention to the posture of the child determines whether the muscle tone is normal Looks at the movements: are they normal active and symmetrical?					
Looks at the presenting part — are there any swelling and bruises?					
Looks at abdomen for pallor and for evidence of jaundice					
Looks for malformations					
Measure body temperature					
Weighs the baby					
Measures the length of the baby					
Plots growth on growth chart					
If baby is preterm or weighs less than 2 kg the provider informs and advises the mother about kangaroo mother care					
If baby is preterm or weighs less than 2 kg the provider checks to see that Vitamin K has been given and provides it if not previously done					
The findings are recorded on the postpartum record					
Provider checks that vaccinations according national immunization schedule have been given and provides them if not previously done					
Provider advises mother about vaccination schedule and date of next visit					
Provider uses the counseling sheet to advise the mother when to seek care immediately, if the baby has any of these danger signs: <ul style="list-style-type: none"> <li>- convulsions</li> <li>- difficulty breathing or hurried breathing</li> <li>- the baby moves more than usual or inhibited</li> <li>- not feeding at all fever or feels cold</li> <li>- pus from eyes</li> <li>- skin pustules</li> <li>- yellow skin</li> <li>- a cord stump which is red or draining pus</li> <li>- bleeding</li> <li>- diarrhoea</li> <li>- in case if condition of the baby will become worse</li> </ul>					

## 2.10 Assessment of breastfeeding and management of common breastfeeding complications

Criteria	0	1	2	3	Comments
<b>Breastfeeding assessment</b>					
Provider asks the mother: <ul style="list-style-type: none"> <li>- How is the breastfeeding going?</li> <li>- How many times has your baby fed in 24 hours?</li> <li>- Is there any difficulty?</li> <li>- Have you fed your baby any other foods or drinks?</li> <li>- How do your breasts feel?</li> <li>- Do you have any concerns?</li> <li>- Has your baby fed in the previous hour?</li> </ul>					
Provider observes how baby is breastfeed. If the baby has not fed in the previous hour, mother is asked to put the baby on her breasts and breastfeeding is observed for about 5 – 10 minutes					
Provider assesses <ul style="list-style-type: none"> <li>- If the baby able to attach correctly?</li> <li>- If the baby well-positioned? If the baby suckling effectively</li> </ul>					
If newborn is not well attached or is not suckling effectively - the provider teaches correct positioning and attachment					
If breastfeeding are less than 8 times per 24 hours – the provider advises to feed more frequently, day and night and reassures mother that she has enough milk					
If the baby receiving other foods or drinks – The provider advises the mother to stop feeding the baby other foods or drinks					
If the baby is nor able to take any food the mother and baby are referred urgently to the hospital					
<b>Counselling on breastfeeding</b>					
Counselling includes: <ul style="list-style-type: none"> <li>- Reassure the mother that she can breastfeed her baby exclusively, on demand and she has enough milk</li> <li>- Explain that her milk is the best food for such for the baby and she should not give any other food, water or drinks.</li> <li>- Explain how the milk's appearance changes: milk in the first days is thick and yellow, and then it becomes thinner and whiter. Both are good for the baby</li> <li>- Explain that breastfeeding will become easier if the baby suckles and stimulates the breast her/himself and when the baby will grow up</li> <li>- Encourage skin-to-skin contact since it makes breastfeeding easier</li> </ul>					

<b>Assess the mothers breasts if complaining of nipple or breast pain</b>				
The provider asks how the breasts feel				
The provider looks at the nipple for fissure and looks at the breasts for: - swelling - shininess - redness Feels gently for painful part of the breast Measures temperature Observes a breastfeed if not yet done				
<b>If nipple soreness or fissure</b> - The provider encourages the mother to continue breastfeeding - Teaches correct positioning and attachment - Reassess after 2 feeds (or 1 day). If not better, the provider teaches the mother how to express breast milk from the affected breast and feed baby by cup, and continue breastfeeding on the healthy side				
<b>If breast engorgement</b> - The provider encourages the mother to continue breastfeeding - Teaches correct positioning and attachment - Advises to feed more frequently - Reassesses after 2 feeds (1 day). If not better, the provider teaches mother how to express enough breast milk before the feed to relieve discomfort				
<b>Mastitis</b> - The provider encourages mother to continue breastfeeding - Teaches correct positioning and attachment - Gives antibiotics, for example cloxacillin for 10 days - Reassesses in 2 days. If no improvement or worse, refers to hospital to rule out abscess - If severe pain, gives paracetamol				

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

<b>Overall assessment - Postpartum newborn care</b>	<b>Improvement required</b>			<b>Good</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>To be circled</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

### 3. Rapid assessment, management and referral of common maternal antepartum and postpartum complications

#### 3.1 Assessment and management of gestational hypertension, pre-eclampsia and eclampsia

Criteria	0	1	2	3	Comments
Blood pressure is taken in all pregnant women seen in the antepartum and postpartum clinic					
Standardized equipment, techniques and conditions for blood-pressure measurement are used by all member staff					
If DBP is $\geq 90$ mm Hg, SBP $\geq 140$ mm Hg measurement is repeated after 1 hour rest					
Dipstick urine (checking for protein) is immediately performed in women with hypertension					
Women with preeclampsia (DBP 90-110 mm Hg, SBP 140-160 mm Hg and proteinuria) are referred to higher level care facilities for specialist care					
When proteinuria develops women are admitted to the hospital for further assessment/monitoring					
Pre-eclampsia and severe pre-eclampsia are correctly diagnosed (see criteria below*)					
Antihypertensive drugs are not given if the SBP less than 160 mm Hg, DBP 90-110 mm Hg					
<b>Management of severe pre-eclampsia and eclampsia <sup>4</sup></b>					
If available an IV is inserted to ensure intravenous access in case of deterioration and need for IV medications					
Antihypertensive treatment is always started when SBP $\geq 160$ and/or DBP $\geq 110$ or when there are any other symptoms such as headache, vomiting, epigastric pain at any level of hypertension					
Appropriate treatment at the appropriate dosage is given (oral alpha methyldopa; intravenous or oral labetalol, oral or intravenous nifedipine or intravenous hydralazine)					
Magnesium sulphate is given to prevent eclampsia in women with severe preeclampsia for transport, in women who are seizing					
Appropriate therapeutic and prophylactic schemes are used for magnesium sulphate administration					
Urine output, maternal reflexes, respiratory rate are evaluated					
Calcium gluconate 10% is readily available to reverse the effect of magnesium sulphate					
Women with severe preeclampsia and/or ec-					

lampsia are immediately referred to hospital care with referral notes and accompanied by medical worker				
The first dose of steroids are given for fetal lung maturity if the fetus is between 24-34 weeks gestational age				
There is a well-defined written protocol for management of eclampsia available and in the facility				
An emergency kit is ready and available at the facility for treatment of eclampsia and staff have received appropriate training to have the skill set to manage the emergency				
Women who are seizing are not restrained but placed in left lateral position with their head gently supported				
Nothing is placed in the mouth of a seizing woman				

<p><b>*Criteria of Hypertension and Preeclampsia</b></p> <p><i>Hypertension</i> diastolic blood pressure <math>\geq</math> 90 mmHg on two occasions or systolic blood pressure <math>\geq</math> 140 mmHg on two occasions</p> <p><i>Severe hypertension</i> diastolic blood pressure <math>\geq</math> 110 mmHg on two occasions or systolic blood pressure <math>\geq</math> 160 mmHg on two occasions</p> <p><i>Preeclampsia</i> Hypertension associated with proteinuria (<math>&gt;</math> 0.3 g in 24 hours) <math>\pm</math> oedema. Virtually any organ system can be affected</p> <p><i>Severe preeclampsia</i> Severe hypertension plus proteinuria, or Any hypertension plus proteinuria, plus one of following symptoms:</p> <ul style="list-style-type: none"> <li>- Severe headache</li> <li>- Visual disturbance</li> <li>- Papilloedema</li> <li>- Epigastric pain and/or vomiting</li> <li>- Signs of clonus</li> <li>- Liver tenderness</li> <li>- Platelet count falling to below 100 000</li> <li>- Abnormal liver enzymes (ALT or AST rising to above 70 IU/L)</li> <li>- HELLP syndrome</li> </ul>
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### 3.2 Assessment and management of antepartum hemorrhage <sup>1,4</sup>

Criteria	0	1	2	3	Comments
Vaginal examination is not performed					
The woman is asked if the bleeding is painful (abruption) or painless (previa)					
An intravenous (IV) line is inserted, using a 14-16-(18) gauge needle or preferably catheter if available					
If available in case of heavy bleeding the crystalloid fluids are administered rapidly: <ul style="list-style-type: none"> <li>- For beginning of infusion 1 litre in 15-20 minutes</li> </ul>					



Blood pressure, pulse and urine output are used as criteria of effectiveness of infusion					
Woman is referred urgently to hospital					
Women is accompanied by health care staff, with appropriate referral notes					

### 3.3 Assessment and management of threatened preterm labour, preterm labour and preterm premature rupture of membranes

Criteria	0	1	2	3	Comments
<b>Management of threatened preterm labour and preterm labour</b>					
Medical provider asks about previous preterm birth and risk factors for preterm birth (smoking, socioeconomic status, age, multiple gestation, rupture of membranes)					
Asks about time and regularity of contractions					
Determines a gestational age					
If contractions' are strong, no rupture of membranes, vaginal examination is performed to determine dilation, effacement, station and presenting part.					
If rupture of membranes has occurred then examination is performed using a sterile speculum					
Ampicillin is given for prevention of GBS sepsis when group B streptococcal (started with preterm labor)					
Woman is referred urgently to hospital					
The first dose of steroids for fetal lung maturity are given					
Tocolytics (nifedipin) are given for transport as per guidelines					
Women is accompanied by health care staff, with appropriate referral notes					
<b>Management of preterm premature rupture of membranes</b>					
Medical provider asks about time of rupture of membranes, colour of liquor, blood; and signs of chorioamnionitis ( fever, abdominal pain, foul smelling vaginal odour or discharge)					
Gestational age is determined via history					
Sterile speculum is used to confirm rupture of membranes					
If rupture of membranes is confirmed vaginal examination is NOT performed					
Ampicillin (during the active phase of labour) and erythromycin ( in case of absence of contractions) are given for prevention of GBS sepsis					
The first dose of steroids are given for fetal lung maturity					
Woman is referred urgently to the hospital					
Women is accompanied by health care staff,					

with appropriate referral notes				
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### 3.4 Assessment and management of pyelonephritis

Criteria	0	1	2	3	Comments
<b>Management of pyelonephritis</b>					
Medical provider asks about symptoms of pyelonephritis: fever, flank pain and burning on urination					
Urinalysis and culture are taken					
Blood pressure, temperature, and pulse are taken					
An intravenous (IV) line is inserted, using a 16-18 gauge needle or preferably catheter if available and IV fluids are administered					
Appropriate IM/IV antibiotics are administered as per national guidelines (ampicillin or cefazolin)					
If available crystalloids are administered rapidly if signs of shock: - for beginning 1 litre in 15-20 minutes					
Blood pressure, pulse and urine output are used as criteria of effectiveness of infusion					
Woman is referred urgently to hospital					
Women is accompanied by health care staff, with appropriate referral notes					

### 3.5 Management of delayed postpartum haemorrhage

Criteria	0	1	2	3	Comments
<b>Management of delayed postpartum haemorrhage</b>					
Medical provider asks about history of disease: when and where delivered, type of delivery, when bleeding started, amount of bleeding, fever, uterine tenderness, foul lochia					
Blood pressure, temperature, pulse are taken					
Bladder is emptied and catheterized					
Uterus is assessed to see if tender or boggy					
If uterus is tender or boggy uterotonics and IV/IM antibiotics are administered as per national guidelines					
Vaginal examination is quickly performed to ensure bleeding is not from lacerations					
IF bleeding is due to lacerations- lacerations are repaired or tamponed with pressure until transported to facility for repair					
An intravenous (IV) line is inserted, using a 14-16 (18) gauge needle or preferably catheter if available and IV fluids are administered					
If available crystalloids are administered rapidly if signs of shock: - for beginning 1 litre in 15-20 minutes					
Blood pressure, pulse and urine output are used as criteria of effectiveness of infusion					
Woman is referred urgently to hospital					

Women is accompanied by health care staff, with appropriate referral notes					
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### 3.6 Management of incomplete abortion

Criteria	0	1	2	3	Comments
<b>Management of incomplete abortion</b>					
Rapid history on incomplete abortion is taken: gestational age, when bleeding started, amount of bleeding, fever, foul odour or discharge					
Blood pressure, temperature, and pulse are measuring					
Speculum exam is performed to see if any tissue sitting in the cervix is present and can be removed					
Bladder is catheterized and emptied					
Uterotonics are given to help with expulsion of retained products according to guidelines					
An intravenous (IV) line is inserted, using a 14-16 (18) gauge needle or preferably catheter if available and IV fluids are administered					
If available crystalloids are administered rapidly if signs of shock: - for beginning 1 litre in 15-20 minutes					
Blood pressure, pulse and urine output are used as criteria of effectiveness of infusion					
Woman is referred urgently to hospital					
Women is accompanied by health care staff, with appropriate referral notes					

### 3.7 Management of intrauterine infection/endometritis

Criteria	0	1	2	3	Comments
<b>Management of intrauterine infection</b>					
Rapid history regarding uterine infection is taken: Temperature >38°C, feeling weak, abdominal tenderness, foul-smelling lochia, uterus not well contracted, history of heavy vaginal bleeding.					
Blood pressure, temperature, and pulse are taken					
Abdominal examination of the uterus is performed					
Bimanual/pelvic examination is performed					
IM/IV antibiotics are started					
An intravenous (IV) line is inserted, using a 14 – 16 (18) gauge needle or preferably catheter if available					
If available crystalloids are administered rapidly if signs of shock: - for beginning 1 litre in 15-20 minutes					
Blood pressure, pulse and urine output are used as criteria of effectiveness of infusion					
Woman is referred urgently to hospital					

Women is accompanied by health care staff, with appropriate referral notes					
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**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

<b>Overall assessment - Rapid assessment, management and referral of common maternal antepartum and postpartum complications</b>	<b>Improvement required</b>			<b>Good</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Circle it</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

#### 4 Rapid assessment, management and referral of newborn baby with complications

##### 4.1 Assessment and management of very severe disease and local bacterial infection

Criteria	0	1	2	3	Comments
<b>Check for very severe disease and local bacterial infection</b>					
Medical care provider asks mother: - Do you have any difficulties in feeding the baby? - Has the baby had convulsions?					
Medical care provider - Counts the breaths per minute (repeats the count if 60 and more breaths per minute) - Looks for severe chest indrawing - <i>! The baby should be calm during examination</i>					
Measurement of axillary temperature					
Examination of the navel (umbilicus) - Is it red or draining pus?					
Examination of skin for pustules					
Looks for the baby's movements: - If baby is sleeping, asks the mother to wake him/her up - If the baby is not moving, gently stimulates him/her					
If any of the following signs are registered: - Not feeding well - Convulsions - Fast breathing (> 60 per minute) - Severe chest indrawing - Fever (> 37.5 °C) - Low body temperature (< 35.5 °C) - Movement only when stimulated or no movement at all					
The first dose of appropriate intramuscular antibiotics is given					
The treatment to prevent low blood sugar is started - If the baby is able to suck the breast, the mother is asked to breastfeed - If the baby isn't able to suck the breast but is able to swallow, the baby is given expressed breast milk or a breast milk substitute, or 30-50 ml sugar water - If the baby does not swallow, he/she is given 50 ml of milk or sugar water by nasogastric tube					
Mother and newborn are urgently referred to hospital					
Mother and newborn are accompanied by					

health care staff, with appropriate referral notes					
Mother is advised how to keep the newborn warm on the way to the hospital					
<b>Management for local bacterial infection</b> (umbilicus red or draining pus or skin pustules)					
The appropriate oral antibiotic is given					
Mother is taught how to treat local infection at home					
Mother is advised on home care for the newborn					
Follows up in 2 days					
If pus and redness remains or is worse, mother and newborn are urgently referred to the hospital					
Mother and newborn are accompanied by health care staff, with appropriate referral notes					
If pus and redness decrease (situation improves) advise is given to continue antibiotics for 5 days and proceed with home care					

#### 4.2 Assessment and management of diarrhoea

Criteria	0	1	2	3	Comments
Health care provider examines the baby for the signs of dehydration					
If any two of the following signs are fixed: - Sunken eyes - Skin pinch goes back very slowly (longer than 2 seconds) <i>it is a severe dehydration</i>					
Mother and newborn are referred urgently to the hospital					
Mother and newborn are accompanied by health care staff with appropriate referral notes					
Treatment of dehydration starts (plan C) - IV line is established - IV crystalloids (100 ml/kg) - If possible rehydration by tube - If the baby is able to drink ORS solution is given by mouth (5 ml/kg/hour) - Advise to continue breastfeeding as soon as the baby wants is given					
Any two of the following signs : - Restless, irritable - Sunken eyes - Skin pinch goes back slowly confirm some dehydration					
Treatment of dehydration begins (plan B) Baby is given ORS solution (200-400 ml) – preferably low osmolarity					
Health care provider shows the mother how to give ORS solution					

Health care provider advises to continue breastfeeding as soon as the baby wants					
If the baby is not breastfed, the advice to give clean water (100-200 ml/4 hours) is given					
If there are other dangerous signs or situation does not improve woman and newborn are urgently referred to the hospital					
Women and newborn are accompanied by health care staff, with appropriate referral notes					

### 4.3 Assessment and management of jaundice

Criteria	0	1	2	3	Comments
Health care provider asks the mother: - age of baby, the time of the problem started - Rhesus factor, blood group of parents - pregnancy and delivery history - history of other babies with jaundice - term or preterm birth, birth weight					
<b>Assesses a severity of jaundice</b>					
If yellow palms and soles at any age health provider - Refers baby urgently to hospital - Encourages breastfeeding on the way - If there are feeding difficulties, recommends giving expressed breast milk by cup					
- If jaundice appears after 24 hours of age and palms and soles are not yellow: Advises mother to continue care at home - Advises to return immediately if palms and soles appear yellow - Follow-up in a day - If age > 3 weeks refer to hospital for assessment					

#### The main strengths

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#### The main weaknesses

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#### Additional comments

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#### Overall assessment for the sections

Overall assessment - Rapid assessment, management and referral of new-born baby with complications	Improvement required			Good
Circle it	0	1	2	3

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)



## 5. Universal Precautions and Cleanliness

Criteria	0	1	2	3	Comments
<b>Appropriate hand washing</b>					
Places for hand washing are well organized and equipped: - liquid soap - disposable towels - containers for used towel collection - antiseptic					
Written protocols on hygiene for hands and antiseptic are available					
An information on hand washing technique is put above or near the wash bowls					
Staff is aware of the written protocols on hand washing and disinfection for various procedures and follows them					
There is continuous training of personnel on the rules and techniques of hand washing					
Hand washing is appropriately done: - hands are decontaminated before direct contact with patient and after any activity or contact that contaminates hands (exposure to blood or any body fluids, and after removing gloves, after changing oiled bed sheets or clothing) - rings, jewellery, nails are kept short soap is applied onto the hands under warm water stream - and hands rub against each other for no less than 15-30 sec according to instruction - hands are dried with paper towel and this is used after to turn off the water tap - nail polish is removed if health care provider carries out invasive procedures					
Hand washing with antiseptic soap or quick hygienic hand disinfection are performed in case of: - infected patients - exposure to biological fluids or invasive procedure (e.g. peripheral venous catheter, installation of urinary catheter)					
<b>Use of gloves</b>					
Sterile or highly disinfected gloves are used when performing vaginal examination, taking blood samples, contacts with sterile tissues or body fluids (blood, liquor)					
Gloves are used when handling dirty instruments, cleaning blood and other body fluid and when disposing of contaminated waste items					
A separate pair of gloves is used for each patient					

<b>Practices for safe sharps disposal</b>				
Each needle and syringe is used only once				
After giving an injection needles are not re-capped, bended or broke				
Puncture resistant container is kept nearby				
All used (disposable) needles, plastic syringes and blades are dropped directly into this container, without recapping, and without passing to another person				
When the container is three-quarters full it is emptied or send for incineration				
<b>Safe waste disposal practices</b>				
Blood, or body fluid contaminated items are disposed of in leak-proof containers				
Contaminated solid waste is burned or buried in special places				
Liquid waste is poured down a drain or flushable toilet				
<b>Sterilization and cleaning of contaminated equipment and gloves</b>				
Any equipment which comes into contact with intact skin is thoroughly cleaned or disinfected				
Bleach or other approved disinfectant is used for cleaning bowls and buckets, and for blood or body fluid spills				
Gloves are cleaned and disinfected or sterilized appropriately: <ul style="list-style-type: none"> <li>- washed in soap and water</li> <li>- checked for damage (blow gloves full of air, twist the cuff closed, then hold under clean water and look for air leaks), discarded if damaged</li> <li>- soaked overnight in bleach solution with 0.5% available chlorine (made by adding 90 ml water to 10 ml bleach containing 5% available chlorine)</li> <li>- dried away from direct sunlight</li> <li>- dusted inside with talcum powder or starch</li> <li>- sterilized by autoclaving or highly disinfected by steaming or boiling</li> </ul>				

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

<b>Overall assessment - Universal Precautions and Cleanliness</b>	<b>Improvement required</b>			<b>Good</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Circle it</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

## 6. Guidelines and auditing

Criteria	0	1	2	3	Comments
At least one recent obstetric textbook is readily available at the facility					
At least one recent midwifery textbook is readily available at the facility					
National guidelines on care during normal pregnancy are readily available at the facility					
Local protocols on care during normal pregnancy are readily available at the facility as pocket instructions, wall charts, or other documents					
National guidelines on management of emergency conditions complicating pregnancy are readily available in the facility					
Local protocols on management of emergency conditions of mothers are readily available at the facility as pocket instructions, wall charts, or job aids					
At least one recent neonatal guideline is available at the facility					
National guidelines on care of newborns are readily available in the facility					
Local protocols on management of emergency conditions of newborns are readily available at the facility as pocket instructions, wall charts, or job aids					
National guideline for integrate management of childhood illness (IMCI) and pocket instruction of emergency care of newborns are readily available at the facility					
Local protocols at the facility are revised and updated regularly					
Medical staff are familiar with the content of the National and local guidelines					
<b>Team work and auditing</b>					
Periodical staff meetings are held to discuss organizational aspects					
Periodical staff meetings are held to discuss maternal, perinatal and newborn morbidity, mortality and quality of care					
Periodical staff meetings are held to discuss and revise protocols					

### The main strengths

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

Overall assessment - Guidelines and auditing	Improvement required			Good
	0	1	2	3
<b>To be circled</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

**7. Regionalization and referral to hospital care for women**

Criteria	0	1	2	3	Comments
<b>Regionalization of care</b>					
A regionalized system of antenatal care is developed and functional					
Clear referral pathways are established by national protocols/guidelines					
There is a written list of conditions/complications of pregnancy and post-partum period for each level of care					
<b>Referral to higher level of care</b>					
There are clear criteria for patients referral					
Referred patients receive appropriate pre-referral treatment when indicated					
Referred patients are provided with referral notes stating the condition, reason for referral and treatment given					
Referred patients are accompanied by trained health providers when indicated					
<b>Transportation to the hospital</b>					
Special transport car is available for “in uteri” transfer to the maternity					
Lack of transport vehicles is not a cause of delayed referral					

Cost for transport does not represent a barrier to referral					
<b>Care-seeking by women</b>					
Women adequately recognize signs and symptoms that require contact with health services					
Women are given adequate information and advice by primary care services about when and how to go to the hospital					

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

<b>Overall assessment - Regionalization and referral to hospital care for women</b>	<b>Improvement required</b>			<b>Good</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>To be circled</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

**8. Regionalization and referral to hospital care for newborns**

<b>Criteria</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Comments</b>
<b>Regionalization of care</b>					
The national protocols/guidelines clearly indicate the direction of the transfer of newborns to specialists or to facilities of higher level					
There is a written list of conditions/complications when treatment is carried out at the different levels of health facilities					
<b>Referral to higher level of care</b>					
Referred patients receive appropriate pre-referral treatment when indicated					

Parents of referred patients are provided with referral notes stating the condition, reason for referral and any treatment given					
referred patients are accompanied by trained health providers when indicated					
<b>Transportation to the hospital</b>					
Special transport car is available for transfer “in uteri” or transfer of a newborn to the hospital					
Lack of transport to hospital is not a cause of delayed referral					
Cost for transport does not represent a barrier to referral					
<b>Care-seeking by women</b>					
Parents adequately recognize signs and symptoms that require contact with health services					
Parents are given adequate information and advice by primary care services about when and how to go to the hospital					

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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**Overall assessment for the sections**

Overall assessment - Regionalization and referral to hospital care for newborn	Improvement required			Good
	0	1	2	3
<b>To be circled</b>				

Please indicate the quality of support of the process, noting one of the 4-digits: number 3 indicates good support, the numbers from 2 to 0 indicate the levels required improvements (2 = little need for improvement, 0 = is an urgent need to improve)

## Summary evaluation score

This summary helps identifying the most critical areas as a basis for identifying priorities and work plan to guide the discussion with staff of facility at debriefing.

	<b>Good</b>	<b>To be improved</b>		
<b>Summary score</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
1. Support system institutions				
2 A. Normal prenatal and postnatal care				
2 B. Normal postnatal care for newborns, breast feeding				
3. Rapid assessment, management and transfer in the case of common prenatal and obstetric complications in mothers				
4. Rapid assessment, management and transfer in the case of common complications in the newborn				
5. Universal precautions and Sanitary				
6. Guidelines and audit				
7. Regionalization and referral care to hospital for women				
8. Regionalization and referral care to hospital for newborn				
Summary score = total score				



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## **Annexes:**

### **A1 Interviews with health professionals**

All groups of health professionals (cleaners, nursing assistants, nurses/midwives, medical officers and doctors) should be considered for this interview. We would like to record the health professional's honest opinions. For this it is important that the health workers understand the aims of the survey and know and trusts that the information will be stored and used while maintaining confidentiality. Please let them know that their names or initials will not be mentioned in any report or to supervisors in the hospital.

Please do not leave forms lying about or in a place that people who are not members of the team can read them.

Try to interview 2 staff each from the above mentioned categories of health professionals so that a minimum of 6-8 forms should be filled during the assessment visit. Health professionals are welcome to fill in the forms themselves, however, please do not let them take it away and return later due to the shortness of your stay.

Ask the questions in a face to face interview in a suitable place.

Try to record comments *as they are spoken* rather than trying to summarise the view expressed. Recording the real words used often helps to properly represent what the person is trying to say. When doing this please put the comments in quotation marks. For example:

***“We have a real problem with the water supply, sometimes days go by without piped water, how can we wash our hands to prevent spreading infection”***

If a health worker does not want to answer a particular question please note and proceed to the next question.

## ANNEX A Interview of health professionals

Date	Name of the interviewer	Country
Town	Rayon	Oblast
Health facility name		
Survey number		

Position of health worker being interviewed:					
Current service and responsibilities					
How long have you worked at this health facility?	How long have you been working in this position?				
<ul style="list-style-type: none"> <li>We are first interested in your views on the <b>antenatal and postpartum care in your health facility</b></li> </ul>					
1) Are there any things about the health facility building/department that you think are good or things that could be improved?					
2) For pregnant women, women after delivery and neonates	good	satisfactory	occasionally inadequate	usually inadequate	
2 a) the space for patients is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 b) the toilets and washing facilities are	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 c) the cleanliness of the facility is ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>We now want to ask you about the <b>medicines, vaccines, supplies and staff</b> in the health facility you work in</li> </ul>					
3) The availability of (the following) are:	Plenty	Satisfactory	Occasionally inadequate	Usually inadequate	N/A
3 a) Medicines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 b) IV fluids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 c) laboratory tests (eg. Hb)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 d) Vaccines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Do you have problems with any other equipment or supplies that make it hard to take care of pregnant women, women after delivery and their babies?					

The <b>availability of staff:</b>	Plenty	Satisfactory	Occasionally inadequate	Usually inadequate
5) What do you think about the number of staff available to care for pregnant women, mothers and their newborns?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Do you think there is enough time available to care for a woman/the child the best way you know how to (the way you were trained)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) If you have a problem with a pregnant woman, mother or the newborn is supervision/support (e.g. from more senior clinical staff) available to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Do you think the health facility lacks any important staff to help look after pregnant women, mothers and their babies?				
9) Do you think the quality of staff performance in general is good? If NOT, what are your suggestions?				
10) If you have problems getting help when you think you need it, is it because:  .there are not enough skilled people to call? <input type="checkbox"/> .you are unable to contact the right people? <input type="checkbox"/> .the response to your request is too slow? <input type="checkbox"/> .another reason?				
<ul style="list-style-type: none"> <li>• What do you think about the <b>training of staff and the organization of your work?</b></li> </ul>				
Training of staff	Very good	OK	Occasionally inadequate	Usually inadequate
11) How is your own knowledge about the health of women during pregnancy and after delivery, their illnesses, fetal development and problems of the neonates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 a) if it is sometimes inadequate what areas do you think you need more training on or are there areas you would like to improve your knowledge further?				
12) Are there possibilities for further professional training in your health facility? Please explain.				

13) Is there a fixed rotation of staff within the health facility in regular intervals? Y / N				
13 a) If yes, how often do you rotate?				
13 b) What do you think about this?				
14) Are there regular meetings of all health care providers (nurses/midwives/doctors) who work in the health facility or/and the department that is involved in antenatal and postpartum care? Please explain who participates, frequency and nature of meetings.				
15) Is there a regular feedback/audit session in terms of quality of care and feedback from the maternity and/or children hospitals? Please explain.				
16) Do you have clear guidelines on the work you are doing? Please explain:				
<ul style="list-style-type: none"> <li>• What do you think about <b>the care</b> you and the health care facility provided to the pregnant women, women after delivery and the neonates?</li> </ul>				
17) How do you evaluate the information / explanations woman and families are given about pregnancy, postpartum period and health, development and illnesses (if any) of the neonate?	Very good	OK	Occasional-ly inadequate	Usually inadequate
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18) Do you have enough time to explain to the woman, parents and family their status and/or status of their child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19) How do you think women evaluate the care provided in your health facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20) How you evaluate the organization and quality of the referral to the hospital when indicated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21) How you evaluate possibilities to provide emergency care to pregnant women, mothers and their babies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How you evaluate communication and feedback from				
22 a) the maternity and children hospitals,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22 b) with ambulances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23) Can you think of any ways to improve patients' understanding of their conditions/status or of their children's status, development and illness (if any)?

24)  
 Can you remember a woman/a baby you looked after recently when you were satisfied with how things turned out? Yes / No  
 24 a) If yes, were you satisfied with how you helped the woman/the baby do well?  
  
 24 b) What aspects of your own performance/ role were you satisfied with?

25) Can you think of a woman/a baby you provided care recently when you were disappointed with how things turned out? Yes / No  
 25 a) If yes, what aspects of care/progress did you think went wrong and what do you think were the reasons for this?

	Always	Often	Sometimes	Rarely	Never
26) Overall are you satisfied with what this primary health facility is able to do to assist pregnant women, women after delivery and their babies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27) Are there any other things that you have not told us about that could be changed to improve the care of women and newborns in the health care facility you are working?

28) Have you ever suggested these improvements to your supervisors/doctors/management and with what results?

29) Do you think the majority of your colleagues are generally satisfied with their work in the health facility? Yes / No

29 a) What things do you think make people dissatisfied with their work?

29 b) What about the working conditions?

29 c) What could be improved to make staff of the health facility more satisfied with their work?

Summary score health workers interview: motivation and training of staff is:	Good		To be improved	
	3	2	1	0
(to be circled)				

Please indicate the quality of support by marking one of the 4 numbers; 3 indicates good support, from 2 to 0 indicating levels of necessary improvement (2=small need for improvement, 0=urgent need for improvement)

## ANNEX B Interview with pregnant women and mothers

The purpose of the interview is to evaluate the quality of the contact between the client and her caregivers and to see if she received appropriate counseling, as well as find out what can be done to improve her well-being and that of her baby. It is also to double-check whether standard case management meets that recommended during training workshops, and evaluate the impact of the training in terms of what has been fully implemented by health providers, partially implemented or not implemented at all.

Optimally, at least three women should be interviewed in each health facility:

- two pregnant women (Interview may take place in the maternity hospital in case of hospitalization of women that have had their antenatal care in the out-patient primary health care institution that is participating in assessment)
- one women having postpartum visit

**Before you conduct the interview, explain** to the woman that this health facility was selected by the Ministry of Health as a pilot hospital for improving the quality of maternal and child health care. Explain to her that the purpose of the interview is to find out what can be done to improve services for herself and her baby.

Ask the woman if she will answer a few questions concerning her own and her baby's condition as well as the care that they received from health providers. Ensure her that this interview is absolutely anonymous and confidential.

### How to carry out the interview and complete the form:

- Make sure you do not upset the woman. Make sure your attitude is positive in both words and action.
- Do not conduct the interview during a clinical session to avoid influencing case management practices of other health providers?
- Do not conduct the interview in the presence of other women whom you are going to interview and far as possible conduct the interview without other clinical staff around, in order to avoid influencing the woman's answers?
- Hold the form upright, out of the view of the woman, as the different options provided in it might influence her answers.
- Take whatever time necessary to talk to the mother and make sure she understands the questions. Ask the question as it is written in the interview form and repeat it in your own words only if the mother had not understood the original question.
- Do not read the different answers that appear after each question. They are there only to facilitate your work. Instead, listen to the woman's answers, asking her to be as precise as possible, and tick [] when the answer provided matches one of the listed points. Sometimes it will be necessary to tick an answer that is close, but not exactly, the one listed. If the answer provided does not match any of the listed points, write a brief summary, as appropriate, in the space provided under "Other (Specify)"?
- As you complete the form, make brief notes of your observations to be discussed with health workers during the feedback session. Also, underline or circle points in any of the issues you feel need commenting on. This will remind you to bring up problems or positive issues during the feedback session.
- Make notes of the discussion during the interview and write summaries of important points under "Comments, discussions, problems". Use these notes at the feedback session.
- Please write *clearly* in print characters so that the form is easy to read.

Date	Name of the interviewer		Country
Town	Rayon	Oblast	
Facility name (hospital, specific service(s))			
Survey number			



If possible, the supervisor/evaluator conducting this interview should be a midwife or social worker or psychologist.

**PREGNANT WOMAN/ MOTHER**

How far do you live from this health care facility?	
How old are you?	
Did you recently migrate to the country?	
How long ago?	
Could you have your partner or any relative with you during visits?	
Is this your first pregnancy? / second? / third?	
<i>If a pregnant woman is interviewed –</i> Do you know approximately which week of pregnancy are you?	

**PREGNANCY**

Which week of gestation you started your antenatal care?		
<i>If it was after the 12<sup>th</sup> week of gestation:</i> Has anybody explained you the optimal time to start the antenatal care? If YES, please, specify who and what was the reason you could not follow the recommendation to start antenatal care early		
Could you specify which health professionals were involved in your antenatal care so far?		
Did you have a possibility to choose the health professional who would provide your antenatal care?	Yes [ ]	No [ ]
If YES, please, specify how you made your choice?		
Did the doctor/nurse during your antenatal visits explain you on the recommended <b>diet</b> during pregnancy?	Yes [ ]	No [ ]
Did the doctor/nurse during your antenatal visits explain you on the recommended <b>physical activity</b> during pregnancy?	Yes [ ]	No [ ]
Did the doctor/nurse during your antenatal visits explain you on the recommended <b>sexual activity</b> during pregnancy?	Yes [ ]	No [ ]
If yes, would you tell us about the diet you were recommended?		

Did the doctor/nurse during your antenatal visits explain you on the recommended tests and examinations during pregnancy?	Yes [ ]	No [ ]
Did the doctor/nurse during your antenatal visits explain you on the signs during pregnancy that require urgent consultation with health professionals?	Yes [ ]	No [ ]
Did you and your husband attend antenatal classes?	Yes [ ]	No [ ]
If NO, what was the reason? Please, specify		
Do you have your perinatal card with you?	Yes [ ]	No [ ]
If Yes, could you, please, show it to us?		
How many times you were examined vaginally during the antenatal care?		
How many times -your weight -your blood pressure -height of the uterus were examined?		
Could you tell us which laboratory tests were done during your antenatal care and how often?		
Did the staff ask your consent for examinations? If YES, please, specify		
Were any vitamins or medicine recommended to you during pregnancy? If YES, please specify		
Were any free of charge vitamins or medicine provided to you by medical facility during pregnancy? If YES, please specify		
Were you visited at home by health care providers of the out-patient primary health care facility that provides antenatal care?	Yes [ ]	No [ ]
If YES, who visited you home and how often? Please, tell us more about the purpose of the visit		
Did you receive any information about delivery during antenatal visits?	Yes [ ]	No [ ]
Have you discussed your delivery plan?	Yes [ ]	No [ ]
Did you receive any information about breastfeeding?	Yes [ ]	No [ ]

Did you receive any information about family planning and contraception after delivery?	Yes [ ]	No [ ]
How many antenatal visits did you make during your pregnancy so far?		
How many ultrasound controls did you make during your pregnancy?		
Did you go to a <u>private clinic</u> ?		
If YES, why?		
Could you tell us approx. how much do you have to pay per visit?		
Have you to <b>pay</b> in this health facility	Yes [ ]	No [ ]
- per visit	Yes [ ]	No [ ]
- laboratory tests	Yes [ ]	No [ ]
- ultrasound control	Yes [ ]	No [ ]
How many consultations were carried out by a midwife?		
Have you to pay the midwife or other health care provider?	Yes [ ]	No [ ]
Are you satisfied with the quality of antenatal care?	Yes [ ]	No [ ]
Do you have any specific suggestions how antenatal care can be further improved? Please, specify.		

Were you given any documents for the out-patient primary health care unit on discharge from the hospital	Yes [ ]	No [ ]
Were you well informed on the postpartum period when discharged from the maternity?	Yes [ ]	No [ ]
If NO, what kind of additional information you would like to have? Please, specify		
What was recommendation given by the maternity staff regarding your visit to the primary health care health facility? Please, specify		
Have you received the birth certificate for your baby?	Yes [ ]	No [ ]
If NO, could you explain why and what would be your suggestion to improve the birth register?		
Did any health professional visit you and your baby at home after dis-		

charge from the maternity?		
If YES, could you please specify who and when?		
If YES, what was the purpose of the visit?		
Do you any suggestions how to improve care of you and your baby after birth?		

**BABY and BREASTFEEDING**

Is your baby healthy?	Yes [ ]	No [ ]
If no, what is the problem with your baby?		
Preterm baby	Yes [ ]	No [ ]
Other (specify):		
What was the weight of your baby when born? _____ grams		
Was your baby in same room with you for almost entire time you were in hospital?	Yes [ ]	No [ ]

How do you feed your baby?		
Breastfeeding	Yes [ ]	No [ ]
Breast-milk with spoon/cup	Yes [ ]	No [ ]
Breast-milk with bottle	Yes [ ]	No [ ]
Breast-milk by gastrogavage	Yes [ ]	No [ ]
Newborn formula	Yes [ ]	No [ ]
Donor's milk	Yes [ ]	No [ ]
Other (specify)		
Does your baby receive water/glucose?	Yes [ ]	No [ ]
Do you use artificial teats/pacifiers?	Yes [ ]	No [ ]
<b>IF THE MOTHER IS BREASTFEEDING:</b>		
How long after birth you started breastfeed your baby for the first time?	_____ hour(s)	_____ minute(s)
How long was it possible to breastfeed him/her?	_____ hour(s)	_____ minute(s)
Did health providers give you some support or recommendation for	Yes [ ]	No [ ]

breastfeeding?		
<b>If yes, what did the health workers tell you on how often you should feed your baby:</b>		
Breastfeed on schedules	Yes [ ]	No [ ]
Breastfeed on demand of the baby	Yes [ ]	No [ ]
Other (specify):		
Were you advised to give to baby water/glucose?	Yes [ ]	No [ ]
<b>Who gave you most of information about breastfeeding?</b>		
Health professionals providing antenatal care		[ ]
Antenatal classes		[ ]
Obstetrician in the maternity		[ ]
Midwife in the maternity		[ ]
Neonatologist in the maternity		[ ]
Neonatology nurse in the maternity		[ ]
Ward-mate/friend		[ ]
Mother		[ ]
Mother-in-law		[ ]
Health care professional making a home visit after you were discharged from the hospital		[ ]
Other (specify)		
Did you receive practical/physical assistance for breastfeeding?	Yes [ ]	No [ ]
<b>How long do you plan to breastfeed?</b>		
Less than 2 months		[ ]
Between 2 and 6 months		[ ]
More than 6 months		[ ]
More than 1 year		[ ]
Other (specify)		

Was the baby examined in your presence?	Yes [ ]	No [ ]
Was the baby taken away from you for pediatric examination?	Yes [ ]	No [ ]

Was the baby taken away from you for washing or other procedures?	Yes [ ]	No [ ]
If separated, can you describe in what situations?	Yes [ ]	No [ ]
Have you received enough help with baby care from staff?	Yes [ ]	No [ ]
Do you have a possibility to take a shower?	Yes [ ]	No [ ]
Did you eat fresh fruits/fresh vegetables yesterday?	Yes [ ]	No [ ]
How many cups of tea did you drink yesterday?	_____	
Did you find the health care facility clean enough?	Yes [ ]	No [ ]
Did you have to pay for any services?	Yes [ ]	No [ ]
Please specify		
<b>I would now like to know more about the services that you received today</b>		
Excluding waiting time, how long did you spend with health staff today?	_____ minutes	
Have you asked any questions regarding your health or health of your baby within last two days?	Yes [ ]	No [ ]
Has staff answered your questions in a way you understood?	Yes [ ]	No [ ]
Were you satisfied with answers?	Yes [ ]	No [ ]

## SATISFACTION

Do you feel happy with maternity experience?	Yes [ ]	No [ ]
Are you planning to have more babies?	Yes [ ]	No [ ]
Do you feel you didn't find staff support you needed?	Yes [ ]	No [ ]
Do you remember continuously some moment you felt very frightened?	Yes [ ]	No [ ]
Did health care providers respect your cultural or religious concerns?	Yes [ ]	No [ ]
Is it difficult for you to take care of the baby?	Yes [ ]	No [ ]
Do you want to describe how do you feel?		

## HOME CARE

<b>Can you tell me how you take care of your baby at home?</b>		
Keep cord stump clean and dry	[ ]	
Always keep newborn warm, but not hot	[ ]	
Breastfeeding on request	[ ]	
Put the baby to sleep on his/her back	[ ]	
Smoke in baby's room	[ ]	
Sleep with the baby if you desire or fall asleep during breastfeed		
Sleep with the baby if you or someone in your bed take sleeping pills		
Other (specify):		
Do you <b>tightly swaddle your baby?</b>	Yes [ ]	No [ ]
<b>Can you tell me under what circumstances you would seek help for your baby? (ask women to specify)</b>		
Umbilicus red or drained pus	[*]	
Fiver/low body temperature	[*]	
Convulsions	[*]	
Poor sucking	[*]	
Vomiting or diarrhoea	[*]	
Low reaction or irritability	[*]	
Breathing difficulties (fast breathing)	[*]	
Other (specify)		
Do you know where to seek help and support for your baby?	Yes [ ]	No [ ]

<b>Can you tell me how you care of yourself at home?</b>		
Daily wash with soap (also perineum)	Yes [ ]	No [ ]
Check up Caesarean wound	Yes [ ]	No [ ]
Check up episiotomy wound	Yes [ ]	No [ ]
Sleep at least 8 hours and some more during the day	Yes [ ]	No [ ]

Organize partner or other family members help with home work	Yes [ ]	No [ ]
Other (specify):		

**CONTRACEPTION AND FAMILY PLANNING**

Were you using contraceptives before this pregnancy?	Yes [ ]	No [ ]
Have you ever had an abortion?	Yes [ ]	No [ ]
If yes, how many?	_____ number	
How many children do you have?	_____ number	
Did health staff discuss contraception methods with you?	Yes [ ]	No [ ]
Did health staff clearly explain you how contraception methods work?	Yes [ ]	No [ ]
Did staff describe possible side effects?	Yes [ ]	No [ ]
Did staff explain what to do if you experience side effect?	Yes [ ]	No [ ]
Would you like to use contraception?	Yes [ ]	No [ ]
If yes, which contraception would you like to use?		
Intrauterine device (IUD)	[ ]	
Oral contraceptives	[ ]	
Condom	[ ]	
Surgical sterilization of woman or man	[ ]	
Contraceptive injections	[ ]	
Vaginal spermicides (creams, suppositories, jelly)	[ ]	
Other vaginal barrier method (diaphragm, sponge, cervical cap)	[ ]	
Lactational amenorrhea method (LAM)	[ ]	
Rhythms or temperature method	[ ]	
Abortion	[ ]	
Other (Specify):		



## Observations

If mother is planning to breastfeed her baby, ask her if you can watch while she breastfeeds her baby.

Try to stay until the end of the breastfeeding session and answer the following questions:

Are nipples washed before breastfeeding	Yes [ ]	No [ ]
Is baby tightly swaddled, including arms, shoulders and neck	Yes [ ]	No [ ]
Is mother's elbow supported during breastfeeding	Yes [ ]	No [ ]
If mother is seated, is her back supported during breastfeeding	Yes [ ]	No [ ]
Position of baby:		
Baby's nose opposite mother's nipple	Yes [*]	No [ ]
Straight baby neck or bending slightly back	Yes [*]	No [ ]
Body turned towards mother	Yes [*]	No [ ]
Body close to mother	Yes [*]	No [ ]
Newborn baby's whole body supported (not only head and neck)	Yes [*]	No [ ]
Attachment of baby to breast:		
Chin touching breast	Yes [*]	No [ ]
Mouth wide open	Yes [*]	No [ ]
Lower lip turned outward	Yes [*]	No [ ]
More aureole visible above than below mouth	Yes [*]	No [ ]
Why did breastfeeding end?		
Because baby stopped sucking spontaneously	[ ]	
Because mother decided it should	[ ]	
Other reason for ending breastfeeding:		
Other comments on breastfeeding session:		

## Questions from the mother

Do you have any question to ask me? Any comments, suggestions and problems you would like to speak about and discuss with health providers or myself?


**SUMMARY OF MOTHER INTERVIEW**

**The main strengths**

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**The main weaknesses**

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**Additional comments**

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## ANNEX C testing clinical skills

Procedure	Steps
<b>Taking blood samples for analysis</b>	1. Preparation of equipment before beginning the procedure is performed, including: <ul style="list-style-type: none"> <li>- syringes, needles and test tubes for transport of blood specimens</li> <li>- antiseptic solution, cotton swabs</li> <li>- laboratory request forms</li> <li>- tourniquet</li> <li>- gloves</li> </ul>
	2. The procedure is explained to the woman and her arm is placed in a comfortable position
	3. Choosing the correct site for puncture of the vein is done
	4. The correct application of the tourniquet is performed.
	5. The site is cleaned with an antiseptic solution, and a sterile needle is used to perform the vein puncture
	6. Infection prevention precautions are taken; hand washing, glove use and precautions against needle stick injuries;
<b>Intravenous infusion (IV)</b>	The health care provider:
	Identify the need for IV when body fluid is lost as a result of shock, bleeding, infection, or dehydration
	2. Prepares the equipment before beginning the procedure, including: <ul style="list-style-type: none"> <li>- sterile intravenous tubing</li> <li>- large (No 14-16-18) needle or cannula</li> <li>- appropriate fluid</li> <li>- sticky tape, cut into strips</li> <li>- drip stand or nail in wall</li> <li>- tourniquet</li> <li>- splint with bandage</li> <li>- antiseptic solution, cotton swabs</li> <li>gloves</li> </ul>
	3. Explains the procedure to the woman and places her arm in a comfortable position
	4. Chooses the correct site for infusion
	5. Performs correct application of the tourniquet
	6. Cleans the site with an antiseptic solution, and uses a sterile needle.
	7. Performs infection prevention precautions; hand washing, glove use and precautions against needle stick injuries
	8. Fixes the needle in place; uses an arm board to keep the joint nearest the IV site from moving.
	9. Takes blood samples for grouping and cross-matching before infusing plasma expanders
	10. Records fluid intake on the patient's chart.
	11. Calculates an appropriate rate for the fluid to be infused at
	12. Recognizes personal limitations: if a midwife is unable to set up an IV within 10 minutes, she should call a more experienced colleague
<b>Testing urine for protein</b>	The provider:
<b>Dipstick method</b>	1. Removes one dipstick from the bottle of dipsticks and replaces the cap
	2. Dips the coated end of the dipstick in the urine sample, completely immersing the reagent areas on the dipstick, and removes immediately
	3. While removing the dipstick from the urine, runs the edge of the dipstick against the edge of the urine container to remove excess urine

	<p>4. Holds the strip in a horizontal position and compares the reagent areas on the dipstick with the corresponding colour chart on the bottle label. Avoids placing the strip directly on the colour chart, as this will result in the urine contaminating the chart</p>
<b>Boiling Method</b>	<p>Colours range from yellow (negative) through yellow-green to green and green-blue for positive</p> <p>1. The following supplies and equipment are required:</p> <ul style="list-style-type: none"> <li>- clean test tubes</li> <li>- heat source (e.g. Bunsen burner)</li> <li>- acetic acid</li> </ul> <p>The provider then:</p> <p>2. Places urine in a clean test tube and heats the upper half of the test tube only until it boils</p> <p>3. Allows the test tube to stand until it is cool enough to touch. A thick precipitate at the bottom of the tube indicates the presence of protein</p> <p>4. Adds 2-3 drops of 2-3% acetic acid after boiling the urine:</p> <ul style="list-style-type: none"> <li>- if urine remains cloudy, protein is present in the urine</li> <li>- if cloudy urine becomes clear, protein is not present</li> <li>- if boiled urine remains cloudy or becomes cloudy when acetic acid, protein is present</li> </ul>