Ethiopian Hospital Alliance for Quality

EHAQ Change Package on Maternal and Newborn Care 2014-2015

July 2015

Addis Ababa

Design: Meliksenay Debas, Clinton Health Access Iniative

FOREWARD

In the last few years, Ethiopia has made great strides in the area of health, with many new hospitals opening, medical professionals trained, and community members reached through the Health Extension Program. Though we have many successes to celebrate, we also acknowledge that there is always more work to be done in terms of improving the quality of this expanded health service delivery. The FMOH has identified quality improvement as a key element of the Health Sector Development Program (HSDP) and the Ethiopian Hospital Reform Implementation Guidelines (EHRIG). Thus, the Ethiopian Hospital Alliance for Quality (EHAQ) was formed to address this need.

Since its inception, the EHAQ has already improved the documentation and sharing of best practices between hospitals, and has helped to motivate quality improvement projects in both the LEAD and cluster hospitals that are participating in the alliance. We decided to focus the 2014-2015 change package on Maternal and Newborn care, to improve both safe labor and delivery practices in the hospitals as well as maternal satisfaction and comfort during the mother's hospital stay.

This Maternal and Newborn care Change Package is prepared for LEAD and general member hospitals, healthcare providers, quality improvement teams and individuals and organizations that participate in the quality improvement process. The Change Package highlights nationally and internationally recognized best practices relating to maternal and newborn care in hospitals.

Improving maternal and newborn care is a national priority for our country, and hospitals are on the front lines leading the charge to help us meet our goals in this area. Therefore it is our hope that implementation of these best practices by health facilities will greatly contribute to improvement of maternal and newborn outcomes in Ethiopia.

Dr. Abraham Endeshaw

Director, Medical Services Directorate, Federal Ministry of Health

ACKNOWLEDGEMENT

The printing of this Change Package was made possible with the generous support of CHAI Ethiopia from its award grant number 5U2GPS00284-05 REVISED of the US Center for Disease Control. The views expressed in this Package do not necessarily reflect the official policies of the Department of Health and Human Sciences, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the US Government.

CONTENTS

Acronyms 6
Introduction 7
What is the change package? 8
Purpose of the change package 8
Strategies for improvement 8
Measuring change 9
Triage and Registration for maternal care 14
Emergency Triage for L&D 14
Safe Childbirth Checklist 17
Essential Newborn Care 32
Maternal Satisfaction 35
Tool 1. Ethiopian Maternal Satisfaction Survey 35
USE OF CHECKLISTS FOR SELF-AUDIT 41

ACRONYMS

BCG	Bacille Calmette-Guerin (vaccine)
CASH	Clean and Safe Hospital Initiative
EHAQ	Ethiopian Hospital Alliance for Quality
EHRIG	Ethiopian Hospital Reform Implementation Guideline
FMoH	Federal Ministry of Health
HBB	Helping Babies Breath
KPIs	Key Performance Indicators
L&D	Labor and Delivery
LEAD	Leadership Excellence Action Dissemination
NICU	Neonatal Intensive Care Unit
OPV	Oral Polio Vaccine
RHBs	Regional Health Bureaus
WHO	World Health Organization

WELCOME TO ETHIOPIAN HOSPITALS ALLIANCE FOR QUALITY (EHAQ) CYCLE II

Welcome to the second cycle of EHAQ, a national learning collaborative with a goal to accelerate quality improvement in hospitals. This cycle aims to improve the quality of maternal and newborn care with the long-term goal of reducing maternal and neonatal mortality in hospitals.

INTRODUCTION

The Ethiopian Hospital Alliance for Quality (EHAQ) is a system for promoting learning and collaboration, based on a model that involves hospitals exchanging knowledge with each other and empowering the hospital industry to self-improve. EHAQ was designed to act as a catalyst to allow this new model of learning to take root and flourish, connecting hospitals across the country in an effort to accelerate quality improvement.

EHAQ consists of 24 LEAD (Leadership, Excellence, Action, Dissemination) hospitals who are connected with a cluster of general member hospitals to which they are responsible for providing direct assistance in implementing service-based quality improvement projects. In addition, each LEAD hospital will share innovative and best practices from their own hospital with all members of the cluster as well as members of the EHAQ. As a reward for their high performance and mentoring efforts (in the last cycle), the LEAD hospitals have received financial and technical support from the Ministry of Health and Regional Health Bureaus (RHBs).

During the second cycle the focus area is Maternal and Newborn Care. However during selection of LEAD Hospitals, it is not only the Maternal and Newborn care services that will be evaluated, but also other elements that can indicate the overall performance of the hospitals, such as Ethiopian Hospital Reform Implementation Guidelines (EHRIG)implementation performance, Clean and Safe Hospital (CASH) initiative implementation, Key Performance Indicator (KPI) data handling and reporting, and cluster activity.

WHAT IS THE CHANGE PACKAGE?

The change package includes a set of evidence-based tools and resources to promote quality improvement. The package is designed to help physicians, midwives, nurses, hospital managers, and quality improvement teams as they are seeking to improve hospital labor and delivery care. The package includes nationally-adapted international tools, ready to be tailored to your hospital's needs. The change package provides practical ways to better implement existing standards and guidelines and to address gaps in practice found in a baseline assessment of more than 20 Ethiopian hospitals.

PURPOSE OF THE CHANGE PACKAGE

The general purpose of this change package is to help hospitals identify gaps in service in order to improve maternal and newborn quality of care.

STRATEGIES FOR IMPROVEMENT

This change package includes tools to support five strategies for improvement in maternal and newborn Care:

1. Reduce delays in care by improving the maternal triage and registration process, identify and manage emergency cases/labor immediately upon arrival.

2. Use Safe Childbirth Checklist

3. Use the Essential Newborn Care checklist on the Safe Childbirth checklist at every delivery to guide care; address birth asphyxia using Helping Babies Breathe resources, neonatal resuscitation chart or WHO resuscitation chart.

4. Measure maternal satisfaction every 3 months (Tool 1) to identify opportunities to improve.

5. Conduct Maternal and Newborn Care self-audits every 6 months using the checklists provided. Refer to the EHRIG standards for help in addressing any gaps you identify through the audits.

MEASURING CHANGE

As part of this change package, the health facilities will receive three electronic files:

1. A database that will help to measure maternal satisfaction,
2. A set of printable checklists, Safe Childbirth checklist and self-audit tools
3. A Maternal and Neonatal quality improvement excel database to track the progress of the self-audits

The facility can use these tools to improve the quality of the service and report the self-audit results to hospital management, the EHAQ steering committee, and the RHB. The steering committee, the LEAD hospital or the RHB may work with the hospitals to verify the results.

Performance will be evaluated based on the average of the following maternal and newborn indicators:

S.N	INDICATORS	SCORE	FREQUENCY	DATA SOURCE	HOW TO CALCULATE
1	Total Number of deliveries		Monthly	Delivery Register	Total number of live and still births
2	Proportion of assisted (vacuum and forceps) vaginal deliveries		Monthly	Delivery Register	Numerator- Total number of assisted vaginal deliveries Denominator- Total number deliveries
3	Proportion of Caesarean deliveries		Monthly	Delivery Register	Numerator- Total number of cesarean deliveries Denominator- Total number of deliveries
4	Still birth rate (fresh and macerated)		Monthly	Delivery Register	Numerator- Total number of still births Denominator- Total number of deliveries multiplied by 1000

5	Perinatal mortality rate		Monthly	Delivery Register	Numerator- Total number of still births plus early neonatal deaths Denominator- Total number of live births multiplied by 1000
6	Number of maternal deaths in health facility		Monthly	Delivery Register	Count number of deaths
7	Case fatality rate for newborns		Quarterly	HMIS registration book and HMIS report	Numerator- Newborn deaths in the last 3 months (Case fatality rate for newborns Denominator- Number of hospitalized newborn in the health facility in the last 3 months
8	Proportion of newborn death in first 24 hours		Quarterly	HMIS registration book and HMIS report	Numerator- Number of early newborn deaths(within 24hr) in the health facility in the last 3 months Denominator-- Number of hospitalized newborn in the health facility in the last 3 months

9	Case fatality rate for newborns 1-1.5 kg		Quarterly	HMIS registration book or newborn admission registration book	Numerator-Number of death of newborns 1-1.5 kg in the last 3 months. Denominator-- Number of newborns 1 -1.5 kg in the last 3 months.
10	% complete medical records of normal deliveries		Quarterly	20 Randomly selected Medical Records of women who delivered at the facility	Use the data abstraction sheet attached to the EHAQ self-audit tool
11	% complete medical records of caesarean deliveries		Quarterly	20 Randomly selected Medical Records of women who delivered by cesarean section at the facility	Use the data abstraction sheet attached to the EHAQ self-audit tool

12	% essential medicines and supplies available		Every six months	Maternal and Newborn care assessment tool	Numerator-- Number of supplies available Denominator –Total supplies listed on the assessment tool
13	% required equipment available and functioning		Every six month	Maternal and Newborn assessment tool	Numerator-- Number of equipment available Denominator –Total equipment listed on the assessment tool
14	EHAQ self-audit tool score		Every six month	EHAQ self-audit tool	See the tool
15	Mom satisfaction score		Every three month	Exit interview with 20 mothers who delivered at the facility	Fill the questionnaire and enter the data on the prepared spreadsheet

1. TRIAGE AND REGISTRATION FOR MATERNAL CARE

EMERGENCY TRIAGE FOR L&D

Delays in care are one of the leading preventable causes of maternal and infant mortality. To promote timely treatment when a pregnant mother arrives at the hospital, we have included two tools 1) A poster to promote efficient processing at reception/emergency triage, and 2) a rapid assessment tool to promote a quick and thorough assessment by the receiving nurse or physician.

Adapt these posters and hang them where they can be used to reduce delays in triage and registration.

Figure 1a: Flow chart for triage and registration of laboring mothers

Aims	Key change concept	Specific change ideas	Change Champion
Avoid administrative delays after the mother arrives to the hospital	Assign runner/ family member to manage the registration process while the mother is on her way to labor and delivery	• Use standard maternal flow chart (below) • Conduct rapid assessment in the labor ward to confirm the mother is in a true labor • Contact referral hospitals for availability of service when needed	**Liaison officer** • Make sure the maternal flow chart is in place • Ensure there is no delay because of administrative processes or referral paperwork

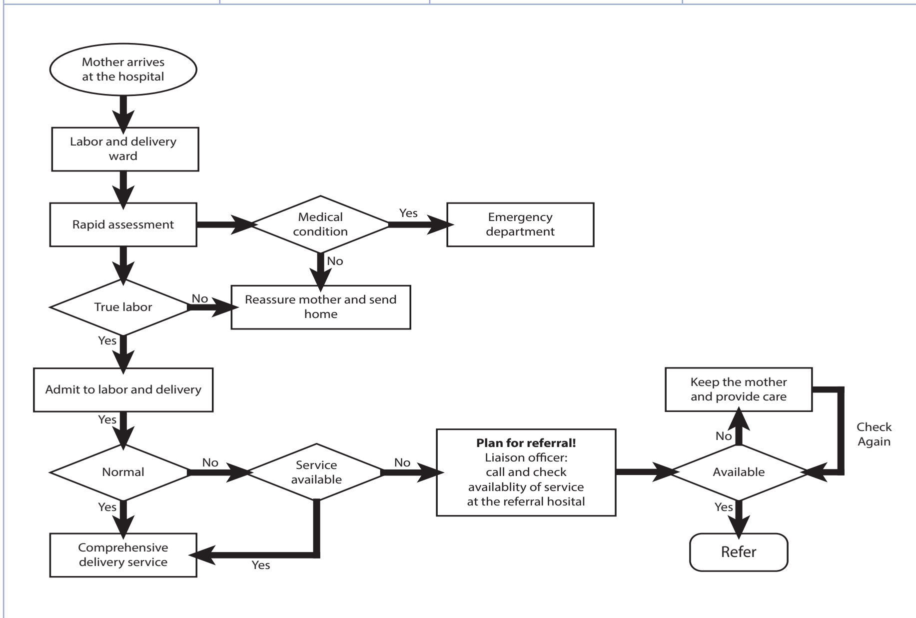
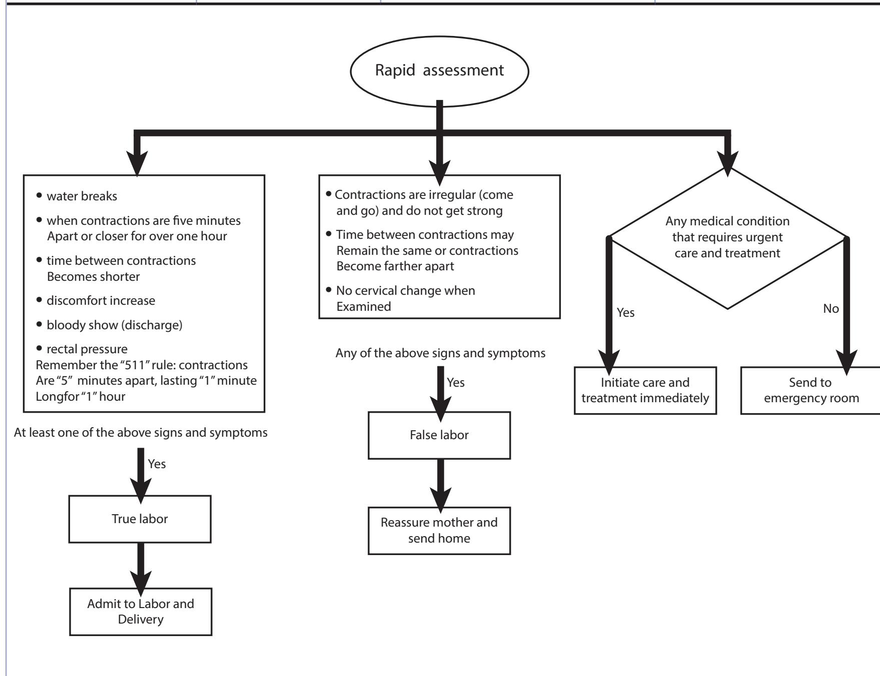


Figure 1b: Rapid assessment of laboring mothers to advance care

Aims	Key change concept	Specific change ideas	Change Champion
Diagnose true labor, false labor or other medical conditions at arrival	Establish rapid assessment process to diagnose labor for decision making	• Follow the rapid assessment chart (below) and other standard guidelines for decision making • Send non-laboring mother home or emergency room accordingly	L&D department head • Ensure all practitioners follow the standard Regularly meet with team to discuss maternal flow, rapid assessment and other quality related issues



2. SAFE CHILDBIRTH CHECKLIST

The objective of this tool is to assist the healthcare workers in reducing the number of adverse events that occur around the time of childbirth and to reduce maternal and newborn morbidity and mortality. This tool helps to translate known best practices into practice at the bedside. The Safe Childbirth Checklist should be included in each client chart.

Aims	Key change concept	Specific change ideas	Change Champion
To help ensure that healthcare workers consistently follow a core set of safety steps to minimize common and avoidable risks	• Introduction of the Safe Childbirth Checklist to improve the safety of care provided and reduce unnecessary deaths and complications. • To help implement known best practices found in existing evidence-based guidance and translate to the bedside	• Ensure staff adherence to essential safe childbirth practices known to be associated with improved maternal, fetal, and neonatal health. • Include the Safe Childbirth Checklist in the client chart for each delivery • Identify and correct gaps that could affect quality of care and make sure proper measures are in place	**L&D department head** • Ensure all practitioners use the Safe Childbirth Checklist for each laboring mother • Regular meeting with staff to discuss identified gaps and improve the quality of care

Safe Childbirth Checklist

Checklist Item		Qualifying Caption
On admission		
Quick check performed?	☐ Yes ☐ No	Assess for danger signs
Does mother need referral?	☐ Yes, organized with initial stabilization and treatment according to signs ☐ No	Refer to a higher level if any of the following danger signs are present: (If the equipment or health care professional needed is not available) ☐ Vaginal bleeding ☐ Severe abdominal pain ☐ High fever >38° C ☐ History of heart disease or other major illnesses ☐ Severe headache or blurred vision ☐ Difficulty in breathing ☐ Convulsions

Partograph started?	☐ Yes ☐ No, will start when ≥ 4 cm	Start plotting when cervix ≥ 4 cm – on alert line. • Every 30 min: plot maternal pulse; contractions, fetal heart rate • Every 2 hours: plot temperature • Every 4 hours: plot blood pressure • Every 4hrs: Vaginal examination
Does mother need to start antibiotics?	☐ Yes, IV started ☐ No	Give if: • Temperature > 38° C • Foul-smelling vaginal discharge • Rupture of membranes >12 hours, • OR labor >24 hours
Does mother need to start magnesium sulfate?	☐ Yes, given ☐ No	Give if: • Convulsions • Diastolic blood pressure ≥110 mmHg and 3+ proteinuria, (give antihypertensives) or • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, orepigastric pain or oliguria, pulmonary edema • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria in labor

Does mother need to start anti-retroviral medicine?	☐ Yes, given ☐ No, confirmed HIV negative ☐ If status unknown, HIV test done	Give ART if mother is HIV+ If already on ART, continue
Are soap, water, alcohol hand rub, gloves available?	☐ Yes, I will wash hands and wear gloves for each vaginal exam ☐ No, arrange supplies	
☐ Confirm if birth companion encouraged to be present throughout labor and at birth		

<table>
<tr><td>☐ Confirm that mother/ companion will call for help during labor if mother has a danger sign</td><td></td><td>Call for help if
Bleeding,
Severe abdominal pain,
Severe headache or blurring of vision
Convulsions
Urge to push
Difficulty emptying bladder</td></tr>
<tr><td>☐ Confirm mothers privacy is maintained during labor and delivery</td><td></td><td></td></tr>
<tr><td colspan="3">Name of provider ....
Date .... Signature ....………………….</td></tr>
<tr><td colspan="3">Just before second stage /birth of baby (or before Cesarean)</td></tr>
<tr><td>Does mother need to start antibiotics?</td><td>☐ Yes, IV started
☐ No</td><td>Give if
Temperature > 38° C
Foul-smelling vaginal discharge
Rupture of membranes >12 hrs
Labor >24 hrs
Before cesarean section</td></tr>
</table>

Does mother need to start magnesium sulfate?	☐ Yes, given ☐ No	Give if • Convulsions • Diastolic blood pressure ≥110 mmHg and 3+ proteinuria, (give antihypertensives) or • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, orepigastric pain or oliguria, pulmonary edema, • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria in labor
Are essential supplies at bedside for mother?	☐ Gloves ☐ Soap/Savlon and clean water ☐ Oxytocin 10 IU in syringe	Prepare to care for mother and baby during birth: 1. Check for 2nd baby 2. Give oxytocin within 1 minute 3. Delayed cord clamping in 1-3min 4. Deliver placenta by controlled cord traction 5. Confirm uterus is contracted

Are essential supplies at bedside for baby?	☐ Two clean dry, warm towels ☐ Sterile scissors to cut cord ☐ Suction device ☐ Bag-and-mask ☐ Sterile Cord tie/ clamp	Prepare to care for baby immediately after birth: 1. Deliver and dry baby on maternal abdomen. Wrap, keep warm and wipe eyes 2. Clamp/tie cord two fingers from abdomen and another two fingers from the first 3. Check breathing - If not breathing: stimulate and clear airway 4. If still not breathing or if the baby is blue: cut cord, ventilate with bag-and-mask 5. Shout for help
☐ Confirm assistant identified and informed to be ready to help at birth if needed		
Name of provider .... **Date .... Signature ....**		
Soon after birth (within 1 hour)		

Is mother bleeding abnormally?	☐ Yes, shout for help ☐ No	If bleeding abnormally: • Massage uterus • Give additional uterotonics (oxytocin drip and/or misoprostol sublingual) • Start IV fluids • Identify and Treat cause: uterine atony, retained placenta/fragments, cervical or vaginal tear, uterine rupture
Does mother need to start antibiotics?	☐ Yes, IV started ☐ No	Give if placenta manually removed, or if Rupture of membranes >12hrs or if temperature >38°C and any: • Chills • Foul-smelling vaginal discharge • Labor > 24hrs at time of delivery

Does mother need to start magnesium sulfate?	☐ Yes, given	Give if • Convulsions • Diastolic blood pressure ≥110 mmHg and 3+ proteinuria, (give antihypertensives) or • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria, and any: severe headache, visual disturbance, orepigastric pain or oliguria, pulmonary edema, • Diastolic blood pressure ≥90 mmHg, 2+ proteinuria and postpartum
Does baby need to start antibiotics?	☐ Yes, given ☐ No	Give if antibiotics were given to mother or if baby has any of following: • Poor sucking/not sucking • Chest in-drawing, grunting • Convulsions • Poor movement on stimulation • Too Cold (temperature <35°C and not rising after warming) or too hot (temperature >38°C)
Does baby need referral?	☐ Yes, (after giving first dose antibiotics when NICU is in another facility) ☐ No	Refer to NICU if: • Any of above criteria or • Jaundice or pallor

Does baby need special care and monitoring?	☐ Yes, organized ☐ No	Arrange special care if: • More than 1 month early • Birth weight <2500 grams • Needs antibiotics • Required resuscitation/HBB
Does baby need to start an anti-retroviral medicine?	☐ Yes, given ☐ No	If mother is HIV+, give baby Neverapine syrup (prophylaxis to be started within 12 hrs of birth)

Newborn: ☐ Placed baby in skin-to-skin contact and started breast feeding within 1 hr(if mother and baby are well) ☐ Vitamin K given 1mg IM on anterior mid-thigh ☐ TTC eye ointment given in both eyes ☐ Weighed and recorded ☐ Give BCG and OPV before discharge		If <2.5kg, ensure full assessment

<table>
<tr>
<td>☐ Confirm that mother/ companion will call for help if danger signs are present</td>
<td></td>
<td>DANGER SIGNS

Mother has:
• Bleeding
• Severe abdominal pain
• Severe headache
• Visual disturbance
• Breathing difficulty
• Fever/chills
• Difficulty emptying bladder

Baby has:
• Fast or difficulty breathing
• Fever
• Unusually cold
• Stops feeding well
• Less activity than normal
• Yellow discoloration of skin/ eyes</td>
</tr>
<tr>
<td colspan="3">Name of provider ....

Date .... Signature ....</td>
</tr>
</table>

Before discharge		
Is mother's bleeding controlled?	☐ Yes ☐ No, treat and delay discharge	
Does mother need to start antibiotics?	☐ Yes, treat and delay discharge ☐ No	Give if temperature >38°C and any: • Chills • Foul-smelling vaginal discharge • Labor > 24 hrs at time of delivery
Does baby need to start antibiotics?	☐ Yes, give antibiotics, delay discharge, and give special care or refer ☐ No	Give if: • Chest in-drawing, grunting • Convulsions • Poor movement on stimulation • Too cold (temperature <35°C and not rising after warming) or too hot (temperature >38°C), • Poor sucking/not sucking breasts • Umbilical redness extending to skin or draining pus
Is baby feeding well?	☐ Yes ☐ No, establish good breast feeding practice	Teach and demonstrate techniques of breast feeding(attachment and positioning) and delay discharge

If Mother is HIV positive, mother is on ART and Baby has Nevirapine syrup for 6 weeks	☐ Yes ☐ No, Explained to give Nevirapine Syrup up to 6 weeks	
☐ Family planning options discussed and offered to mother		
☐ Confirm that mother/ companion will call for help after discharge if:		DANGER SIGNS **Mother has:** • Bleeding • Severe abdominal pain • Severe headache • Visual disturbance • Breathing difficulty • Fever/chills • Difficulty emptying bladder **Baby has:** • Fast or difficulty breathing • Fever • Unusually cold • Poor sucking/not sucking • Less activity than normal • Yellowish discoloration of skin/ eyes

☐ Follow-up arranged for mother and baby		Give three postnatal visits (6-24 hours, 3 days, 7 days) and an immunization visit at 6 weeks

Name of provider ....

Date .... Signature ....

3. ESSENTIAL NEWBORN CARE

Use this list to make sure that every baby receives essential newborn care. Include a checklist in the client chart for each delivery. Consider developing a stamp for nurses to stamp the checklist into the chart in preparation for delivery. Check off the items when the service is provided.

Aims	Key change concept	Specific change ideas	Change Champion
Provide consistent, high quality newborn care for every birth	Develop a standardized process using evidence based guidelines to improve newborn care	• Establish a neonatal corner within the labor and delivery ward • Use the standard criteria listed in the safe childbirth checklist • Train staff on essential neonatal care • Ensure required national guidelines are readily available for staff • Post neonatal resuscitation posters on a wall at a convenient place for staff to look at • Embed Safe Childbirth Checklist into neonatal card for tracking • Monitor the implementation of the essential neonatal care standards • Refresh or train staff on essential newborn care practices, you can even role-play a scenario using a training mannequin	**Midwife head** • Make sure the necessary equipment is available • Monitor midwives giving neonatal care service • Conduct a regular meeting with team to discuss on completeness of neonatal care checklist, and other quality related activities • Develop action plan for improvement

• Avail critical care room/ area with close monitoring of patients in the neonatology ward	• Establish well equipped critical care room/ resuscitation area at NICU	• Follow the charts, NICU protocol and other standard guidelines for decision making • Monitor patients as per national standard (reassessed by doctor &nurses 2-4 or more times a day) • Admit infectious cases and very low birth weight babies in separate room	• Pediatrics ward head/ head Nurse/NICU head Nurse • Make sure necessary equipment and job aids are available • Ensure all practitioners follow the standard • Regularly meet with team to discuss monitoring & outcome of patients, and other quality related issues • Ensure room is arranged for infectious cases or referral is facilitated through liaison office
• Implement Helping Babies Breath (HBB)	• Establish a system and implement HBB to decrease neonatal death and fresh stillbirth	• Ensure that staff are trained for HBB • Avail required equipment for HBB • Follow the HBB standards	• Mid wife head • Ensure HBB is implemented • Assess availability of functional equipment, and posters • Regular meeting with team to discuss on implementation of HBB and, and other quality related activities • Develop action plan for improvement

4. MATERNAL SATISFACTION

TOOL 1. ETHIOPIAN MATERNAL SATISFACTION SURVEY

Every 3 months, administer this survey to a minimum of 20 consecutive maternity clients after their delivery and before they leave the facility. Use the accompanying excel tool to track your results and identify areas for improvement. The survey protocol is annexed in this document.

የኢፌዴሪ ጤና ጥበቃ ሚኒስቴር

በጤና ተቋማት የሚስተናገዱ እናቶች እርካታ መለኪያ መጠይቅ

መግቢያ

ይህ መጠይቅ የተዘጋጀው እናቶች በጤና ተቋማት አገልግሎት በሚያገኙበት ጊዜ ያጋጠማቸውን ጥሩ ልምዶችን እናመሻሻል ያለባቸውን አሰራር በመለየት በጤና ተቋማት የወሊድ አገልግሎትን ለማሻሻል በቂ መረጃን ለማቅረብ ታስቦ ነው፡፡

ይህ መጠይቅ ጥናት በማካሄጃው ፕሮቶኮል መሰረት በየሶስት ወሩ በጤና ተቋሙ የወሊድ አገልግሎት ካገኙ እናቶች ተሰብስቦ ትርጉም በሚሰጥ መልኩ መረጃው ተጠናክሮ በሆስፒታሉ አስተዳደር በኩል ታይቶ እና ተገምግሞ ለሆስፒታሉ የመሊድ አገልግሎት ክፍል ለማሻሻያ የሚያገለግሉ ሀሳቦች ተለይተው አፈጻጸማቸውንም መከታተል ያስፈልጋል፡፡

ከዚህም በተጨማሪ በየሶስት ወሩ ከሌሎች የአፈጻጸም ጠቋሚ መለኪያዎች ጋር ለክልሉ/ለከተማ አስተዳደሩ ጤና ቢሮ እና ለጤና ጥበቃ ሚኒስቴር መላክ ይኖርበታል፡፡

በዚህ መጠይቅ የሚሰበሰቡ ማንኛዉም የእናቶች መረጃ ጤና ተቋሙ በሚስጥር እንዲያዝ እንዲሁም አላማውን በመግለፅ የእናቶችን ፍቃደኛነት አረጋግጦ የማካሄድ ሀላፊነት ይኖርበታል

አጠቃላይ መረጃ ቀን ------------------------

1. ዕድሜ ------------------------

2. የትምህርት ሁኔታ

- ☐ ያልተማረች
- ☐ ማንበብና መፃፍ የምትችል
- ☐ የመጀመሪያ ደረጃ ትምህርት
- ☐ ሁለተኛ ደረጃ ትምህርት የተማረች
- ☐ ከሁለተኛ ደረጃ ትምህርት በላይ

3. የጋብቻ ሁኔታ

- ☐ ያገባች
- ☐ ያላገባች
- ☐ ከባላ ጋር የተለያየች
- ☐ ባለቤቷ የሞተባት

ሌላ ካለ ____

4. ከዚህ በፊት በጤና ተቋም የወሊድ አገልግሎት አግኝተው ያውቃሉ

- ☐ አዎ
- ☐ አላውቅም

5. ስንተኛ ዕርግዝናዎ ነው? ________________________

6. በየተኛው መንገድ ነው ልጅ የተገላገሉት

- ☐ በተፈጥሮአዊ መንገድ
- ☐ በመሳሪያ የተደገፈ በተፈጥሮአዊ
- ☐ በቀዶ ሕክምና

7. ወደ እዚህ ጤና ተቋም እንዴት መጡ

- ☐ ከዚህ በፊት በዚህ ተቋም አገልግሎት ካገኙ እናቶች በመስማት
- ☐ በራሴ ምርጫ
- ☐ ከጤና ጣቢያ ሪፈር ተደርጌ
- ☐ ከሌላ የመንግስት ሆስፒታል ሪፈር ተደርጌ
- ☐ ከግል የህክምና ተቋም ሪፈር ተደርጌ

8. ወደ እዚህ ጤና ተቋም በምን አይነት ትራንስፖርት መጡ

- ☐ በአንቡላንስ
- ☐ በግል ትራንስፖርት
- ☐ በታክሲ
- ☐ በእግር

ተ.ቁ	ጥያቄዎች	በጣም እስማማለው	እስማማለሁ	መካከለኛ	አልስማማም	በጣም አልስማማም
የሠራተኞች አቀባበል እና አግባቦት/ኮሚኒኬሽን						
1	የጤና ተቋሙ የአቀባበል ሥርዐት ከመግቢያው ጀምሮ መልካም ነበር	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
2	በወሊድ ወቅት ለነበሩኝ ጥያቄዎች ባለሞያዎቹ አዳምጠው በቂ ማብራሪያ ሰተውኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
3	በምጥ እና በወሊድ ወቅት ለሚደረግልኝ ሕክምና ጥቅምና ጉዳት የጤና ባለሞያዎቹ ማብራሪያ ሰጥተውኝ ፈቅጄና ተስማምቼ ግልጋሎቱን አግኝቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
4	በወሊድ ጊዜ የጤና ባለሞያዎቹ በአክብሮት አስተናግደውኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
5	ከወሊድ በኋላ ስለ ጡት አጠባብ፣ ክትባት፣ የወሊድ መከላከያ እና ሌሎች ምክሮችን ከጤና ባለሞያዎቹ ተነግሮኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
6	በወሊድ ወቅት ጤና ባለሙያዎቹ እራሳቸውን በአግባቡ አስተዋውቀውኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
የክፍሎች እና የአገልግሎት አሰጣጥ ምቹነት						

7	ከመግቢያው ጀምሮ የማዋለጃ ክፍልን ለማግኘት እና ወደ ክፍሉ ለመጓጓዝ አልተቸገርኩም	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
8	በማዋለጃ ክፍሉ የዕጅ፣ የገላ መታጠቢያና የመፀዳጃ አገልግሎቶች ማግኘት ችያለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
9	የማዋለጃ ክፍሉ አጠቃላይ የንጽህና ሁኔታ ጥሩ ነበር	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
10	በምጥና በወሊድ ምርመራ ወቅት አገልግሎት ሳገኝ የነበረው ከፈቀድኩት ሰው ውጪ ሳይገባና በተከለለ ቦታ ነበር	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
11	በምጥ እና በወሊድ ወቅት እንድንቀሳቀስና በተመቸኝ እና በፈለኩት የወሊድ አኳኋን (ተኝቼ፣ ቆሜ፣ ተቀምጬ፣ ወዘተ...) እንድሆን ተፈቅዶልኝ ነበር	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
12	በምጥ እና በወሊድ ወቅት የቤተሰብ አባል ከጎኔ እንዲሆን ተፈቅዶልኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
13	በወሊድ እና ከወሊድ በኋላ ህመም በሚሰማኝ ወቅት የሕመም ማስታገሻ እርዳታ ተሰጥቶኛል	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐

አገልግሎት አሰጣጥ						
14	ሆስፒታል ገብቼ ካርድ እንዳወጣ ሳልጠየቅ ቀጥታ ወደ ማዋለጃ ክፍል በመሄድ አገልግሎት አግኝቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
15	ጤና ተቋሙ ቅጥር ግቢ ለወሊድ ከገባሁ በኋላ በባለሙያ በፍጥነት ታይቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
16	ጤና ተቋም ቅጥር ግቢ ከገባሁ በኋላ አልጋ በፍጥነት አግንቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
17	በጤና ተቋሙ ቆይታዬ የታዘዘልኝን የላቦራቶሪ፣ የራጅ እና አልትራሳውንድ ምርመራዎች በተቋሙ አግኝቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
18	በጤና ተቋሙ ቆይታዬ የታዘዘልኝን መድሀኒት እና ሌሎች የህክምና መገልገያ ግበአቶች (ጓንት፣...) በተቋሙ አግኝቻለሁ	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
የአገልግሎት ወጪ						
19	በጤና ተቋሙ ቆይታዎ ወቅት የአገልግሎት ክፍያ ተጠይቀው ነበር	አዎ ☐			አልተጠየኩም ☐ መልሱ አልተጠየኩም ከሆነ ጥያቄ ቁጥር 20 እና 21 ይለፏቸዉ።	
20	ክፍያው ተመጣጣኝ ነው	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐
21	ክፍያ ከፈፀሙ ክፍያው የፈጸሙበት ምክንያት ይግለፁ					

ማጠቃለያ መጠይቅ		
22	በዚህ ጤና ተቋም ቤተሰቤ ወይም ጓደኞቼ መጥተው የወሊድ አገልግሎት እንዲያገኙ እመክራሉ	በእርግጠኝነት አደርገዋለሁ ☐ · ይመስለኛል ☐ · አይመስለኝም ☐ · በፍጹም አላደርገዉም ☐
23	በዚህ ጤና ተቋም አገልግሎት አሰጣጥ በአጠቃላይ ረክቻለሁ	5 ☐ · 4 ☐ · 3 ☐ · 2 ☐ · 1 ☐
24	የዚህ ጤና ተቋም አገልሎት አሰጣጥ በእርሶ እይታ ከ1-10 ደረጃ ስጡት ቢባል እና 1 በጣም ዝቅተኛ፣ 10 በጣም ከፍተኛ ቢሆን ስንት ይሰጡታል	0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ እጅግ ዝቅተኛ → እጅግ ከፍተኛ

5. USE OF CHECKLISTS FOR SELF-AUDIT

The main objective of the Maternal and Neonatal self-audit is to help hospitals improve the quality of maternal and immediate newborn care service in the public hospitals of Ethiopia. Use the national Maternal Care Quality Improvement Self-Assessment tool for Hospitals to assess the performance of Maternal and Neonatal care services every 6 months. The results of the assessment shall be discussed at senior management level and findings should be used for the development of an improvement plan.

Annex 1: Mother's Satisfaction Survey Protocol

Purpose of Survey:

To use mothers experience and opinion for service quality improvement of labour and delivery.

Cluster hospitals report the Indicator "Mothers Satisfaction Survey Score" which will be calculated using the average responses to all of the five sections and number '6'.

Hospitals should perform a detail analysis of all the five sections to know the areas where mothers dissatisfied so as to develop improvement plan.

Period of Survey:

This survey should be given every quarter to a minimum of 20 mothers who had delivery services at the hospital. The survey should be collected right before discharge. The survey should be collected in the last two weeks of the quarter. All delivered mothers in the last two weeks of the quarter should be surveyed, including those who delivered on weekends, during the night and mothers with unwanted neonatal and maternal outcomes.

Mother's recruitment:

All delivered mothers in the last two weeks of the quarter should be surveyed.

Participation in the survey is voluntary and mother's anonymity must be maintained. No identifying information (such as mother's name) should be collected. Participants should be excluded from the surveys if cognitively impaired and unable to understand the survey questions.

Methodology of Survey:

A. Assign and train surveyors

The quality team conducting the survey should understand the survey well, including all survey questions and answer choices. The quality team will be responsible for data collection, entry and analysis.

B. Select mothers for survey

The quality team should select mothers from the logbook to participate in

the survey. The number of surveys actually completed by mothers and what type of survey was administered (written or oral) should be recorded. This is to measure the survey response rate as well as track surveys.

The surveyor (assigned person from quality team) should then approach the mother to inquire if she is interested in completing a mother survey. The surveyor should explain the purpose of the survey and assure the mothers anonymity. If the mother does want to participate she must then give her consent verbally before the survey can be administered.

C. Oral or written completion of survey

The survey may be completed by the mothers themselves (written) or administered by the surveyor who will transcribe the mother's answers (orally). An ID number should be assigned to each survey sequentially as it is conducted. The ID should be entered on the survey form and in a logbook.

Written Survey:

Surveyors will provide a blank survey to the participant. The mother should complete the survey at the time it is distributed and return it. The surveyor should record the Survey No. in logbook and identify it as a "written survey".

Oral Survey:

If the mother requests that the survey be conducted orally, surveyors will read each question on the survey to the mother, transcribing the responses of the mother on to the survey form. The surveyor should record the Survey No. in a logbook and identify it is as "oral survey".

D. Data analysis

At the end of the survey period the quality team should collect all completed surveys and calculate the response rate of the survey. The quality team of the facility has a responsibility to enter all data on the survey into the database and write and submit the result to hospital senior management. In addition the result of the survey should be presented and discussed with senior management team and based on the result the hospital management with the maternity case team has to plan on the gap identified to improve the quality of labor and delivery service.

Before Birth | SAFE CHILDBIRTH CHECKLIST

1. On admission

Quick check performed?
- ☐ Yes
- ☐ No

• Assess for danger signs

Does mother need referral?
- ☐ Yes, organized with initial stabilization and treatment according to signs
- ☐ No

Refer to a higher level if any of the following danger signs are present (if the setup and professional is not present):
- Vaginal bleeding
- Severe abdominal pain
- High fever > 38°C
- Difficulty in breathing
- History of heart disease or other major illnesses
- Severe headache or blurred vision
- Convulsions

Partograph started?
- ☐ Yes
- ☐ No, will start when ≥ 4 cm

Start plotting when cervix ≥ 4 cm—on alert line.
- Every 30 min: plot maternal pulse, contractions, fetal heart rate
- Every 2 hours: plot temperature
- Every 4 hours: plot blood pressure
- Every 4 hours: vaginal examination

Does mother need to start:

Antibiotics?
- ☐ Yes, IV started
- ☐ No

Give if:
- Temperature > 38°C
- Foul-smelling vaginal discharge
- Rupture of membranes >12 hours,
- OR labor >24 hours

Magnesium sulfate?
- ☐ Yes, given
- ☐ No

Give if:
- Convulsions
- Diastolic blood pressure ≥110 mm Hg and 3+ proteinuria (give antihypertensives) OR
- Diastolic blood pressure ≥90 mm Hg, 2+ proteinuria, and any: severe headache, visual disturbance, or epigastric pain or oliguria, pulmonary edema
- Diastolic blood pressure ≥90 mm Hg, 2+ proteinuria in labor

Antiretroviral medicine?
- ☐ Yes, given
- ☐ No, confirmed HIV negative
- ☐ If status unknown, HIV test done

Give ART if mother is HIV+
If on ART, continue

Are soap, water, alcohol hand rub, gloves available?
- ☐ Yes, I will wash hands and wear gloves for each vaginal exam
- ☐ No, arrange supplies

☐ **Confirm if birth companion encouraged to be present throughout labor and at birth**

☐ **Confirm that mother/companion will call for help during labor if mother has a danger sign**

Call for help if:
- Bleeding
- Severe abdominal pain
- Severe headache or blurring of vision
- Convulsions
- Urge to push
- Difficulty emptying bladder

☐ **Confirm mothers privacy is maintained during labour and delivery**

Name of Provider: ……………………................Date: …………………..Signature: ………….............

2. Just before second stage/birth of baby (or before cesarean)

Does mother need to start antibiotics?

- ☐ Yes, IV started
- ☐ No

Give if:
- Temperature > 38°C
- Foul-smelling vaginal discharge
- Rupture of membranes > 12 hours
- Labor > 24 hours
- Before cesarean section

Does mother need to start magnesium sulfate?

- ☐ Yes, given
- ☐ No

Give if:
- Convulsions
- Diastolic blood pressure ≥ 110 mm Hg and 3+ proteinuria, (give antihypertensives) OR
- Diastolic blood pressure ≥ 90 mm Hg, 2+ proteinuria, and any: severe headache, visual disturbance, or epigastric pain or oliguria, pulmonary edema
- Diastolic blood pressure ≥ 90 mm Hg, 2+ proteinuria in labor

Are essential supplies at bedside for mother?

- ☐ Gloves
- ☐ Soap/Savlon and clean water
- ☐ Oxytocin 10 IU in syringe

Prepare to care for mother and baby during birth:
- Check for 2nd baby
- Give oxytocin within 1 minute
- Delayed cord clamping in 1–3min
- Deliver placenta by controlled cord traction
- Confirm uterus is contracted

Are essential supplies at bedside for baby?

- ☐ Two clean, dry, warm towels
- ☐ Sterile scissors to cut cord
- ☐ Suction device
- ☐ Bag-and-mask
- ☐ Sterile cord tie/clamp

Prepare to care for baby immediately after birth:
- Deliver and dry baby on maternal abdomen, wrap, keep warm, and wipe eyes
- Clamp/tie cord two fingers from abdomen and another two fingers from the first
- Check breathing—If not breathing: stimulate and clear airway
- If still not breathing or if the baby is blue: cut cord, ventilate with bag-and-mask
- Shout for help

Anti-retroviral medicine?

- ☐ Yes, given
- ☐ No, confirmed HIV negative
- ☐ If status unknown, HIV test done

Give ART if mother is HIV+
If on ART, continue

☐ **Confirm assistant identified and informed to be ready to help at birth if needed**

Name of Provider: …………………….................Date: ………………….Signature: ………….............

MATERNAL, NEWBORN AND CHILD CARE QUALITY IMPROVEMENT AND SELF-ASSESSMENT TOOL FOR HOSPITALS

CONTENTS

I. Introduction to maternal neonatal and child health quality improvement audit tool	51
II. Instructions on how to use the assessment tool	51
III. General Hospital Information	52
1. Basic infrastructure Score	53
2. ANC Facility Assessment	54
3. Labor and Delivery Ward	55
4. Caesarean Delivery	58
5. Case Management of PPH and Eclampsia	60
6. Paediatric Care	60
7. Laboratory service	62
8. Guideline and Auditing	63
9. IPPS	64
Annex 1. Data abstraction sheet to assess the quality of ANC	66
Annex 2. Data abstraction sheet to assess the use of partograph, third stage management and basic new born care	67
Annex 3. Data abstraction sheet to assess the caesarean delivery records	69
Annex 4. Essential drugs that must be available in emergency drug cabinet of L& D ward	71
Annex 5. Checklist for medical equipment in labor and delivery ward and operation theatre (equipment must be functional at the time of assessment)	72
Annex 6. List of drugs and equipments that should be available in operating theater	73
Annex 7: Checklist for Guidelines and Protocols.	74
Annex 8: Checklist for laboratory services	75
Annex 9: Checklist for PPH management	76
Annex 10: Checklist for eclampsia management	77

INTRODUCTION

I. Introduction to maternal neonatal and child health quality improvement audit tool

This tool is part of MH self-assessment tool that can be used by hospitals. It can be used either by hospitals themselves or by external evaluators.

II. Instructions on how to use the assessment tool

1. The tool assesses eight different areas with different number of standards under each theme.

2. This tool should be used together with the Annex

3. Scoring method

   A. Give **1** if Yes and **0** if No for each verification criteria

   B. To assess the quality of ANC, the use of partograph and completeness of medical records for caesarean delivery use the data abstraction sheet attached in the Annex

      I. First select randomly 19 medical records of patients out of the last quarter

      II. For ANC we use the ANC register, for Partogram we use the labor ward register and for caesarean delivery we use the operating room register to get the card numbers.

      III. Then using the data abstraction sheet attached in the annex, fill each verification criteria for each card and count the number of yes.

      IV. Using simple mathematics divide total number of Yes with total number of medical records seen.

      V. ANC has 6 verification criteria but partograph and caesarean chart documentation have 10 criteria each

      VI. Then the result is added in the audit tool.

4. The total is then calculated out of 100%.

III. General Information

Hospital Information			
Date of Assessment			
Hospital's name			
Region, Zone/Sub city, District/woreda			
Type of the hospital (Teaching non-teaching)			
Staff Info	**Name**	**Phone #**	**Email address**
Director			
CEO			
L&D Head			
Neonatal unit head			
	Name of Assessors		
1			
2			
3			
4			

Standard and Criteria	1 for Yes / 0 for no	Data Source	Remark
1. Basic Infrastructure Score			
S1.1 Electricity supply is continuously available 24/7 with reliable backup source		Observation Interview	
C1. Check availability of continuous electric supply with backup generator			
C2. In case of power cut check generator is automatic or can be started within 5 minute		Interview with key informants	
S1.2 water supply is continuously available 24/7 with reliable backup source			
C1. Ask and check continuous water supply availability with adequate backup source			
S1.3 Telephone service should be available			
C1. Check availability of functional telephone in Liaison office			
C2. Telephone service for internal communication			
C3. in the compound for public use			

S1.4 There should be a suggestion box on the hospital premises or formal way patients can communicate with the hospital			
C1. check availability of suggestion box or log for handling compliant in the labor ward			
C2. Review whether the suggestions were evaluated and documented			
Total score for infrastructure			**Total criteria – 8**
2. ANC Facility Assessment			
S2.1 completeness of medical cards of women attending ANC clinic. (6 verification criteria)see Annex 1		Card review of 19 random medical records of women who came for ANC visit in the last quarter	Use data abstraction sheet on annex 1, Scored out of 6
S2.2 Hiv positive pregnant mothers and their exposed infants should get all needed care		reviewing registers	
C1. Option B + is practiced in the facility			
C2 Mother- infant follow up at ANC clinic until 18 months and beyond			
C3 DBS is done in the facility			
Total score for ANC			**Total criteria- 9**

3. Labor and Delivery Ward			
S3.1 No administrative barriers for laboring mothers and a functional triage		observation and interview	
C1. Laboring mothers go directly to labor ward before any administrative procedure			
C2. Emergency triage exists for sick pregnant mothers who are not in labor			
S3.2 All hospitals must provide CEmONC service		observation and interview	No if one functions is not available
C1. All 9 signal functions available			
S3.3 Labor wards must have emergency drug cabinet and fridge filled with essential drugs and all essential equipment		Observation	
C1. Does the labor ward has an emergency drug cabinet that has labeled essential drugs			
C2. There is functional and regularly refrigerator (fridge) in labor ward			
C3. Are all essential drugs available in the labor ward, See ANNEX 4			Yes if 100 %
C4. Are all equipment's mentioned in ANNEX 5 available?			Yes if 100%

S3.4 The area designated for labor and delivery should be safe with comfortable environment and is women friendly		Observation, interview	
C1. The rooms are well ventilated			
C.2Temperature of the room is good (neither too cold or too hot)			
C3. First stage has 4 beds and Second stage has at least 2 delivery couches			
C4.There are screens or curtains to ensure privacy			
C5. Has a working bathroom that is accessible to laboring mothers that has door, hand washing basin with soap			
C6. Sufficient space for pregnant women to be able to walk around and for one companion at the first stage of labor			
C7.Has running water and soap for hand wash			
C8. Family member/support person is allowed to remain with woman constantly during labour and birth			
C9. Mother is offered oral fluids and light food during labour			

C10. Mothers are allowed to deliver in their preferred position			
S3.5 completeness of medical records of normal delivery (10 verification criteria) see annex 2		Card review of 19 random medical records of women who delivered in the facility in the last quarter	Scored out of 10, Use data abstraction sheet (annex 2)
S3.6 The most seriously ill women cared for in a separate Unit i.e. ICU or section (HDU near the nursing station		Observation and interview	
C1. Availability of ICU orAvailability of high dependency unit near nursing station(district hospital)			
S3.7 Essential neonatal care should be available		Observation and interview	
C1. There is a newborn corner with radiant warmer		Observation and interview	
C2. There is a new born sized resuscitation bag (with volume of 250 ml/less) with no- 0 and 1 mask is available		Observation and interview	
C3.suction machine/bulb available		Observation and interview	

C4. The health worker trained on new born resuscitation(HBB) and is available for resuscitation (There is a plan to call a senior health professional for resuscitations if required)		Observation and interview	
C5. There is a NICU service where newborn is referred if advanced neonatal resuscitation is needed		Observation and interview	
Total score for emergency obstetric care			**Total criteria--33**
4. Caesarean Delivery			
S4.1 A fully functional operation theater dedicated for cesarean delivery should be available adjacent to labor ward		Observation	
Interview			
C1. All essential drugs are available and essential equipment are readily available and are functional in Operating theater, See Annex 6			Yes if 100 % availability
C2. separate or dedicated operating room table is available for caesarean section that is close to labor ward			
S4.2 Caesarean delivery should be done 24/7			
C1. Appropriate caesarean section (CS) teams are always available for emergency CS.			

C2. Theatre is always ready for emergency CS (Anesthesia drugs, surgery kit, electricity, water, health professionals...are always available)			
S4.3. Proper documentation of caesarian delivery by the surgeon,			
C1.completeness of medical records of women who delivered by caesarean section(11 verification criteria) see annex 3		Card review of 19 random medical records of women who delivered by caesarean section in the last quarter	Scored out 11, Use data abstraction sheet in the Annex 3
S4.4 spinal anesthesia is preferred if there are no contra indications			
C1. Spinal anesthesia is given whenever possible		Using the operating theater register, find the proportion of caesarean delivery with spinal anesthesia in the last quarter	Yes if the spinal rate is more than 50% for the last quarter, use the operating theater register to get the data
Total score for caesarean delivery			**Total criteria -16**

5. Case Management of PPH and Eclampsia			
PPH (see criteria annex -9)			Use data abstraction sheet on annex -9, Scored out of 5
Eclampsia (see criteria annex -10)			Use data abstraction sheet on annex -10, Scored out of 5
Total score for Case Management			**Total criteria -10**
6. Pediatric Care			
S6.1 Separate pediatrics Emergency OPD with active ETAT service		Observation	
C1. Proper triage exists for pediatric cases			
C2. Equipped pediatrics EOPD (O2, Suction,different size Ambubags, nebulizer& pulse oxy meter)			
C3. ETAT trained staffs are available in the emergency area			
S6.2 Patients should be monitored in the ward			
C1. Nutritional status (Anthropometry) is assessed in all admitted < 5 children-----(at least see 5 charts)			

C2. Key risk(vital)signs are monitored and recorded by a nurse twice a day for all patients and at least four times a day for critically ill patients;			
C3.Seriously ill patients are reassessed by a doctor upon admission and reviewed at least twice daily until improved and at least once per day for other patients			
S6.3 There has to be a section for most seriously ill children			
C1. Well Equipped room with resuscitation coach near the nurses' station			
C2.Isolation room for infectious cases (10% of the total beds)			
S6.4 Neonatal ward/NICU			
C1. Sick Newborns admitted separately (section for most seriously ill infants for referral hospitals near nurse station for direct observation)			
C2. Newborns with suspected sepsis will be treated with parenteral antibiotics			
C3. Maternal waiting room for admitted neonate			

C4. KMC room with warmer available and Babies are monitored e.g. temperature, feeding, weight			
C5. Health worker trained on management of common neonatal problems			
C6. There is a resuscitation trolley with basic newborn resuscitation equipment like (resuscitation bag and mask suction bulb or machine resuscitation action plan)			
Total score for pediatric care			**Total criteria 12**
7. Laboratory Service			
S7.1 Availability of all tests as per the facility standard 24/7, with good turnaround time			
C1. All the lab tests listed on the test menu should be available, see the list in the Annex 8			
C2.Services should be available 24/7			
C3. Turnaround time for Hgb, Blood group should be less than 15 mts			
S7.2 Blood safety & storage			
C1. Blood should be available from blood bank and stored properly (in a fridge with temperature record)			

C2. Blood should be provided without replacement			
Total score for Laboratory			**Total criteria -5**
8. Guideline and Auditing			
S8.1All the necessary guidelines and protocols should be available			
C1. All relevant guide lines listed in ANNEX 7 are available in L and D room			Yes or 1 if all available and list the unavailable ones in the remark section
C2. All relevant guide lines listed in ANNEX 7 are available in ANC room			Yes or 1 if all available
C3. All relevant guide lines listed in ANNEX 7 are available in pediatrics ward			Yes or 1 if all available
S8.2Regular audits are conducted and recommendations from audits are used for quality improvement		Interview	
Observation			
C1. A MNCH Quality Improvement (QI) subcommittee is established from different case teams and a focal person is assigned to coordinate the QI team			
C2. the subcommittee have a regular documented meeting at least every two weeks			

C3. The facility should conduct a regular monthly neonatal and maternal death audits and provide recommendations			
C4. Recommendations from audits are discussed, documented and implemented			
Total score for Guideline and auditing			**Total criteria- 7**
9. IPPS			
S9.1 Personal protective equipment and			
IPPS consumables available			
C1. Goggle, boots, apron, gloves, gown…			
C2. Alcohol, Chlorine, Detergents, Gloves, and Syringes			
S9.2 Cleanliness of the wards			
C1. Novisible wastes, splashed blood, trash			
S9.3 Health workers segregate wastes into infectious, noninfectious and sharps			
C1. adequate collecting bins of yellow and black color coded and Safety box at the point of source			
S9.4 Beds are safe and clean			

C1.Beds and couches are well maintained and have rubber sheet cover at delivery and postnatal wards			
S9.5 Staffs know how to prepare disinfectant solutions according to standards			
C1. Staffs who are available during the assessment know how to make 0.5% Chlorine solution,			
S9.6 Hand washing and toilet facilities			
C1. Tap water available in all visited rooms			
C2. Functional sinks with detergents			
C3. Functional and clean toilet at delivery, postnatal , children and neonatology ward			
S9.7 The sterilization process performed at maternity ward			
C1. Availability of functional Autoclave / Dry oven			
Total score for IPPS			**Total criteria- 10**
Grand total score out of 110			

Total EHAQ Audit Score Percentage= $\frac{\textbf{Grand total score X 100}}{\textbf{110}}$

Annex 1. Data abstraction sheet to assess the quality of ANC

Verification Criteria for ANC standards

C1. All problems identified in classifying form AND senior health professional consulted when necessary

C2. Pregnant women coming for ANC follow up have BP measured at each visit

C3. Pregnant women have all essential lab tests (VDRL, blood group typing, urine analysis, HIV and hemoglobin)

C4. Pregnant women have their partners counseled and tested for HIV

C5. Iron folate supplementation

C6. Pregnant women are counselled about danger signs in pregnancy and birth Preparedness and complication readiness is advised/plan developed

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total Yes
C.1 (y/n)																				
C.2 (y/n)																				
C.3 (y/n)																				
C.4 (y/n)																				
C.5 (y/n)																				
C.6 (y/n)																				

$$\textbf{ANC Quality Score} = \frac{\textbf{Total number of yes}}{\textbf{Total number of medical records evaluated}}$$

Annex 2. Data abstraction sheet to assess the use of partograph, third stage management and basic new born care

Verification Criteria

C1. Identification and previous obstetric history are properly filled

C2. Date and time of admission with admission finding properly filled.

C3. Hgb, blood group and Rh and HIV test is done

C4. FHB is monitored at least every 30 minutes and documented

C5. Cervical dilation assessed every 4hrs and documented

C6. Maternal Blood Pressure measured at least every 2-4 hours and pulse rate every half hour

C7. Delivery summary is properly documented

C8. Safe child birth check list used

C9.Oxytocin 10 IU IM given just after delivery of the baby(AMSTL)

C10. Neonate is given vitamin K 1 mg, TTC eye ointment and vaccinated with BCG and OPV 0.

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total yes
C.1 (y/n)																				
C.2 (y/n)																				
C.3 (y/n)																				
C.4 (y/n)																				
C.5 (y/n)																				
C.6 (y/n)																				

C.7 (y/n																				
C.8 (y/n																				
C.9 (y/n																				
C.10 (y/n																				

Partograph,3rd stage managrmrnt & Newborn Care Score= $\dfrac{\textbf{Total number of yes}}{\textbf{Total number of medical records evaluated}}$

ANNEX 3. Data abstraction sheet to assess the caesarean delivery records

Verification Criteria

C1. Indication is properly documented

C2 Date and time of decision and time of surgery is documented

C3. Informed consent is obtained

C4. Hgb/Hct and blood group and RH determined

C5. Prophylactic antibiotics given

C6.Post-operative vital signs are checked at least every 30 min for the first 2 hrs

C7. Admission and Progress note are documented and attached

C8. Order sheet and medication administration sheet are completed and revised accordingly and attached

C9. Nursing care plan documented

C10. Discharge summary documented

C11. Safe surgery check list is used and attached for each case.

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total yes
C.1 (y/n)																				
C.2 (y/n)																				
C.3 (y/n)																				
C.4 (y/n)																				
C.5 (y/n)																				
C.6 (y/n)																				

C.7 (y/n)																				
C.8 (y/n)																				
C.9 (y/n)																				
C.10 (y/n)																				
C.11 (y/n)																				

Caesaean Delivery Score= $\frac{\textbf{Total number of yes}}{\textbf{Total number of medical records evaluated}}$

ANNEX 4. Essential drugs that must be available in emergency drug cabinet of L& D ward

#	In the emergency drug cabinet on the L&D ward or refrigrator	Yes or No
1.	Uterotonic medication (Oxytocin, Misoprostol,Misoptrostol Po and/ or Ergometrine)	
2.	Magnesium sulphate	
3.	Diazepam	
4.	Antihypertensive medication (Nifedipine and Hydralazine)	
5.	40% glucose	
6.	IV Cannula	
7.	Lidocaine	
8.	Syringe & needle	
9.	IV fluids (crystalloids)	
10.	Tetracycline eye ointment	
11.	Sterile gloves	
12.	Atropine	
13.	Vitamin K	
14.	Adrenaline	
15.	Ampicillin IV	
16.	Cagluconate	
17.	TDF/3TC/EFV (ARV drugs)	
18.	Nevirapine syrup	
19.	Aminophylline	
20.	Hydrocortisone	

Annex 5. Checklist for medical equipment in labor and delivery ward and operation theatre (equipment must be functional at the time of assessment)

#	Item	Yes/No
1.	Functional Sphygmomanometer (BP apparatus)	
2.	Stethoscope	
3.	Suction machine portable	
4.	Pinnardstethetescope(Fetoscope)/doppler	
5.	Ultra Sound	
6.	Thermometer	
7.	Filled oxygen tank with flow meter	
8.	Nasal prongs for oxygen administration	
9.	Catheter for oxygen administration	
10.	5 delivery sets, at least two sterile	
11.	Sterile suture kit	
12.	Forceps	
13.	Vacuum extractor	
14.	Urinary Catheter	
15.	HIV test kits (KHB, Stat pack)	
16.	Stand lamp	
17.	Speculum for vaginal examination	
18.	Craniotomy set	
19.	Sterilizer (Steam or dry)	
20.	Ambu-bag with sterile mask	
21.	Bed with accessories	
22.	IV stand	
23.	Mask for oxygen administration	
24.	Cord cutting/clumping set	
25.	Radiant Warmer	
26.	Towels for drying and wrapping new-born babies	
27.	weighing scale for baby	

28.	Tape to measure baby length and Head circumfrance	
29.	Functioning clock	
30.	Two Episiotomy set	
31.	Suction bulb for NB resuscitation	
32.	Long sleeve glove for removal of retained placenta	

Annex 6. List of drugs and equipment that should be available in operating theatre

#	In operation theatre	Yes or No
1.	Ketamine injection	
2.	Oxygen inhalation	
3.	Thiopental IV	
4.	Halotane	
5.	Muscle relaxant (Suxamitanum and Vecronium)	
6.	Lidocaine injection and or Bupivacaine	
7.	Lidocaine + epinephrine injection	
8.	Ephedrine injection	
9.	Dexamethasone IM	
10.	Diazepam /IV/	
11.	Suction	
12.	Oxygen	
13.	Ambu bag (Adult)	
14.	Ambu bag (Neonatal)	
15.	Spinal Needle	
16.	3 Caesarean section sets at least one ready	
17.	2 Laparotomy sets with at least one ready	

Annex 7: Checklist for guidelines and protocols

#	Guideline/protocol	Yes or No
	Maternity/L&D	
1.	Management protocol on selected obstetrics topics, FMOH 2010	
2.	Mg SO4 administration protocol	
3.	PMTCT Option B+ desk top reference/pocket guide/ job aid, DNA PCR/DBS job aid and HIV testing algorithm	
4.	Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia, second edition 2014	
5.	Infection prevention guideline	
6.	Hand washing poster	
7.	Newborn corner guideline	
8.	Newborn resuscitation flow chart/Helping Babies Breathe Poster	
9.	Active management of third stage of labor poster	
	Neonatal Unit or pediatrics	
1.	National newborn case management protocol	
2.	Newborn corner guideline	
3.	Newborn resuscitation flow chart	
4.	Pediatric hospital care pocket book on common child hood illness and malnutrition protocol	
5.	Triaging wall chart , job aids are available	
	ANC	
1.	Focused ANC poster	
2.	PMTCT job aids	

Annex 8: Checklist for laboratory services

Lab test	Available	Not Available	Time to get results -TAT	Comments
Blood glucose				
Haemoglobin				
Haematocrit (PCV)				
Blood grouping and cross match				
Bilirubin				
Rhesus antibodies				
Urine dipstick				
Urine microscopy				
Full blood count				
Liver function tests				
Renal function tests				
IV test				
CD4 count or HIV plasma viral loads				
Serum protein and albumin				
Rapid test for syphilis				
Microscopy or rapid diagnostic test (RDT) for malaria parasites				
CSF microscopy				
HBsAg				

Annex 9: Checklist for PPH management

Audit 5 charts in the Delivery Room/Post natal clinic to assess whether appropriate measure were instituted for PPH management

S.no	Audit Criteria(standard)for PPH	Case-1	Case-2	Case-3	Case-4	Case-5	Total yes
1	Experienced Medical Staff should be involved in the management of life-threatening obstetric hemorrhage within 10 minutes of diagnosis						
2	Intravenous access should be achieved						
3	Patients haematocrit or hemoglobin level should be established						
4	Typing and cross matching of blood should be performed.						
5	Coagulation tests should be performed if indicated – clotting time, platelet count						
6	Crystalloid and/or colloids should be infused until cross matched blood is available.						
7	Clinical monitoring to detect early deterioration should be done at least every quarter of anhour for 2 hours: pulse, blood pressure.						
8	Urinary output should be measured hourly						
9	Oxytocics should be used in the treatment of postpartum hemorrhage						
10	Genital tract exploration should be performed in cases of continuing postpartum hemorrhage.						

$$\textbf{PPH Criteria Score} = \left(\frac{\textbf{Total number of yes}}{\textbf{Total number of medical records evaluated}}\right) \times 0.5$$

Annex 10: Checklist for eclampsia management

Audit 5 charts in the Delivery Room/Post natal clinic to assess whether appropriate measure were instituted for Eclampsia management

S.no	Audit Criteria(standard)for PPH	Case-1	Case-2	Case-3	Case-4	Case-5	Total yes
1	Detailed history and documentation should be made as soon as the patient is admitted						
2	Management plan should be made by senior personnel within two hours of admission (IESO, senior resident or obstetrician).						
3	All eclamptic patients should receive MgSO4 as treatment and prophylaxis for further seizures.						
4	Treatment of severe hypertension (DBP>110mmHg)with IV medication to all patients with hypertension						
5	All patients should have blood pressure measurement at least every half an hour						
6	Urinalysis for proteinuria should be done within 2 hours of admission						
7	Fluid balance chart should be maintained for 48 hours, in order to monitor urine output and that no patient should be put at risk of fluid imbalance and pulmonary oedema						
8	Deep tendon reflexes should be monitored in all patients treated with magnesium sulphate every 4hrs						
9	Respiration rate should be monitored every half hrsfor 24 hours in all patients treated with magnesium sulphate						

10	Corticosteroids for lung maturation should be given to all preterm cases						
11	Operative delivery (Caesarean section) should be performed if deicide						
12	Delivery should be within 24 hours						
13	Full blood count should be done at least once to all admitted patient						
14	Renal function test (urea and serum creatinine) should be done at least once to all admitted patient						
15	Liver function test (liver enzymes) should be done at least once to all admitted patient						

Eclampsia Criteria Score= $\left(\frac{\text{Total number of yes}}{\text{Total number of medical records evaluated}} \right) \times 0.3$