

Community Based Newborn Care in Ethiopia: Phase 1 Evaluation Protocol



October, 2013

Acronyms

ANC	Antenatal Care
BMGF	Bill and Melinda Gates Foundation
CBNC	Community Based Newborn Care
CCM	Community Case Management
COMBINE	Community Based Interventions for newborns in Ethiopia
FGD	Focus Group Discussion
HDA	Health Development Army
HEP	Health Extension Program
HEW	Health Extension Worker
HMIS	Health Management Information Systems
iCCM	Integrated Community Case Management
IDI	In Depth Interview
IMR	Infant Mortality Rate
KII	Key Informant Interview
MDG	Millennium Development Goals
MNCH	Maternal Newborn and Child Health
NMR	Neonatal Mortality Rate
PHCU	Primary Health Care Unit
PMNCH	Partnership for Maternal, Newborn and Child Health
PNC	Postnatal Care
PPS	Probability Proportional to Size (sampling methodology)
PRCMM	Program Review and Clinical Mentoring Meeting
RHB	Regional Health Bureau
SBA	Skilled Birth Attendant
SNL	Saving Newborn Lives
SNNPR	Southern National Nationalities Peoples Region
TWG	Technical Working Group
WHO	World Health Organisation

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1. Summary

Community-based newborn care (CBNC) in Ethiopia is a national programme that aims to improve newborn survival through the health extension programme. Phase 1 of CBNC implementation is planned for 2013 and will include all Primary Health Care Units¹ (PHCU) in seven zones (92 woredas) of the country. The evaluation design of Phase 1 includes before-and-after coverage surveys of key behaviours and interventions at household level in intervention and comparison areas;² a midline survey to examine supply-side factors at PHCU level, including health centres, health posts, HEW, and the HDA; qualitative work to understand implementation processes; and tracking of contextual factors.

Evaluation of CBNC will show the extent to which sepsis management through the health extension programme in Ethiopia is scaled-up, and the extent to which evidence-based life-saving behaviours and interventions at household level are improved, as a result of CBNC.

Groundwork for the evaluation started in mid-2013 and the evaluation will be completed by early 2016. The London School of Hygiene & Tropical Medicine, in collaboration with JaRco Consulting PLC, an Ethiopia-based health research consulting agency, has been commissioned to lead the study through the IDEAS (Informed Decisions for Actions in Maternal and Newborn Health) project, funded by the Bill & Melinda Gates Foundation. The lead investigators for the CBNC evaluation in Ethiopia are Dr Bilal Avan, Dr Tanya Marchant and Dr Joanna Schellenberg. Mr Tsegahun Tessema is lead investigator for JaRCo.

The CBNC evaluation budget is \$1.7m.

2. Background and rationale

2.1 Maternal and newborn health in Ethiopia and CBNC

In Ethiopia, approximately 90% of births still take place at home. The neonatal mortality rate is 37/1000 live births.³ Given the limited care for newborns in health facilities and inadequate newborn care seeking practice, scale up of essential newborn care in communities and primary health facilities is a promising way forward.

Building on lessons learned from integrated Community Case Management of childhood illness (iCCM), the implementation of Community Based Newborn Care (CBNC) will use the following guiding principles to ensure rapid, high- quality implementation: 1) government leadership and ownership; 2) spanning the continuum of care; 3) balance between preventive and curative care at the community level; 4) quality service; 5) community participation; 6) strong health system support, and 7) phased approach and partnership.

The goal of the CBNC programme is to reduce newborn and child mortality to accelerate the achievement of MDG 4 through strengthening the Primary Health Care Unit approach (PHCU) and the Health Extension Program (HEP). This goal will be achieved by improving linkages between health centres and health posts and the performance of health extension workers and Health Development Party (HAD), to improve antenatal, intrapartum, and newborn care through

¹ The Primary Health Care Unit consists of a health centre together with the surrounding satellite health posts

² The use of comparison areas has been proposed by MoH leadership and will be adopted provided consensus with the Technical Working Group is agreed in August 2013. We will seek comparison areas where CBNC roll-out is planned to be as late as possible, and our evaluation will compare changes from baseline in phase 1 areas with changes from baseline in late-phase-2 areas.

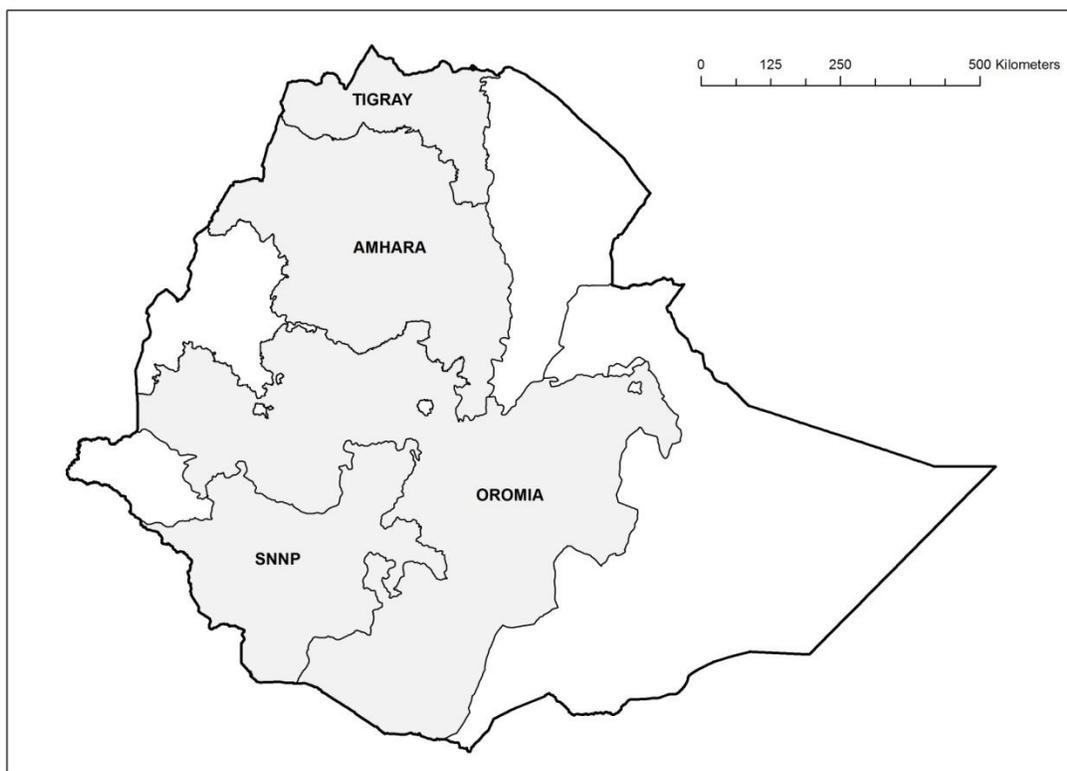
³ The Ethiopia Demographic and Health Survey (EDHS), 2011.

the “four Cs” (1) prenatal and postnatal **Contact** with the mother and newborn; (2) **Case-identification** of newborns with signs of possible severe bacterial infection; (3) **Care**, or treatment that is appropriate and initiated as early as possible; and (4) **Completion** of a full 7-day course of appropriate antibiotics. CBNC implementation will involve the scaling-up of community based MNH services including:

- Early identification of pregnancy
- Provision of focused antenatal care (ANC)
- Promotion of institutional delivery
- Safe and clean delivery including provision of misoprostol in case of home deliveries or deliveries at health post level
- Provision of immediate newborn care, including application of chlorhexidine on the cord
- Recognition of asphyxia, initial stimulation and resuscitation of the newborn baby
- Prevention and management of hypothermia
- Management of pre-term and low birth weight neonates, and
- Management of neonatal sepsis and very severe disease at community level.

Operationally, implementation of CBNC will further strengthen the coordination among the HEP, iCCM and the HDA platform to deliver MNH services, especially community based sepsis management which will be introduced in a phased manner. The CBNC programme will be implemented in seven zones across four regions of Ethiopia (Amhara, Tigray, Oromia and SNNP) by the end of 2013 as a proof of concept (Phase-I) (Figure 1). This initiative will then be scaled-up to the remaining zones in the four regions in 2014 and beyond (Phase-II), and will be refined on the basis of learning and experiences from the evaluation in the initial seven zones.

Figure 1: Four regions for CBNC Phase-I) implementation in Ethiopia.



2.2 Community-Based Newborn Care Implementation

CBNC will be implemented in two major phases. Phase-I will be implemented in all the woredas and PHCU of seven selected zones from the agrarian regions namely: Amhara (East Gojam zone), Tigray (Eastern zone), Oromia (North and East Shewa zones) and SNNP (Wolayita, Gurage and Sidama zones) (Figure 2). In these seven zones a total population of over 11 million will benefit from the interventions, with 2.6 million women of reproductive age and almost 400,000 expected deliveries expected per year.

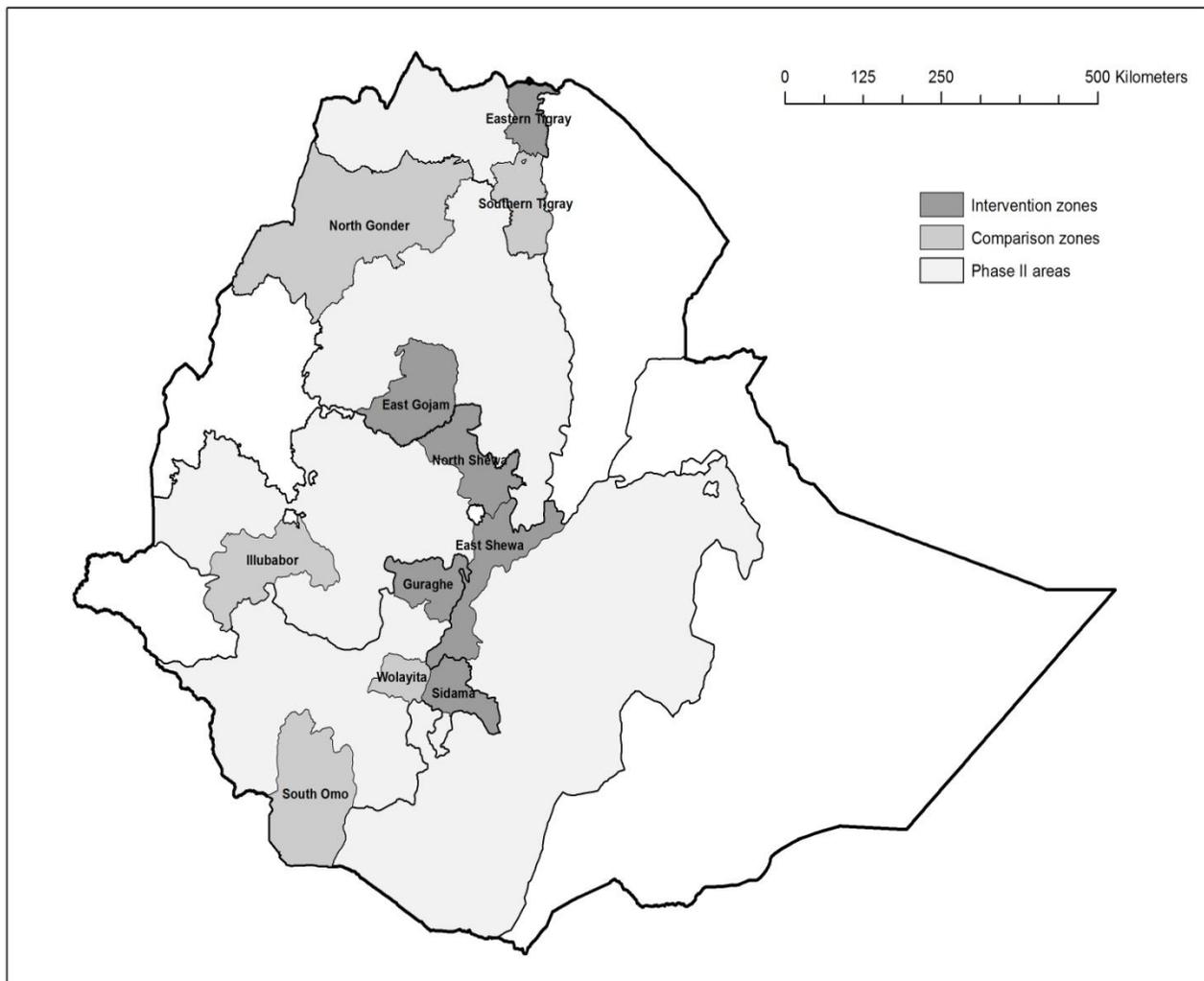


Figure 2: Intervention (dark grey) and comparison (light grey) zones selected for CBNC Phase-I implementation.

The CBNC programme in Ethiopia has the following objectives:

1. To further strengthen the PHCU approach and the Health Extension Program by improving linkages between health centres and health posts and the performance of the health extension worker, to scale up community based MNH services including introduction of newborn sepsis management;
2. To strengthen the capacity of health centres in providing quality maternal, newborn and child health services;
3. To further strengthen logistics and information systems within the PHCU context;

4. To improve maternal and newborn care practices and care seeking through the HDA and other existing effective community mobilization mechanisms; and
5. To draw experience and lessons from the initial phase to inform the scale-up phase.

The major activities for Phase-I include preparation of training guides and supporting training materials for health workers, HEWs and the HDA, cascaded training, regional and zonal level orientation, orientation of the HDA on CBNC, follow-up after training and regular supportive supervision, Performance Review and Clinical Mentoring Meetings (PRCMM) and procurement and distribution of essential supplies and drugs as well as operations research.

Building on learning from the implementation of CBNC in the seven Phase-I zones, there will be a high-level review meeting in December 2013. This meeting is expected to come up with a scale-up plan for how CBNC could be implemented at scale based on learning from the seven zones.

According to the planned scale-up of CBNC, Phase-II, a regional level training of trainers will be organized from January to March 2014. The HEWs' and health professionals' training, including post training follow-up, will be done from April to December 2014. Performance review and clinical mentoring meetings will be carried out side by side with rollout trainings from May 2014 to February 2015.

3. Objective and evaluation questions

3.1 Objective

The objective of the CBNC evaluation is to gather, analyse and synthesise evidence to determine whether and how community-based newborn care in four regions of Ethiopia leads to increased coverage of critical interventions along the continuum of care, reflecting the nine programmatic components.

3.2 Evaluation questions

The primary evaluation questions are:

1. What is the effect of CBNC on coverage of key MNH interventions along the continuum of care at the health post, health centre and household levels, reflecting each of the nine components of CBNC?

This question will be answered through estimating the difference in the coverage change over time between intervention and comparison areas, adjusting for confounding / contextual factors.

2. What is the process by which beliefs, attitudes and care seeking for newborn illness are addressed by CBNC at the household level?

This question will be answered by a qualitative study with families, HEWs and HDA.

3. What are the CBNC processes through which HEWs and the HDAs deliver the four Cs and their respective key components?

This will be answered by a qualitative study of key CBNC workers (HEWs and HDA).

4. What is the quality of CBNC services provided by HEWs at the PHCU level?

This will be answered by the midline survey and the qualitative study of CBNC workers.

The evaluation will further address the following questions:

- Will complete and sustained implementation of CBNC in the seven Ethiopian zones over a period of 20 months lead to:
 - A ten percentage point increase in antenatal care coverage (ANC)
 - A twenty percentage point increase in skilled birth attendance (SBA)
 - A ten percentage point increase in postnatal care coverage (PNC)?
- Will complete⁴ and sustained implementation of CBNC in the seven Ethiopian zones over a period of 20 months lead to a 25 percentage point increase in the completion of treatment of neonatal sepsis?
- Will complete and sustained implementation of CBNC over a period of 12 months be associated with improved functioning of PHCU, HEWs, the HDA and better health seeking patterns of families?
- Will CBNC reach the poorest and most vulnerable households at least as well as it reaches the least poor?

4. Methods

4.1 Design

The evaluation design includes baseline and endline coverage surveys of key behaviours and interventions at household level in intervention and comparison areas; a midline survey to examine supply-side factors at PHCU level, including health centres, health posts, HEW, and the HDA; two qualitative studies, to provide an in-depth understanding of the perspective of health care providers and families, and the adaptive behaviours needed for CBNC, and tracking of contextual factors.

Evaluation of CBNC will show the extent to which sepsis management through the health extension programme in Ethiopia is scaled-up, and the extent to which evidence-based life-saving behaviours and interventions at household level are improved as a result of CBNC.

4.2 Key research activities

The CBNC Phase-I evaluation study encompasses eight major research activities conducted between June 2013 and March 2016:

(1) foundational work, including development of a process framework and a detailed evaluation plan (June – August 2013);

(2) baseline household survey in intervention and comparison areas to measure the coverage of critical MNH interventions reflecting the nine programmatic components of CBNC in seven intervention and four comparison zones (October 2013 – February 2014);

(3) qualitative study at household level (October 2013 – February 2014);

⁴ Complete CBNC implementation = all 4 Cs are being implemented and functional simultaneously
CBNC Household Questionnaire – October 2013

(4) midline survey to reflect supply-side factors at health centre, health post, HEW and HDA level (September 2014 – January 2015);

(5) qualitative study at CBNC worker (HEW and HDA) level (October 2014 – January 2015)

(6) endline coverage survey including households and health providers in 2015 to enable change in intervention coverage to be measured (September – December 2015);

(7) synthesis and dissemination of findings (September 2015 – March 2016).

4.3 Overview of baseline, midline and endline surveys

Baseline and endline coverage surveys will be carried out in a representative sample of households in 2013 and 2015 and among the health workers in the health facilities serving these households. Developmental field work for the evaluation started in June 2013. The evaluation of CBNC Phase-I will be carried out in all seven implementation zones and four comparison zones simultaneously. The net change in coverage indicators will be based on comparing births from July 2012 to June 2013 (baseline birth cohort) with births from July 2014 to June 2015 (endline birth cohort) in CBNC intervention and comparison zones. The surveys will be 20 months apart in order to be able to observe changes in coverage indicators due to CBNC implementation that have both statistical and public health significance. Further information on the survey tools, including informed consent, is given in Annex 1 and 2.

The baseline and endline surveys will use multistage cluster sampling at the woreda, PHCU and household levels. The coverage of all nine components of the CBNC package will be assessed. The process of CBNC implementation includes finalization of training materials, training of trainers, training of health staff, and the first cycle of Performance Review and Clinical Mentoring Meetings (PRCMM). At this point the intervention will be fully in place at community level. The first cycle of PRCMM is expected to be no sooner than September 2013, and the timing of the baseline survey will coincide with this point of project implementation.

The midline survey will be at the facility level and include performance evaluation of HEWs and the HDA. The midline survey will focus on assessing overall CBNC performance and quality of CBNC services provided to sick children by HEWs at the PHCU level.

4.4 Household and frontline worker surveys at baseline and endline

a. Study population

The household study population comprises 500 women aged 13-49 who have given birth within the previous 3-15 months from a representative sample of 5,200 households in the seven implementation zones and a similar sample of 500 women (5,200 households) from comparison area zones.

The frontline worker survey will identify and interview health staff from the primary health care unit (PHCU) providing newborn care to the household study population (including health posts and primary health centres). In addition, data will be collected from the HDA (leaders of a network of 5 households) residing in the household study population.

A health centre survey will also be conducted, which will include a record review of attendance for sick newborns, an inventory of CBNC related equipment and supplies and a list of staff employed at the centre, their training and supervision.

b. Sample size

The sample size calculations for the household survey are based on detecting a change in the coverage of key interventions over the time of the study that can be attributed to the CBNC package. The total fertility rate in Ethiopia is estimated to be 4.8 (Ethiopia DHS preliminary report, 2011), suggesting that a cross-sectional survey will find one woman aged 13-49 who had a live birth in the previous 3-15 months in 10% of all households. The proposed sample size (10,400 households) will allow us to detect differences in coverage rates between intervention and comparison areas of at least 10 percentage points in key interventions, including antenatal care (ANC), skilled birth attendance (SBA), and post-natal care (PNC), with 80% power, 5% significance and assuming a design effect of 1.4 and 90% completeness (table 1).

Table 1: Number of births needed to detect 10-20% changes in selected indicators along the continuum of care. [A 10,400-household survey will include approximately 500 live births in intervention areas and a further 500 in comparison areas]

	Sample Indicator	Expected level at baseline*	Sample size** (births in previous 3-15 months) in intervention and comparison areas to detect percentage point increases of:		
			10	15	20
ANC	Attended ANC 4 or more times during pregnancy	19%	440	206	120
PNC	PNC within 48 hours	6.5%	243	125	78
SBA	Assistance at delivery from a trained health professional (including HEWs)	11%	323	158	96
	Assistance at delivery from a trained health professional (excluding HEWs)	10%	306	151	85
	Facility delivery	10%	306	151	85

* The Ethiopia Demographic and Health Survey (EDHS), 2011.

**Assuming design effect of 1.4, 90% completeness

Similarly we would expect 5-10% of the infants born to the interviewed women to have had sepsis within 30 days of their birth. This means that in the household survey we would interview between 50 and 100 mothers of infants who had sepsis and were born July 2012-June 2013. Table 2 shows the (absolute) difference in correct treatment of sepsis that we would be able to detect between intervention and comparison areas with 80% power and 5% level of significance. No design effect (or attrition) is allowed for at this stage.

Table 2: Absolute percent difference in correct treatment of sepsis to be detected between intervention and comparison areas with 80% power and 5% level of significance.

	50 babies (25 intervention; 25 comparison)*	100 babies (50 intervention; 50 comparison)*
Baseline rate of detection and treatment of neonatal sepsis (%)	Detectable difference (percentage points)	Detectable difference (percentage points)
1	27	16
5	31	20
10	35	23
20	38	26

* No design effect (or attrition) is allowed for at this stage

c. Sampling strategy

Level	Associated surveys
Region	N/A
Zone	N/A
Woreda	N/A
PHCU	Health centre survey including head of health centre (2 for each selected woreda)
Health Post	Health post survey including questions for HEW and HDA (1 for each selected PHCU)
household	50 household surveys (1 household cluster for each selected PHCU)

Stage 1 – selection of woreda

The following procedures refer to the CBNC implementation area; the same procedures will also be applied to the survey comparison area sampling frame.

There are 104 woreda in the seven zones in the CBNC implementation area.

52 woreda will be selected from the 104, stratified by zone. A list of all woredas by zone will be produced and stratified random sampling will be used to select half of the woreda from each zone (52). The sample will be selected using the random sampling procedure in Stata 13.

Stage 2 – selection of PHCUs

Once the 52 woredas have been selected, random sampling will be used to select 2 PHCUs from each woreda. This process will be carried out in Stata 13.

Stage 3 – selection of health posts

Once the PHCUs have been selected, a list of all health posts in each PHCU will be produced and simple random sampling will be used to select one health post from each PHCU.

In each of the randomly selected health posts, interviews will be conducted with an HEW. In health posts where there are two HEWs, where possible, the survey supervisor will interview the most senior HEW, otherwise the HEW will be randomly selected. In addition three HAD 1-5 leaders will be randomly selected and interviewed.

Stage 4 – selection of Gotes

Once a health post has been selected, a list will be produced of all Gotes which are served by that health post. Details of Gotes, and permission to carry out the survey within them, will need to be obtained from woreda and kebele administrative officials. Simple random sampling will then be used to select one Gote which is served by that health post.

Stage 5 – selection of households

Random sampling will be used to select 50 households from the selected Gote. Sampling will take place on the first day that the enumeration teams visit the Gote.

1. All households in the selected Gote should be numbered upon arrival in the Gote
 - Identify/estimate the general north-western area of the Gote
 - Walk to the house at the north-western area; the enumerator will write with chalk the assigned number of the house (1 to maximum number) on part of the house that is visible and unreachable by children. Number all households in a way that would differentiate this survey from other surveys: **LSJ-01/2012, LSJ -02/2012, LSJ 03/201** etc...This will also help **supervisors to identify the households** easily while checking enumerators' work.
2. If the selected Gote has fewer than 50 households, the nearest households outside the Gote will also be visited for interview to make the total up to 50.
3. If the selected Gote has more than 50 households the households will be selected (without replacement) systematically from a list of all the households using a fixed fraction (the total number of households divided by 50).

d. Indicators

Maternal and child health (MCH) indicators based on the nine components of the CBNC package are shown in Annex 3. These indicators draw on the evaluation team's collaborative work with BMGF implementation grantees to harmonise indicators across the continuum of care, in consensus with the recommendations by the WHO and Partnership for Maternal and Newborn and Child health (PMNCH) and WHO.⁵ In addition to MCH indicators, socioeconomic indicators such as age, ethnic group and educational level will be collected. A list of indicators for the frontline worker and health

⁵ <http://www.countdown2015mnch.org/reports-and-articles/2012-report>

centre survey are listed in Annex 4 and indicators for contextual factors are shown in Annex 5. All indicators will be finalized after consultation with the TWG.

e. Questionnaire development

Questionnaires, based upon the agreed indicators, have been developed for conducting face-to-face interviews with household members, HDA volunteers, HEWs and health centre staff in each of the sampled PHCUs. The questionnaires are based upon previous surveys conducted by IDEAS in the four regions, with revisions specific to the CBNC programme based upon formative research conducted in July 2013. Questionnaires will be translated into Amharic, Oromifa and Tigrinya, back-translated into English, and field-tested prior to the surveys starting.

f. Recruitment, training and responsibilities of data collectors

Field data collection will be carried out by JaRco, with support from IDEAS staff in Ethiopia and London. Approximately 160 data collectors (enumerators) will be recruited locally by JaRco, and will be managed by 40 data supervisors, with each supervisor having responsibility for four enumerators. Enumerators will have language skills appropriate to the area(s) in which they will be working. Prior to the surveys enumerators and supervisors will receive 7 days of training in data collection specific to the type of surveys (i.e. household, facility and frontline worker).

Each sampled PHCU will be allocated a unique three-digit code. Each sampled sub-village within a PHCU will then be allocated a numeric code unique within that PHCU, and each sampled household within a sub-village will be allocated a numeric code unique within the sub-village. Combining the PHCU, village and household codes will therefore provide a unique identifier for each household. Similarly each health facility and front-line worker will be assigned a unique ID which will be a combination of PHCU number and a worker/facility number which will be unique within that PHCU.

Within the catchment of each PHCU it will be the responsibility of the supervisor to meet with kebele leaders in order to obtain permission to conduct the surveys within their kebele.

Each survey cluster will be allocated a “cluster envelope” which will be the responsibility of the cluster supervisor to complete. This will include a summary of all activity in that cluster, all completed consent forms and any data correction sheets.

For all surveys the enumerators will record participant responses onto paper questionnaires during the course of each interview. Data will be numerically coded where appropriate. Survey questions and data-collection instructions will be given in the relevant local languages (Amharic, Oromifa and Tigrinya), and free-text answers will be recorded in local languages and translated into English after data collection. Dates will be recorded using the Ethiopian calendar and converted to the Gregorian calendar after data collection.

g. Field procedures

1) Field procedure-household survey

Households will be sampled by enumerators when they arrive in the PHCU catchment area as described in section 4.4 c). Full instructions on how to do this will be given in the field manual. Each sampled household will be visited by one enumerator, and it is estimated that each enumerator will visit up to [3] households on each day of data collection. Taking into account travel time, the total time required for the household survey is estimated to be six weeks.

On first arriving at a sampled household the enumerator will introduce him/herself to the household head, and then seek written informed consent to conduct the survey interview, using a standard participant information sheet and consent form. In instances where the individual is unable to write, fingerprints will be taken as a signature.

If consent is given the enumerator will then collect socio-demographic data about all residents of that household from the household head, including those who are not present at the time. Each resident will be allocated a numeric code by the enumerator which, when combined with the PHCU, village and household codes, will provide a unique identifier for that individual. The enumerator will also collect data relating to the household itself (i.e. building construction, sources of drinking water, toilet facilities, assets for SES indexing and education of level of household head).

Women aged 13-49 will be identified from the socio-demographic data. Eligible women who are present in the household at the time will be asked for informed consent. Assuming consent given, data will be collected on each one of the completed pregnancy outcomes (their "birth history"), with additional questions for women who had at least one live birth in the previous 3-15 months. If any eligible women are not present in the household at the time of the first visit, the enumerator will make up to two further visits to the household to interview the women and obtain their birth histories.

II) Field procedures- health Centre

The health centre in each of the selected PHCUs will be visited. At each of these centres, the survey supervisor will fill in the questionnaire with the aid of the person in charge. The survey supervisor will also list all health posts in the selected PHCU and randomly select one health post for a health centre interview. The supervisor will then conduct the health centre survey with the aid of the HEWs. Details about survey procedures for the health centre will be included in the field manual.

III) Field procedures – health post survey including HEW and HDA interviews

In each of the randomly selected health posts, interviews will be conducted with HEWs. In health posts where there are two HEWs, where possible, survey supervisor will interview the most senior HEW. In addition, data will be collected from the HDA 1 to 5 leaders. Details about survey procedures for front-line workers will be included in the field manual.

h. Data quality assurance in the field

I) Daily questionnaire checking

At the end of each day enumerators will hand their completed questionnaires to their supervisors, who will carry out a preliminary check of each questionnaire for data completeness and accuracy. Any issues identified by the supervisors will be discussed with the relevant enumerator(s) and, if required, a data correction sheet completed. All issues should be resolved before leaving the cluster.

II) Random re-interviewing

At each cluster, the supervisor will randomly re-interview five households, one front-line worker and one health centre. Questions asked at re-interview will be selected from those where answers are not likely to have changed since the original interview and where the interviewer is required to have followed through, e.g. questions incorporating a possible skip pattern. Where discrepancies arise, the enumerator and his/her supervisor will return to the enumeration site to address them as needed. Corrections will be made to the original paper questionnaire.

III) Spot-checks

Supervisors will accompany enumerators on survey visits, at random times and without warning. At each PHCU level, supervisors will aim to accompany enumerators on at least two different household interviews and one front-line worker and health centre interview. The supervisor should observe the interviewer's work and provide immediate feedback to the enumerator about his/her performance.

i. Data entry, checking and storage

All questionnaires will be transported to Addis Ababa, to be entered into CSPro survey software at the JaRco offices. Each questionnaire will be entered into the software twice, by two different members of the data-entry team. The two electronic versions of each questionnaire will be compared and reconciled by a JaRco data supervisor. Range and consistency checks will also be carried out on the data, and values which appear to be out of range or inconsistent will be raised with the appropriate survey supervisor for checking where possible.

At the beginning of each week questionnaires which have been double-entered, reconciled and checked will have their data transmitted as CSPro text files to the IDEAS Data Manager at the LSHTM. The files will be transported in encrypted format via the LSHTM secure web server (<https://sfx.lshtm.ac.uk>). The data will undergo further checks before being incorporated into standard monitoring reports which will provide an update of survey progress and a preliminary analysis of the data. These reports will be circulated each week to the CBNC survey management team.

Paper questionnaires which have had their data entered into CSPro software as described above will be stored securely at the JaRco offices for a period of three years. Electronic data at JaRco will be stored on a central secure server; backups will be kept on an external hard drive kept in a secure fire-proof cabinet, and on CD-R which will be stored in a separate office. Backups will also be stored on the secure data server at the LSHTM.

j. Quantitative data analysis

Household surveys

At baseline all indicators (and other factors) will be tabulated by area (intervention/comparison). No significance tests will be performed to test for differences at baseline. Descriptive statistics for continuous variables will include the mean, standard deviation, median, range and the number of observations. Categorical variables will be presented as numbers and percentages.

The primary statistical analysis will be carried out at the individual level and will account for clustering.

The impact of the CBNC programme on the coverage of pre-specified indicators (Annex 3) will be estimated through mixed effects models with a random effect for cluster to account for correlations among women in the same cluster. Fixed effects will be area (intervention vs comparison), time (follow up versus baseline) and the interaction between area and time. The key effect of interest is the interaction, which estimates the change from baseline to follow up in the intervention area relative to change in the control area (analogous to a difference in differences approach).

At follow up, the results and differences from baseline will be tabulated by area and presented with the estimated effect of the CBNC programme and 95% confidence interval.

A confirmatory cluster level analysis will also be carried out.

Multiple Comparisons/Multiplicity

All significance tests will be interpreted with caution due the large number of outcomes. Greater weight will be given to consistency in the findings, than to single small p-values.

Adjustments for Covariates

All analyses will adjust for confounders, chosen from among contextual factors that change over time, by assessing whether the adjustment changes the effect estimate by 15% or more.

Dropouts and Missing Data

All missing data will be chased at the time of data collection. The sample size calculations allow for 10% missing data. Unless there is considerably more missing data than that allowed for, no formal statistical methods will be used to account for missing data in the analysis.

Frontline worker and health centre surveys

Results from the baseline frontline worker and health centre surveys will be tabulated by area, descriptive statistics for continuous variables will include the mean, standard deviation, median, range and the number of observations. Categorical variables will be presented as numbers and percentages.

The primary statistical analysis will be carried out at the health centre level and will account for clustering. The approach to analysis will be the same as for the household surveys.

At follow up, the results and differences from baseline will be tabulated by area and presented with the estimated effect of the CBNC programme and 95% confidence intervals.

4.5 Qualitative study at household level

This qualitative study, to be conducted in 2013, will involve several steps including formative research to formulate and finalise topic guides through literature review and field visits, training of field researchers, pilot testing of topic guide, data collection and analysis.

Research question:

What are the CBNC processes through which beliefs, attitudes and care seeking for newborn illness are addressed at the household level?

To address the above question, we will use Focus Group Discussions (FGDs), In-Depth Interviews (IDIs) and Key Informant Interviews (KIIs) in both intervention and comparison zones. Combining the three data collection methods improves the persuasiveness of an argument, answers different evaluation questions and triangulates the information gathered from different the types of participants. Furthermore, utilizing the different qualitative data collection techniques will reduce the chance of bias and provide a comprehensive understanding of the topic.

a. Theoretical framework

For the qualitative work, we developed a framework based on existing theoretical health behaviour models, which explain the characteristics of a population and factors that influence care-seeking behaviour. This conceptual framework draws on diverse models, including the Sheeran and Abraham (1995) health belief model and the Andersen's (1995) initial and Phase II model. The Sheeran and Abraham model takes into account demographics, psychological characteristics and how these influence beliefs and attitudes that lead to behavior change, while the Anderson's model addresses other external factors that influence health care seeking behaviour.

In the context of this study, there are several factors that may influence care seeking for newborn illness at the household level. These include the demographics such as age, religion, culture, knowledge, information and education. Along with psychological characteristics such as personality and peer pressure, demographic factors have an impact on women's beliefs, attitudes and motivation for taking action (care seeking). Other factors that affect health seeking behavior are cues such the influences of HDA, HEW and family, the availability of health facilities, health workers, distance, cost and quality of service (Annex 6).

b. Study population

The study population will include 72 individuals from the intervention and comparison PHCUs located in the four regions (Table 3). The potential interviewees will be identified based on a purposeful and snowball (Cascade) sampling technique where the selection criteria will follow the PHCU hierarchy structure. The sampling will start at the health center, followed by the health post level, and then the community level. The selection criteria for each step is detailed below:

Woreda

-Woreda level official who actively participate in programmatic implementation of MNCH programs and can speak knowledgably about barriers to health care seeking from the programmatic standpoint

Health Center

-Health Center manager who has a role in the programmatic implementation of MNCH programs and can speak knowledgably about barriers to health care seeking from the programmatic standpoint

-Health center staff who supervise the HEWs on a monthly basis and those who have the ground-level knowledge about MNCH program implementation, challenges and overall care seeking practices

Health post

- HEWs who have been working in the community in the past year and are actively reporting to the health center on a monthly basis, who have the awareness and knowledge of the communities they work in, and understand the nuance of cultural practices, enabling and challenging factors to health care seeking behaviors in their respective communities.

Community level

- HDAs who report to the health post on a monthly basis and can speak on the role of their work and the cultural practices in place, as well as the barriers and enabling factors for health care seeking

-Women (those who recently gave birth) at the household level who would potentially utilize the health facility services

In each level we will utilize different qualitative techniques as follows;

I) Key Informant Interviews (KII)

A series of open-ended questions will be prepared and posed to decision makers at the district level, including woreda health officials, kebele managers and religious leaders. The interviews will be in-depth and semi structured. This group will provide information on the general context of care seeking behaviour for newborn illnesses, as well as care seeking behaviour for ANC, delivery, and PNC. Types of services available, existing supervisory structures, referral systems in place and implementation of other MNH related programmes will also be explored. KIIs will guide the framework for the FGDs and IDIs with health centre staff members, HEWs, HDAs and women in the community.

II) Focus Group Discussion (FGDs)

A series of discussion guides will be utilized to facilitate FGDs among selected groups at the health facility and community level. At each level, five to eight members will participate in a discussion to formulate common themes. FGDs will be held with each of the following:

- Health Centre Staff, (HEW supervisors): The discussions will consist of health service provisions (ANC, PNC, SBA and care seeking for newborn illness), supportive supervision, working relationship with HEWs/HDA, and cultural and traditional practices in the community.
- Health Development Army (HDA) members: discussions with the HDA will consist of understanding their role in promoting and referring community members for ANC, SBA, PNC and care seeking for newborn illness. FGDs will also explore the challenges faced by HDA as well beliefs and attitudes in the community that affect uptake of CBNC services.
- Pregnant and recently delivered women: similarly FGDs will be held with pregnant and recently delivered women between the ages of 13-49. Discussions will focus on cultural practices, beliefs and attitudes affecting health seeking behaviour along the continuum of care and care seeking for newborn illness. The decision making processes affecting utilization of MNH services will also be explored.

III) In-depth interview (IDIs)

In-depth interviews will be conducted at the facility level with HEWs and health centre managers. The interviews will be conducted with one HEW in each of the health posts (up to five health posts) under the selected health centre's catchment area. IDIs will address the communities' beliefs, attitudes and care seeking practices for ANC, SBA, PNC and newborn illness. Moreover, their role in their community, supervision, referral system and challenges will be explored.

c. Sampling strategy

On the assumption that there are variations between the different regions in terms of cultural practices, attitudes and belief systems that affect health seeking behaviour, we propose to conduct this qualitative study in all four regions. The CBNC Household Questionnaire – October 2013

study will be conducted in comparison and intervention zones in each of the four regions: Amhara, Oromia, Tigray, and SNNP. A purposeful sample method will be employed with the unit of sample being PHCU, which includes one health centre and all of the health posts (approximately five) within the health centre catchment area. We will also select HDA members and households that are located within each of the health post catchment areas. The sampling method will take into consideration the characteristics of the sites, or types of groups/persons to be interviewed. It will be flexible and iterative in nature, evolving as the study progresses.

d. Sample size

For the household level qualitative study, we propose to conduct 11 focus group discussions, six in depth interviews and two key informant interviews at each PHCU (table 3).

Table 3: Sample size for the household qualitative study detailing the total number of FGDs, IDIs and KIIs at the community, health post, health centre, kebele and woreda levels.

<i>Levels</i>	<i>Number of FGDs and Interviews in one PHCU</i>
<i>Community</i>	FGD 2 Household 2 HDA
<i>Health Post</i>	IDI 2 HEWs
<i>Health Centre</i>	FGD 1 HEW supervisors x 1 HC=1 IDI 1 Health centre manager x 1 HC=1
<i>Woreda</i>	KII 1 Woreda health office head x 1 woreda =1
Total 5 FGDs x 8 PHCUs = 40 3 IDIs x 8 PHCUs = 24 1 KII x 8 PHCUs = 8 Total = 72 for both intervention and comparison areas	

The inclusion criteria for the household level qualitative study is as follows:

- PHCUs with functional (open on the day of visit and have staff) health centres and health posts
- PHCUs that have an HDA system in place
- Health Centre staff members who have a role in the field of MNCH
- Stakeholders with the ability to speak about the woreda and kebele knowledgeably

- Women who have given birth in the previous three months.

e. Development of topic guides

A qualitative topic guide will be developed based on formative research and literature review of similar studies that use qualitative methods to evaluate community based maternal and newborn health interventions. Formative research will involve site visits and meetings with woreda health officials, health centre staff members, HEWs, and HDA leaders to discuss the processes involved in providing ANC, SBA, and PNC. Additionally, processes for identifying sick young infants and providing treatment or referral, and ensuring completion of treatment will be discussed. Household visits will be conducted to understand care seeking behaviours of women in the community. Information obtained will be used to formulate the protocol and modify the data collection tools for relevance and appropriateness. All topic guides along with the consent forms will be translated to the relevant language (Annex 7 and 8).

f. Qualitative team

The qualitative study team will consist of the qualitative lead, four interviewers and four note takers. One interviewer and one note taker will be assigned to each of the four regions. Additionally, the IDEAS country coordinator will manage the study across the four regions, and the qualitative lead will oversee the data collection and act as a liaison between the field team and researchers at JaRco and IDEAS.

g. Training of field staff and pilot testing

JaRco, along with the qualitative lead, will recruit and train interviewers and note takers. Training will last for four days. The first two days will focus on the aims and methodology of the household level qualitative study and a thorough review of the topic guide. Once all personnel have adequately practiced the recording techniques and feel comfortable with their performance, interview simulations and exercises will be conducted to ensure that the team has the skills to collect high quality data. On the third day, the qualitative study team will pilot-test the topic guides through interviews and FGDs with HEWs, HDAs and women in the community. Pilot interviews will be conducted in districts (woredas) near Addis Ababa that are comparable to the planned study areas. On the last day of the training, the study team will refine the qualitative tools based on the results of the pilot test.

Overall, training will cover the following key topic areas:

- Administrative issues
- Study objectives
- Organization of the study team and responsibilities
- Sampling procedures
- Logistics management
- Data collection, recording, and standardization of procedures
- Ethical handling of notes and recordings
- Communication with supervisor and IDEAS country coordinator
- Pre-test of the data collection.

A field manual will be utilized to ensure that the qualitative lead and interviewers are coordinating in a manner that facilitates collection of data on the main objectives and in a similar manner across all the study sites. Field manuals will

be provided to the team for reference during the fieldwork. Job descriptions detailing the roles and responsibilities of each team member and expected day-to-day deliverables will also be provided.

h. Data capture and management

The main method of data capture will be using expanded field notes (Annex 9) with sound recordings. During each discussion and interview, note takers will capture important points using their own notes. The interviewers will complete the expanded field notes after each interview based on the notes they took along with the sound recordings to fill in gaps where required. The expanded field notes will be organized in major themes according to the analytical category, and should demonstrate important points and informative quotes to provide a full picture and context of the discussion. Using this approach will help in capturing data and at the same time conduct analysis simultaneously. Interviewers will also write up main interpretations and emerging hypothesis for further exploration. The digital sound recordings will be used for all interviews subject to agreement and consent with the respondent. This method will assist in backing up the interviews notes for capturing accurate information during the interview and discussion. Moreover, notes will also be used to populate a 'pre-analysis' template (Annex 10). Interviewers, with the assistance of note takers, will populate the templates on an ongoing basis. This will be an effective means for identifying major emerging themes while in the field, comparing accounts of different types of interviewees (i.e. household, HDA and frontline worker), triangulating data by identifying consistencies and inconsistencies across different interviewee accounts. They will be able to compare emerging themes and identify gaps that will be addressed in subsequent interviews. Regular de-briefing meetings will be held between the qualitative lead, interviewers and note-takers. They will discuss progress, identify emerging themes, and think through any necessary adjustments to the topic guide.

Data management

A standard referencing methodology format for qualitative data management will be in place for each interview. Each interview will have a specific identifier on each of the expanded field notes template forms, voice recordings and full transcripts.

Each interview will be assigned a unique reference based on the following:

_WoredaNumber_Kebele Number_ InterviewNumber_ IntervieweeType_ Interviewtype_ Date:

- **Woreda Number:** Number #01
- **Kebele Number: #01**
- **Interviewee number:** sequentially starting with 01 in each PHCU
- **Type of Person:** WO Woreda Official, KO Kebele Official, HEW Health Extension Worker, HDA Health Development Army, HH Household:
- **Interviewee type:**
 - FGD Focus Group Discussion
 - IDI In-depth Interview
 - KII-Key Informant Interview
- **Date:** day, month, year format ddmmyy

For example an in-depth interview held with woreda official in the first woreda and kebele on 1st October 2013 would be **01_01__01_WO_IDI_011013**

An excel log sheet will be developed to add information pertaining to each interview and the interview reference number will also be included. This will be a valuable tool for managing the data collection process, and will also serve as a useful record. One form for each team, depending on their assigned region, will be provided. Each team will be responsible for updating their forms and sharing these with the IDEAS/JaRco team in Addis Ababa on a regular basis.

All voice recordings, expanded field notes, pre-analysis templates, interview notes, log sheets and other related documentation will be stored in JaRco in a secure place/network space in order to maintain anonymity and confidentiality.

i. Data quality assurance

The interviewers and note takers will be provided with field manuals containing the necessary guidelines and documents to assist them in collecting quality data. A supervisor will work closely with each data collection team to ensure that the expanded field notes, pre-analysis templates, recordings, transcriptions and translations are appropriately completed. The supervisor will also assist in clarification of questions and ensure that emerging themes are followed up in subsequent KIIs, IDIs and FGDs.

Interviewers will be responsible for checking the transcription and translation of interviews and field notes. Both interviewers and note takers will be responsible for completing the expanded field notes directly after each interview. They will also contribute to field team de-briefings. Interviewers will also make some reflective notes after each interview considering the context and atmosphere of each interview, major emerging themes and possible adjustments to the topic guide or to the sample if appropriate.

Within 48 hours of the interviews, interviewers will email expanded field notes to the qualitative lead. Additionally, they will send updated pre-analysis forms every five interviews. The qualitative lead will review and comment on field notes within 24 hours of receipt and pre-analysis forms at regular intervals as they are populated. As a means of quality assurance, throughout the period of data collection, four randomly selected interviews from each of the four teams will be requested for translation and transcription.

j. Data analysis

IDEAS LSHTM staff will collaborate with JaRco qualitative lead members to analyze the qualitative data. This will involve undertaking a systematic thematic analysis of the qualitative data whereby *a priori* and emerging themes will be synthesized by tabulating them in a common analytic framework. It will also be important to adopt data triangulation and investigator triangulation approaches to enhance validity of the findings. Data triangulation involves cross-checking different interviewees' accounts for consistency, and in cases where accounts disagree, conducting further analysis or data collection. Investigator triangulation involves multiple analysts contributing to the analysis, and in cases where interpretations differ, data being re-examined before reaching an agreed interpretation.

Overall, the qualitative analysis will involve multiple stages:

- Note takers and interviewers will complete expanded field notes will be completed after each interview
- Pre-analysis templates will be regularly filled by interviewers and note takers to capture major themes with inputs from the qualitative lead;

- Regular debriefing sessions and brainstorming will be held to surface and agree upon major themes;
- Major themes will be drawn out and summarised in consultation with IDEAS and JaRco researchers; and
- An analysis workshop will be held in Addis Ababa involving the interviewers, qualitative lead, researchers from IDEAS and JaRco team members to synthesis and agree on main messages and triangulate different investigator interpretations.

4.6 Midline Quantitative survey

A midline survey will be conducted in 2014 to reflect supply-side factors at health centre, health post, HEW and HDA level. The survey will assess overall CBNC provision and quality of CBNC services provided to sick neonates by HEWs at the PHCU level. It will focus on performance evaluation of HEWs and the HDA and help establish the timing and pattern of any observed changes.

Research Question

What is the quantity and quality of CBNC services provided by HEWs and HDA at the PHCU level?

The midline survey will assess supply-side factors including availability of trained HEWs and HDA, equipment and supplies, supportive supervision and Performance Review and Clinical Mentoring Meetings (PRCMM), as well as quality of care provided by HEWs, and service utilization by sick newborns. Where possible, the survey will include HEWs adherence to treatment algorithms.

a. Study population

The study will sample functional PHCU's as primary units. Study participants will include:

- 1) HEWs providing sepsis treatment
- 2) ANC and PNC clients at health posts
- 3) Mothers or caretakers of sick newborns that come to health posts for consultations
- 4) HDA in the community.

b. Sampling Strategy

The sampling frame will be at the PHCU and will include all functional health centres and health posts and their respective frontline workers (HEWs, Health Centre staff), as well as HDA. Using stratified sampling all PHCUs will be listed and the selection of kebeles will be made using PPS sampling methods.

c. Study questionnaire development

Questions similar to the baseline front line worker and facility survey will be utilized, with slight modifications based on CBNC programme implementation. Additional thematic areas that will be addressed in the frontline worker and facility survey are as follows:

- *What is the knowledge level of HEWs and HDAs in regards to CBNC implementation?*
- *What is the degree of service provision for treatment for sick newborns with sepsis?*
- *What is the degree of supportive supervision and Performance Review and Clinical Mentoring Meetings (PRCMM) conducted in improving the services?*
- *What are methods used in mobilization of the community for provision of services?*
- *Has there been adequate equipment and supplies? And did this availability improve service uptake in*

providing treatment of sick newborns?

- *What is the level of knowledge of HEWs in treating sick newborn using treatment algorithms?*

d. Indicators

In addition to the supply-side indicators specified in the baseline facility and frontline surveys, the midline will develop indicators in the thematic areas listed below:

- Training of HEWs and the HDA in CBNC
- Availability of essential commodities (drugs, essential equipment and supplies)
- Supportive supervision and PRCMM
- Demand-generation activities
- Utilization of health posts/HEWs in treatment for sick newborns
- Quality of services provided by HEWs.

e. Development and pilot testing of questionnaires

The development and pilot testing of questionnaires will be similar to the process described for the baseline survey.

f. Field operations: training, data collection, data entry, and data quality assurance

Field operations will be conducted in a similar manner as described for the baseline survey.

4.7 CBNC worker (HEW and HDA) qualitative study

Similar to the household level qualitative study conducted in 2013, the qualitative study, conducted at midline focusing on the CBNC worker level, will involve FGDs, IDIs and KIIs to address the following research question:

What are the CBNC processes through which HEWs and HDA deliver the four Cs and their respective key components?

The CBNC worker level qualitative study will describe the processes, facilitators and barriers for HEWs and the HDA in identifying pregnant women, providing ANC and PNC, promoting SBA, identifying sick young infants, providing referral and ensuring completion of treatment. Moreover, it will provide information on the potential change that occurred at the community level after implementation of the CBNC program and the factors that brought about the observed changes. Common themes that emerge from the qualitative data can inform programme improvement for Phase-II of CBNC implementation.

a. Study Population

Data will be collected from participants at the district (woreda), facility and community level. The study population will include kebele managers, woreda officials, health extension workers, health development army leaders and beneficiaries of the CBNC programme.

For each of the interviews and discussions, the interviewer will use a topic guide and a note taker will record comments and observations during the discussion

I) Key Informant Interviews (KII)

Semi structured open-ended questions will be prepared and posed to those stakeholders involved in the implementation of the CBNC programme (e.g. implementing partners, kebele managers, and woreda health officials). Information will be collected on the CBNC programme in place, the processes involved, and challenges encountered. KIIs will also address the changes observed in identification of pregnant women; provision of ANC, SBA and PNC; identification of sick young infants and provision of treatment/referral; and ensuring completion of treatment.

II) Focus Group Discussions (FGDs)

Focus group discussions at the mid-line survey will provide the context for CBNC implementation at the facility and community level. Discussions will be held with health workers (HEWs and HEW supervisors at the health centre) and female community members. FGDs will also be held among the HDA as this group is instrumental in the uptake of the CBNC programme. Discussions will address the processes for: early identification of pregnancy; promotion of ANC, SBA and PNC; identification of sick young infants and provision of treatment/referral; and ensuring completion of treatment. FGDs will also address facilitators and barriers for the above processes.

III) In-depth interview (IDIs)

In-depth interviews will be conducted at the facility level with HEWs and health centre managers. The interviews will be conducted with one HEW in each of the health posts (up to five) under the selected health centre's catchment area.

b. Sampling strategy and size

For the CBNC worker-level qualitative study, we will utilize similar sampling methods and sample size selection criteria as for the household-level qualitative study, described above.

c. Development of topic guides

The CBNC worker level study will use similar methods for developing topic guides as the household level qualitative study.

d. Field operations

The CBNC worker level study will use similar methods for training, pilot testing, data capture, quality assurance and analysis as the household level qualitative study.

4.8 Contextual factors

In order to explain and interpret changes in coverage attributable to CBNC, contextual data will be collected. Some of the contextual factors are expected to be confounders to implementation of CBNC. Both quantitative and qualitative means will be used to collect information on contextual factors: a) a well defined but limited set of contextual indicators (Annex 5) will be collected at the woreda level as a part of the baseline, midline and end line surveys, and b) semi-

structured interviews will be conducted with programme implementers and managers on an annual basis to assess context changes beyond baseline and identify specific challenges to CBNC implementation.

4.9 Analytical framework

The evaluation of CBNC will not only assess whether a large scale public health programme works effectively, but will also appraise why and how it works in order to provide recommendations for its effective national level scale up. A mixed methods approach will be used for both data collection and analysis. The primary data sources will include baseline and end line coverage surveys, a midline survey to assess provision and quality of care, and qualitative research at the household and CBNC worker level to describe health seeking behaviours and front-line worker performance. A variety of quantitative and qualitative analysis techniques will be used accordingly.

The overall evaluation report will synthesise the findings on each research question with a particular focus on:

- a) CBNC effectiveness: to assess the extent to which the purpose of CBNC phase-I has been achieved near the end of two years of implementation, through estimation of the impact of effect of CBNC on coverage of key MNH interventions;
- b) Quality: a description of the quality of core CBNC implementation processes at the service delivery level and recommendations to improve;
- c) Scale up: documenting learning for the sustainability of CBNC for implementation at national level. For the quantitative data, the change from baseline to follow up in the intervention area relative to change in the control area in core coverage indicators will be estimated to assess the effectiveness of CBNC phase-I across core coverage indicators.

The primary focus of the evaluation will be health outputs and outcomes, i.e. services delivered and received, and health behaviours (for definition of core indicators, see Annex 3). Neonatal mortality will not be part of the evaluation: this is addressed in the recently conducted COMBINE trial in Ethiopia by Save the Children.

Some comparison of the findings will be made at the regional level. However no comparison will be made by implementer type. Only regional identification will be revealed in analysis. Confidentiality will be maintained at the household, health centre and woreda level.

Due to its magnitude and numerous implementing partners, CBNC Phase-I is a 'multi site- multiple governance' project, so the evaluation requires in-depth understanding of how implementation varies in different contexts. The detailed data collection of programme implementation and contextual factors will also be carried out as a part of coverage surveys and by annual contacts with CBNC implementers and managers by the designated field teams.

Due to pre-existing differences in health system and population features, it is highly unlikely that comparison areas will be similar in terms of all baseline characteristics or contextual factors that change over time. Hence the effect of CBNC will be estimated through mixed effects models (as described in section 4.4 j) which allows for investigation and control of confounders, using information on contextual factors that change over time. The findings will also be synthesized and interpreted using evidence from the qualitative research conducted at household level, and the quality of CBNC care processes delivered by the FLW and at the PHCU level.

The baseline survey report will focus on coverage of key MNH interventions (nine components of CBNC) and newborn care practices between CBNC and comparisons groups. The findings will be described at the household, FLW and health centre level and will be primarily based on descriptive statistics.

The midline survey analysis will mainly focus on quality of care delivered for the nine CBNC components. It will not be possible to get reliable estimates of change in newborn sepsis incidence and treatment rates through endline and baseline surveys due to the limited sample size for this relatively rare event. The midline evaluation will focus on estimation of rates of correct diagnoses and treatment of severely sick newborns by HEW based on the adherence to standardized CBNC care and treatment algorithms.

A detailed qualitative inquiry will be conducted during the course of the evaluation to develop an in-depth understanding of CBNC implementation and will feed into the overall interpretation and synthesis of results, in the final evaluation report. Thematic analysis will be the primary qualitative analytical technique to evaluate three key phenomena: a) how care seeking needs of the family of a severely sick newborn are addressed by CBNC services, b) how Health Extension Workers (HEWs) and the Health Development Army (HDA) deliver the services related to all nine CBNC components and c) the quality of those services.

4.10 Limitations and steps taken to minimize limitations

There are a number of limitations to the household surveys.

The sample size is restricted to 10,400 households with 1,000 expected births over the relevant time period, which means that the power to detect differences between intervention and comparison areas could be limited for some indicators. For example, any indicator with a baseline prevalence of more than 25% needs more than 500 babies per area to detect a difference of 10%. In addition, the sample size calculations are based on realistic estimates of the design effect (1.4) and attrition (10%), however if the actual design effect was higher or attrition greater than 10% then again there is a possibility of too little power. However we believe that the parameters used in the calculations are conservative and not dissimilar from those found in previous surveys and therefore hope that we will have adequate power to detect reasonable effect sizes.

In addition women are being asked to recall details of births that happened between 3-15 months previously and it should be recognized that there may well be greater recall bias associated with births that were longer ago. However this bias should not be different between intervention and comparison areas.

There is also the possibility that implementation may not happen within the expected timeframe, or that it may not be complete and sustained, both of which will impact on the effect seen. However we are aware of the importance of interpreting all results with due care and appropriate dialogue with the implementing partners.

Finally, the small number of babies expected with sepsis at baseline and at follow up means that we will only be able to detect an effect due to the CBNC programme if the effect is large. This issue is compounded by potentially incomplete treatment records and recall bias related to treatment-seeking, drugs received and compliance with treatment. This is unavoidable given the relative rarity of the condition and may mean that the findings from this part of the study are primarily descriptive with formal statistical testing kept to a minimum.

The health post and health centre surveys are not subject to the same limitations of power (as the study was not powered around them); however poor record keeping and recall on behalf of CBNC workers (HEWs and the HDA) may mean that the findings are biased. However there is no reason to assume that these issues will differ between intervention and comparison areas and as such we feel that estimates of the effect of the CBNC programme will not be biased.

5. Deliverables

This section details the main content and timeline of the key deliverables (illustrated in Annex 11). It is important to highlight that the scheduling of qualitative research at household and CBNC worker level will be revisited with the TWG. The timing for the qualitative work will be assessed in terms of maturity level of CBNC implementation and the implementers' needs.

- Detailed evaluation plan, shared with the Technical Working Group (August 2013)
- A baseline report on coverage of key MNH interventions (nine components of CBNC) and newborn care practices (February 2014).
- A report on beliefs and attitudes on newborn illness and care seeking practice, and how these have been addressed by the CBNC program implementation (February 2014).
- A midline report on CBNC implementation at PHCU level (January 2015).
- A report on involvement of HEWs and HDA in CBNC (January 2015).
- A final report of the CBNC program evaluation in Ethiopia, including the effectiveness of the programme at the PHCU level with regard to: intervention coverage, behaviours and practices, utilization of CBNC services for neonates, and a summary of the dose response relationship between implementation strength and coverage change (March 2016).

6. Ethical Consideration

6.1 Risks / benefits to subjects

Risks to study participants for involvement in the CBNC evaluation are low. There may be emotional risks associated with discussion of sensitive questions regarding health and survival of mothers and children. Interviewers will be trained to minimize this risk. Participants will also be informed of their right to refuse answering any questions with which they are uncomfortable. Respondents will not gain any direct benefits by participating in the evaluation study. However, information obtained will be used to improve health service delivery in the community as well as at health facilities.

6.2 Costs and compensation

Respondents will not receive monetary compensation and they will not incur any out-of-pocket costs.

6.3 Confidentiality assurances

Sensitive and personal information on reproduction, health practices and child death will be collected from women of reproductive age. Confidentiality of every respondent will be guaranteed. Unique identifiers will be constructed for use of the questionnaire and no identifiers will be released. All questionnaires will be stored under lock and key, with access restricted to selected study investigators. Data collection and entry will be conducted by JaRco Consulting with technical assistance from IDEAS. All data will be stored on password-protected computers with access only to the investigators. All questionnaires will be destroyed after completion of the study. The data sets collected through the evaluation will be made available for public access two years after the major results are published.

6.4 Conflict of interest

There are no other gains from taking part in this study other than the normal scholarly gains.

6.5 Ethical clearance

The investigators will obtain a letter of approval from the Institutional Review Boards of the London School of Hygiene & Tropical Medicine, the Ethiopian Science and Technology Ministry and Oromia, Amhara, Tigray and SNNP regional health bureaus.

7. Dissemination plan

There will be dissemination activities associated with each of the deliverables of the project, outlined in section 5 above, targeted toward specific stakeholder groups. There will also be a comprehensive set of dissemination activities after final analysis and integration of the CBNC evaluation data.

Results from the CBNC evaluation will be promoted through the communications channels available to all components of the IDEAS project. This includes: the IDEAS website at <http://ideas.lshtm.ac.uk/>; Research Online (– an open access, searchable repository of LSHTM-authored research outputs), quarterly newsletters, IDEAS' twitter account, web and face-to-face seminars, learning workshops, LSHTM institutional publications and professionally designed and produced research reports and policy briefs. All communications activity will be supported by the IDEAS Communications Office.

In-country communications will be the joint responsibility of the IDEAS Communications Office and Ethiopia Country Coordinator. The Ethiopia Country Coordinator will lead the Ethiopia-based CBNC team in developing and maintaining regular communication with key stakeholders for the CBNC evaluation, in between the production of key outputs from the evaluation. The London-based CBNC leadership team will be present for key stakeholder meetings and dissemination events.

Records will be kept by the IDEAS Communications Office of all dissemination activities and outputs relating to the CBNC evaluation.

7.1 Regional

Dissemination of results at regional level will first be to the regional health bureaus for Amhara, Oromia, SNNP and Tigray. The CBNC evaluation team will send a written annual report to each RHB, summarizing the findings of the previous 12 months, and informing of plans for the coming year. Specifically, copies of the baseline survey report, midline survey report and endline survey report will be sent for approval by each regional IRB prior to wider dissemination.

Once the final study report has been approved by the RHB, a regional dissemination event will take place in each of the four regions. This will be planned and delivered in partnership with the regional governments of each region. Key stakeholders representing community-level, primary and secondary health care, government and NGOs will be invited.

7.2 National

Dissemination of results at national level will first be to the FMOH, the Technical Working Group (TWG) for the CBNC evaluation, and to the Ministry of Science and Technology. An annual progress report will be submitted to the Ministry

of Science and Technology, in addition to copies of the baseline survey report, midterm report and endline survey report. Submission of written reports will be accompanied by presentations to the FMOH, TWG and Ministry of Science and Technology, and further discussion as requested.

Wider dissemination activities of CBNC evaluation results will only take place once approval has been granted by the FMOH, TWG and Ministry of Science and Technology. These will include a major dissemination event on completion of the study, and interim dissemination events to share findings with key stakeholder groups as appropriate. CBNC implementing organisations are represented on the TWG, but discussions with each implementer regarding evaluation study findings will also be held on request. The CBNC evaluation team is open to suggestions by the TWG of relevant fora in which to present the study findings, in collaboration with TWG members, including federal government, where appropriate.

7.3 International

Research reports and policy briefs from the CBNC evaluation will be made available globally via the IDEAS website and LSHTM's Research Online. Academic and policy-relevant conference papers and peer reviewed journal articles will also be produced, in collaboration with members of the TWG where there is mutual interest to work together. Drafts of these publications will be reviewed by and approval sought from the TWG prior to publication.

8. Management and coordination

8.1 Evaluation team: management structure and responsibilities

The CBNC evaluation team is led by Dr Bilal Avan (clinical epidemiologist and IDEAS scientific coordinator), Dr Tanya Marchant, (epidemiologist) and Dr Joanna Schellenberg, (Principal Investigator of the IDEAS project). Fieldwork for the evaluation will be conducted by JaRco Consulting PLC, under the overall direction of Mr Tsegahun Tessema, Director. The CBNC evaluation is funded by the Bill & Melinda Gates Foundation. Ms Becky Ferguson, Program Officer, and Dr Win Brown, Senior Program Officer, are the key contacts within the foundation to whom the evaluation team reports.

In-country operations are coordinated by Dr Della Berhanu, IDEAS Ethiopia Country Coordinator, supported by a team of staff from LSHTM and JaRco Consulting PLC including:

1. Ms Feker Belete, Survey Coordinator (JaRco)
2. Mr Girmaye Dinsa, Survey Coordinator (LSHTM)
3. Mr Nolawi Taddesse, Qualitative study lead (JaRco)

In addition to the leadership team, the London-based LSHTM team includes:

1. Dr Liz Allen, Statistician
2. Mr Keith Tomlin, Data Manager
3. Ms Shirine Voller, Project Manager.

The full CBNC team meets weekly, with a call between London and Addis Ababa. The Ethiopia-based team has an additional weekly meeting, at which progress on all components of the CBNC evaluation is reported and issues discussed. Meetings between individual members of the CBNC team take place on an ad-hoc basis as required. The

team has a Gantt chart that outlines in detail the activities, timelines and milestones for the study. This is updated weekly by the Ethiopia Country Coordinator following input from any member of the team. All documentation relating to the CBNC evaluation study, both working drafts and final documents, is held on a secure web-based file sharing space called Teaming.

8.2 Coordination and communication with implementers

Dr. Della Berhanu, IDEAS Ethiopia Country Coordinator, is the focal contact point with the CBNC Technical Working Group (TWG) and individual implementers. She attends meetings of the TWG, accompanied by the CBNC evaluation leadership team or other members of the team as appropriate.

Annexes

Annex 1: Baseline survey consent forms

QUANTITATIVE INFORMED CONSENT-HOUSEHOLD

1. Participant Information Sheet

Good day. My name is ----- I am working in the research team organized by JaRco consulting firm and London School of Hygiene and Tropical Medicine as a data collector. I would like to ask you some questions about maternal and newborn health for some minutes. Before the questions I will provide you full information of the study so that you can decide whether or not to take part.

Project title

Study on the Health of Mothers and Babies.

Duration of the interview

It will take up to one hour for each interview.

Purpose of the Study

The overall purpose of this study is to improve the health of mothers and their babies. We want to find out how families get health care in their own homes, at health posts and at health centres, and about the type of care that they get. With this information we will be able to give advice to health authorities about health care activities that are successful, and those that need strengthening.

Confidentiality

I strongly assure you that your name and other identifiers will not be disclosed to anyone outside of the study.

Procedures

I would like to ask you questions about the types of health services you have received related to maternal, newborn and child health issues. You were selected to participate in this study because your knowledge and experience are important.

Risk and Benefits of the Study

By participating in this study and answering our questions you will not receive any direct benefit. However, you will help to increase understanding about Maternal, Children and Newborn Health services in Ethiopia. The results of this study will help to inform policy and practice. This study involves you giving information using questionnaires. We will keep your information in a safe place which can only be accessed by the study team. Therefore I want to assure you that your participation in this study will not involve any risks to you.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or to not answer any questions that you feel uncomfortable. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspect of your social life, and future medical care you should require or any other benefits to which you are entitled. If there is anything unclear or you need further information about, I am happy to provide it.

Whom to contact

In any case if you need any information. You can contact in the following address:
*The Federal Democratic Republic Of Ethiopian Ministry of Science and Technology,
National Research Ethics Review Committee Secretariat*

Address: P. O. Box 2490, Addis Ababa, Ethiopia
Tele: 0913906779, Fax: 251-011-1-562749
E-mail: nrerc2002@gmail.com

Principal Investigator: Feleke Fanta
Address: P.O.B 43107 Addis Ababa Ethiopia
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E-mail feleke@jarrco.info

JaRco consulting Firm Director: Tsegahun Tesema
Address: P.O.B: 43107 Addis Ababa Ethiopia
Tel: 0113724656/0113724657, Fax : 0113724655
E-mail : Tsegahun@jarrco.info

2. Declaration of the Volunteer Study Participant

I understand that the purpose of the study is to collect information regarding maternal, child and newborn health. I have read the above information, or it has been read to me. I have had the opportunity to ask questions and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate in this study and understand that I have the right to withdraw at any time without in any way affecting my social life or medical care.

Signature of Informant _____ Date _____

Name of Informant _____

Signature of Witness _____ Name of Witness _____

Signature of Data Collector _____ Name of Data Collector _____

QUANITATIVE INFORMED CONSENT SECTION-FRONTLINE WORKER

1. Participant Information Sheet

“Good morning /Good afternoon”

My name is ----- I am working in the research team organized by JaRco consulting firm and London School of Hygiene and Tropical Medicine as a data collector. I will ask you some questions about issues related to maternal and newborn health for some minutes. Before the question I will provide you full information of the study so that you will make an informed decision to my request.

Project title

Measurement, Learning and Evaluation Study on the Improvement of Health and Survival of Mothers and Babies in Ethiopia.

Duration of the study

It will take up to one hour for each questionnaire to be completed.

Purpose of the Study

The overall purpose of this study is to improve the health of mothers and their babies by improving policies and individual health practices.

The work being carried out has two main purposes. First, to find out more about the way in which families get health care in their own homes, at health posts and at health centres. In particular, for women and babies it is important to know how many times families get health care and how good that health care is. With this information we will be able to give advice about the type of families who need more help and the services that still need to be strengthened. Second, to find out more about the things that people are already doing to improve the health of mothers and babies. With this information we will be able to give advice about the activities that are successful, and those that need strengthening.

Confidentiality

I strongly assure you that your name and other identifiers will not be disclosed to anyone outside of the study.

Procedures

Specifically, I am going to ask you information about types of health services you have received related to maternal, newborn and child health issues. You were selected to participate in this study because you are believed to have significant knowledge and experience in issues relating to maternal, newborn and child health.

Risk and Benefits of the Study

By participating in this study and answering our questions you will not receive any direct benefit. However, you will help to increase our understanding about Maternal, Children and Newborn Health in Ethiopia. The result of this study will contribute in generating evidence and knowledge to inform policy and practice at national and global levels. This study involves your provision of information through pre-developed questionnaires and the organization will keep your data in a safe place which can only be accessed by the study team. Therefore I want to assure you that your participation in this study will not involve any risks to you.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or to not answer any questions that you feel uncomfortable. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspect of your social life, and future medical care you should require or any other benefits to which you are entitled. If there is anything unclear or you need further information about, I am happy to provide it.

Whom to contact

In any case if you need any information. You can contact in the following address:
*The Federal Democratic Republic Of Ethiopian Ministry of Science and Technology,
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Address: P. O. Box 2490, Addis Ababa, Ethiopia
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JaRco consulting Firm Director: Tsegahun Tesema
Address: P.O.B: 43107 Addis Ababa Ethiopia
Tel: 0113724656/0113724657, Fax : 0113724655
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2. Declaration of the Volunteer Study Participant

I understand that the purpose of the study is to collect information regarding maternal, child and newborn health. I have read the above information, or it has been read to me. I have had the opportunity to ask questions and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate in this study and understand that I have the right to withdraw at any time without in any way affecting my social life or medical care.

Signature of Informant _____ Date _____

Name of Informant _____

Signature of Witness _____ Name of Witness _____

Signature of Data Collector _____ Name of Data Collector _____

116	Interviewer: Does the respondent agree?	1 = Yes 2 = No- <i>end the interview here and move on to the next household.</i>	_
117	What is the ethnic group of the household head?	1 = Agew 2 = Amhara 3 = Bench 4 = Burji 5 = Dizi 6 = Gedeo 7 = Gurage 8 = Hadiya 9 = Keficho 10= Kembata 11= Konta 12 = Me'enite 13 = Oromo 14 = Silite 15 = Tigray 16=Welayita 17 = Other Ethiopian National Groups 18 = From two or more ethnic groups	_ _

Visits		1 st	2 nd	3 rd	Final Visit
Date (dd/mm/yyyy)		_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	Day _ _ Month _ _ Year _ _ _ _ Result _
Interviewer's name					
Result (Enter relevant code below)		_	_	_	
If not completed during this interview, when is the next visit (appointment)	Date (dd/mm/yyyy)		_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	
	Time				
Result Codes: 1. Completed 2. Partly completed 3. Postponed 4. Not at home 5. No-one competent to respond 6. Refused					

If refused end interview.

Now I want to ask you some questions about the characteristics of your household

Interviewer: In this section and throughout the questionnaire, please read out all the options to the interviewee UNLESS it is clearly stated 'Do not read list'.

119	What is the main material of the walls?	1 = No walls 2 = Natural materials (cane, wood, mud, straw) 3 = Stone with mud 4 = Stone/bricks with cement 5 = Other	<input type="checkbox"/>
120	What is the main floor material?	1 = Natural floor (earth/sand/dung) 2 = Rudimentary floor (wood/palm/bamboo) 3 = Finished floor (polished wood/vinyl/tiles/cement/carpet) 4 = Other	<input type="checkbox"/>
121	What is the main material of the roof?	1 = Thatch/grass or leaves 2 = Iron sheets or tiles 3 = Other	<input type="checkbox"/>
122	What kind of toilet facilities does your household have?	1 = No facility/bush/field 2 = Pit toilet/latrine 3 = Flush toilet	<input type="checkbox"/>
123	What is the main source of drinking water for the household? Do not read list	1 = Piped connection into house 2 = Piped connection into yard 3 = Public standpipes 4 = Boreholes 5 = Protected dug wells 6 = Protected springs 7 = Rainwater collection 8 = Surface water 9 = Open dug wells 10 = Unprotected springs 11 = Vendor provided water 12 = Bottled water 13 = Tanker	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
124	Do you do anything to the water to make it safer to drink?	1 = Yes 2 = No-GO to 127 3 = Don't know --GO to 127	<input type="checkbox"/>
125	If yes, what is the main thing you do? Do not read list	1 = Let it stand and settle 2 = Strain through a cloth 3 = Use water filter (ceramic/sand/composite/etc) 4 = Boil 5 = Solar disinfection 6 = Add bleach/chlorine 7 = Other 8 = Don't know	<input type="checkbox"/>
126	If OTHER, specify	Specify _____	
127	What type of fuel does your household mostly use for cooking? Do not read list	1 = Dung 2 = Firewood/straw 3 = Charcoal 4 = Kerosene 5 = Gas 6 = Electricity 7 = Other	<input type="checkbox"/>
128	Is the house connected to electricity?	1 = Yes 2 = No	<input type="checkbox"/>

In total, how many of the following items are owned by residents of this household?		Enter number of items (zero if none)	
	129	Wrist watch	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Add the household total for each item	130	Gold (in grams)	_ _ _
	131	A kerosene lamp/pressure lamp	_ _ _
	132	A bed	_ _ _
	133	Non-mobile phone	_ _ _
	134	Mobile phone	_ _ _
	135	Bicycle	_ _ _
	136	Car	_ _ _
	137	Radio	_ _ _
	138	TV	_ _ _
	139	Fridge	_ _ _
140	Do you own this house?	1 = Yes 2 = No	_
141	Does any member of the household own any agricultural land?	1 = Yes 2 = No-GO to 143	_
142	How many hectares of agricultural land do members of this household own?	Enter total number of hectares (If less than 1, Enter in decimals (example 0.5) Enter 9999 if hectares are not known	_ _ _ . _ _ _
143	Does this household own any livestock, herds, other farm animals, or poultry?	1 = Yes 2 = No-Go to Section 2	_
How many of the following animals does this household own?	For each: Enter number. If none, enter 0		
	144	Chickens	_ _ _
	145	Goats	_ _ _
	146	Sheep	_ _ _
	147	Donkeys	_ _ _
	148	Horses	_ _ _
	149	Mules	_ _ _
	150	Camels	_ _ _
	151	Milk cows	_ _ _
152	Bulls	_ _ _	

If there are no eligible women 13-49 in the household listing end interview here

Module 2

2. Identification of eligible women

Interviewer: These questions are to be asked of all resident women aged 13-49 who were listed. Ask to see eligible women from household listing in question 118. Start with the oldest eligible woman.

For each woman listed by the household head you must first complete the consent procedure (up to 204) before proceeding with the interview.

If unable to interview or complete the interview, state the reason and next appointment

Visits	1 st	2 nd	3 rd
Date (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _
<i>Interviewer's name</i>			
<i>Result (Enter relevant code below)</i>	_	_	_
<i>If not completed, next visit appointment date</i> (dd/mm/yyyy)	_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	
<i>If not completed, next visit appointment time</i>			

Result Codes:

1. Completed
2. Partly completed
3. Postponed
4. Not at home
5. No-one competent to respond
6. Refused

If at the third visit, you are unable to complete the interview, please move on to the next woman in the household or the next household.

If possible please conduct the interview alone with the interviewee.

212	How many pregnancies have you had that did not end in a live birth?	Enter number	_
213	Now would like to ask about the information regarding pregnancies beginning of 2004 (Ethiopian calendar). Were you pregnant at the time of Mäskäräm 2004 or any time afterwards?	1 = Yes 2 = No (end interview)	_

Now I would like to ask you about information on pregnancies at the time of Mäskäräm 2004 or afterwards. By this I mean all the pregnancies whether they ended up born alive, dead or even lost before full term pregnancy, whether they are still living or not, and whether they live with you or somewhere else.

Interviewer: start interview with a) asking the women to bring all the birth cards, if she has any, b) start with the birth outcome of the most recent pregnancy and work back to Mäskäräm 2004 (Ethiopian calendar). If the woman is currently pregnant do not include here – enter only pregnancies that have already ended.

For twin birth or two births, please record each baby separately (different lines, with different ID numbers)

Lost before full term is when baby was born before its due date, without woman going into labor.

ID Number of pregnancy	Outcome of pregnancy	Baby's name	Date of birth/Date Pregnancy ended	Born as a twin?	Sex	Still alive?	If still alive, how old in completed months?	If the child died, when did s/he die?
Start with most recent pregnancy	1 = Live birth 2 = Baby born dead 3= Lost before full term	Enter "not given" if not given a name	Enter 01 for day if not known. Probe for months/years if not known	1 = Yes 2 = No 3=Don't know	1 = Male 2 = Female 3=Don't know	1 = Yes 2 = No	If less than a 28 days enter number of days	Enter 01 for day if not known. Probe for months/years if not known
1	_		dd _ _ mm _ _ yyyy _ _ _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _ yyyy _ _ _ _
2	_		dd _ _ mm _ _ yyyy _ _ _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _ yyyy _ _ _ _
3	_		dd _ _ mm _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _

			yyyy _ _ _ _					yyyy _ _ _ _
4	_		dd _ _ mm _ _ yyyy _ _ _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _ yyyy _ _ _ _
5	_		dd _ _ / mm _ _ / yyyy _ _ _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _ yyyy _ _ _ _
6	_		dd _ _ / mm _ _ / yyyy _ _ _ _	_	_	_	dd _ _ mm _ _	dd _ _ mm _ _ yyyy _ _ _ _

According to the given pregnancy history since Mäskäräm 2004 (Ethiopian), I would like to confirm that you have:			
214	Total number of live births = XX	1 = Yes 2 = No	_
215	Total number born dead = XX	1 = Yes 2 = No	_
216	Total number pregnancy loss before full term = XX	1 = Yes 2 = No	_

Note: In case of discrepancy, the interviewer will revisit the pregnancy history with the respondent women

Continue with interview for each reported pregnancy since Mäskäräm 2004(Ethiopian).

Module 3

Section 3. Pregnancy ID		
Interviewer: Please obtain child information from the pregnancy event table.		
300	Write name of the child (if live birth)	<input type="text"/> Enter 99 if not live birth or name not given
301	Write unique ID of the pregnancy Obtain from = cluster ID = Q107 /household ID = Q108 /Person (woman) number = Q118/pregnancy = pregnancy history table	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> cluster household woman pregnancy

Section 4. Antenatal care (ANC)		
Interviewer: in instances where the birth ended in a stillbirth or pregnancy was lost, please use the pregnancy number to refer to the birth (instead of baby name)		
<i>Now I want to talk to you about your pregnancy with the birth of [Child name / pregnancy number] (write no name if name was not given)</i>		
Abbreviation code		
HDA = Health Development Army		
HEW = Health Extension Worker		
400	When pregnant with CHILD NAME / PREGNANCY NUMBER, did you inform anyone outside your family?	1 = Yes 2 = No - GO to 404 <input type="text"/>
401	If you informed a health worker, who did you first inform about your pregnancy amongst health workers	1 = HDA 2 = HEW 3 = Other health staff (i.e. nurse) at the health center 4 = Other <input type="text"/>
402	If OTHER	Specify _____
403	What was the duration of your pregnancy when you informed an HEW, HDA or other health workers?	Write number of weeks 99 if don't know <input type="text"/>
404	Do you have a family health card with information about that pregnancy and birth?	1 = Yes 2 = No - GO to 406 <input type="text"/>
405	If yes: May I see your family health card? Interviewer: Is a family health card available?	1 = Yes 2 = No <input type="text"/>

406	When pregnant with [CHILD NAME / PREGNANCY NUMBER], did you receive any care during pregnancy? Probe: care at the HP, at a health facility, or visits at home from a HEW/HDA If no, skip ANC questions	1 = Yes 2 = No-GO to Section 6	<input type="checkbox"/>	
If YES , where did you get for ANC visits? Please select all that apply		For each: 1= Yes 2 = No		
		407	Home	<input type="checkbox"/>
		408	Health Post	<input type="checkbox"/>
		409	Health Center	<input type="checkbox"/>
		410	Hospital	<input type="checkbox"/>
		411	Other	<input type="checkbox"/>
412	(Specify) _____			

Antenatal care from a health post			
413	Did you receive pregnancy care from a health post?	1 = Yes 2 = No – GO to 422	<input type="checkbox"/>
414	How many times did you attend the health post for pregnancy care in that pregnancy?	Enter the number of times 99 if don't know	<input type="text"/>
415	When did your first visit to the health post take place? If this information is available from the family health card, use it.	dd <input type="text"/> <input type="text"/> mm <input type="text"/> <input type="text"/> yyyy <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Write 99/99/9999 if not available	
416	Interviewer: did Q415 information come from the woman or the card?	1 = Woman 2 = Card	<input type="checkbox"/>
417	How old was your pregnancy at the first visit?	Record number of weeks 99 if don't know	<input type="text"/>
418	Interviewer: record gestation of the pregnancy at first ANC visit from family health card if available	Record number of weeks 99 if not available	<input type="text"/>

419	Can you tell us whether or not you were satisfied with the pregnancy care you received at the health post? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 421) 3 = Neither satisfied nor dissatisfied (Go to 422)	_
420	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied-Go to 422 2 = Somewhat satisfied-Go to 422	_
421	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	_

Antenatal care from a health center			
422	Did you receive pregnancy care from a health center?	1 = Yes 2 = No- GO to 434	_
423	Was your first ANC visit at a health center?	1 = Yes 2 = No	_
424	How many times did you attend the health center for pregnancy care in that pregnancy?	Enter the number of times Enter 99 if not known	_ _
425	When did your first visit to the health center take place? Interviewer: Probe date of visit; record month and year if she does not remember date	dd _ _ mm _ _ yyyy _ _ _ _ Write 99/99/9999 if not available	
426	Interviewer: Record from family health card if available.	dd _ _ mm _ _ yyyy _ _ _ _ Write 99/99/9999 if not available from family health card.	
427	How old was your pregnancy at the first visit? Record from family health card if available	Record number of weeks 99 if day is not known	_ _
428	Interviewer: did this information come from the woman or the card?	1 = Woman 2 = Card	_
429	Who saw you at that first visit?	1 = Nurse 2= Midwife 3=Health officer 4 = Other (HEW) 5=I don't know	_
430	If OTHER please specify	Specify _____	
431	Can you tell us whether or not you were satisfied with the pregnancy care you received at the health center? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 433) 3 = Neither satisfied nor dissatisfied (Go to 434)	_
432	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied -Go to 434 2 = Somewhat satisfied-Go to 434	_

433	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	_
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Antenatal care at home.			
434	Did you receive pregnancy care from a health worker in your own home?	1 = Yes 2 = No – GO to 445	_
435	How many times were you visited at home by a health worker for pregnancy care in that pregnancy?	Enter the number of times	_
436	When did the first visit to you at home take place? Record from family health card if available	dd _ _ mm _ _ yyyy _ _ _ _ 99 if day is not known	
437	Interviewer: did Q436 information come from the woman or the card?	1 = Woman 2 = Card	_
438	How old was your pregnancy the first time that you were visited at home for pregnancy care?	Record number of weeks Enter 99 if not available.	_ _
439	Interviewer: Record from family health card if available.	Record number of weeks Enter 99 if not available.	_ _
440	Who was it that came to visit you the first time?	1 = HEW 2 = HDA 3 = Other	_
441	If OTHER please specify:	Specify _____	
442	Can you tell us whether or not you were satisfied with the pregnancy care you received at home? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 444) 3 = Neither satisfied nor dissatisfied (Go to 445)	_
443	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied -Go to 445 2 = Somewhat satisfied-Go to 445	_
444	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	_

Interviewer: I would now like to ask you about who provided specific elements of pregnancy care.

In instances where birth was a still birth or pregnancy was lost, use the pregnancy number instead of name.

When you were pregnant with CHILD NAME / PREGNANCY NUMBER, did you have the following at any time?

Interviewer: this applies to cares at home, health or health centre

445	Was your weight measured?	1 = Yes 2 = No – GO to 448	<input type="checkbox"/>
446	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
447	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
448	Was your height measured?	1 = Yes 2 = No – GO to 451	<input type="checkbox"/>
449	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
450	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
451	Did you receive information about breastfeeding]?	1 = Yes 2 = No – GO to 454	<input type="checkbox"/>
452	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
453	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
454	Was your blood pressure tested? (PROBE: when a strap was put around your upper arm and a measure taken)	1 = Yes 2 = No – GO to 457	<input type="checkbox"/>
455	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
456	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
457	Did you give a urine sample for a test?	1 = Yes 2 = No – GO to 460	<input type="checkbox"/>
458	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
459	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre	<input type="checkbox"/>

		4 = Hospital 5 = Other	
460	Did you give blood for any test for syphilis?	1 = Yes 2 = No – GO to 463 3 = Don't know – GO to 463	<input type="checkbox"/>
461	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
462	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
463	Did you receive iron folate tablets or iron syrup? Interviewer: show a sample or picture of iron tables/syrup and folate tablet	1 = Yes 2 = No – GO to 467	<input type="checkbox"/>
464	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
465	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
466	If yes: For how many days did you take the tablets or syrup?	Enter number of days Enter 999 if not known	<input type="text"/>
467	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? (On field manual please explain the need to describe tetanus toxoid shots part)	1 = Yes 2 = No – GO to 473	<input type="checkbox"/>
468	If yes: How many times did you get a tetanus injection?	Write number of times	<input type="text"/>
469	If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1 = Yes 2 = No – GO to 473	<input type="checkbox"/>
470	If 469 is answered YES: Before this pregnancy, how many times did you receive a tetanus injection?	Enter number of times Enter 99 if not known	<input type="text"/>
471	If 469 is answered YES: How many years ago did you receive the last tetanus injection before this pregnancy?	Write number of years ago	<input type="text"/>
472	In which health facility was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
473	Did you receive HIV information?	1 = Yes 2 = No – GO to 476	<input type="checkbox"/>
474	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer	<input type="checkbox"/>

		5 = Doctor 6 = Other	
475	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
476	Did you receive HIV testing?	1 = Yes 2 = No – GO to 479	<input type="checkbox"/>
477	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
478	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
479	Did you receive STI testing?	1 = Yes 2 = No – GO to 482	<input type="checkbox"/>
480	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
481	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
482	Did you receive any STI treatment?	1 = Yes 2 = No – GO to 485	<input type="checkbox"/>
483	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
484	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
485	Did you receive information on nutrition?	1 = Yes 2 = No – GO to 488 3 = Not applicable – GO to 488	<input type="checkbox"/>
486	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>

487	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
488	Did you receive information on danger signs?	1 = Yes 2 = No – GO to 491	<input type="checkbox"/>
489	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
490	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
491	Were you advised on birth preparedness and complication readiness? Probe: for finances, for help during delivery, for transport, for emergencies?	1 = Yes 2 = No – GO to 501	<input type="checkbox"/>
492	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
493	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
494	Was your birth preparedness and complication readiness plan recorded?	1 = Yes 2 = No – GO to 501	<input type="checkbox"/>
495	Which was the provider who did this the first time? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse/midwife 4 = Health Officer 5 = Doctor 6 = Other	<input type="checkbox"/>
496	In which location was this service provided?	1 = Home 2 = Health Post 3 = Health Centre 4 = Hospital 5 = Other	<input type="checkbox"/>
Section 5. Antenatal care continued			
500	Is there a record in family health card about her birth preparedness and complication plan? Ask to see Family Health Card, if available.	1 = Yes 2 = No 3 = No family health card	<input type="checkbox"/>

<p>Can you tell me danger signs during pregnancy?</p> <p>Do not read list. Do not probe. This is about knowledge of danger signs, not about her own specific experience.</p>		For each: 1 = Yes 2 = No		
		501	Vaginal bleeding	<input type="checkbox"/>
		502	Severe abdominal pain	<input type="checkbox"/>
		503	Offensive discharge from the birth canal	<input type="checkbox"/>
		504	Fever	<input type="checkbox"/>
		505	Headache, dizziness, or blurred vision	<input type="checkbox"/>
		506	Convulsions or unconsciousness	<input type="checkbox"/>
		507	Swollen hands and face	<input type="checkbox"/>
<p>Can you tell me the components of birth preparedness and complication readiness plan</p> <p>Do not read list. Do not probe. This is about knowledge, not about her own specific experience with planning.</p>		For each: 1 = Yes 2 = No		
		508	Financial	<input type="checkbox"/>
		509	Transport	<input type="checkbox"/>
		510	Nutritious and sufficient food	<input type="checkbox"/>
		511	Identify birth attendant	<input type="checkbox"/>
		512	Identify facility where you would give birth	<input type="checkbox"/>
		513	Identification of blood donor, if required	<input type="checkbox"/>
		514	Clean clothes	<input type="checkbox"/>
		515	Cover to deliver on	<input type="checkbox"/>
		516	Gloves	<input type="checkbox"/>
		517	Cotton gauze	<input type="checkbox"/>
		518	Soap	<input type="checkbox"/>
		519	New razor blades	<input type="checkbox"/>
		520	Sterilized scissors	<input type="checkbox"/>
521	Sterilized thread	<input type="checkbox"/>		
522	<p>Did you make any preparations for your delivery?</p> <p>Probe: for finances, for help during delivery, for transport, for emergencies</p>	<p>1 = Yes 2 = No – GO to 539</p>	<input type="checkbox"/>	
<p>If YES: What preparations did you make for your delivery?</p> <p>Probe but do not read out the list. Select all that apply.</p>		For each: 1 = Yes 2 = No		
		523	Financial	<input type="checkbox"/>
		524	Transport	<input type="checkbox"/>
		525	Nutritious and sufficient food	<input type="checkbox"/>

	526	Identify birth attendant	<input type="checkbox"/>	
	527	Identify facility where you would give birth	<input type="checkbox"/>	
	528	Identification of blood donor, if required	<input type="checkbox"/>	
	529	Clean clothes	<input type="checkbox"/>	
	530	Cover to deliver on	<input type="checkbox"/>	
	531	Gloves	<input type="checkbox"/>	
	532	Cotton gauze	<input type="checkbox"/>	
	533	Soap	<input type="checkbox"/>	
	534	New razor blades	<input type="checkbox"/>	
	535	Sterilized scissors	<input type="checkbox"/>	
	536	Sterilized thread	<input type="checkbox"/>	
	537	Other	<input type="checkbox"/>	
	538	Specify _____		
539	During your last pregnancy have you attended a pregnant women's conference/Forum?		1 = Yes 2 = No- GO to 552	<input type="checkbox"/>
540	If yes, how many times did you attend pregnant women's forum in your last pregnancy?		Enter number of times Enter 99 if not known	<input type="text"/>
<p>What was discussed in the pregnant women's forum?</p> <p>Probe but do not read out the list. Select all that apply.</p>		For each: 1 = Yes 2 = No		
		541	Birth preparedness	<input type="checkbox"/>
		542	Importance of ANC	<input type="checkbox"/>
		543	Institutional delivery	<input type="checkbox"/>
		544	Importance of post natal checks	<input type="checkbox"/>
		545	Seeking newborn care	<input type="checkbox"/>
		546	Other (specify)	<input type="checkbox"/>
	547	Specify _____		
548	Who informed you about the pregnant women's forum?		1 = HDA 2 = HEW 3 = Other (Specify)	<input type="checkbox"/>
549	If OTHER , specify		Specify _____	

550	Where did the pregnant women conference take place?	1 = at HDA's place 2 = at gote/kebele meeting place 3 = health post 4 = health centre 5 = Other	
551	If OTHER , specify	Specify _____	
552	Can you tell us whether or not you were satisfied with the care you received while you were pregnant? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 554) 3 = Neither satisfied nor dissatisfied (Go to 555)	__
553	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied-Go to 555 2 = Somewhat satisfied-Go to 555	__
554	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	__

Interviewer

If the interviewee has reported having facility based care for ANC for this birth, ask the following questions

For each: 1 = Yes 2 = No			
<p>When having a pregnancy related medical examination at a health facility, did you experience any of the following with someone?</p> <p>Select all that apply</p>	555	Encourage you to ask questions about delivery	<input type="checkbox"/>
	556	Give you the choice for choosing any specific option (date of delivery, normal or operative delivery etc.)	<input type="checkbox"/>
	557	Unnecessarily motivating you for having C-section	<input type="checkbox"/>
	558	Give explanation on the procedure s/he is going to use (e.g. normal delivery or c-section or time that is going to take)	<input type="checkbox"/>
	559	Maintain privacy while examining you (e.g. placed a curtain/separator before examination)	<input type="checkbox"/>
	560	Use non-dignified language (for example passing insulting and/or degrading statements about you/family/community/ethnicity) during examination	<input type="checkbox"/>
	561	The primary care (senior doctor)provider deny to provide you services because you belong to any specific ethnic group/community	<input type="checkbox"/>
	562	Use harsh tone or shouted on your during examination	<input type="checkbox"/>
	563	Use abusive language with you during examination	<input type="checkbox"/>
	564	Threaten you e.g. if you do not cooperate I will do the caesarean operation during delivery	<input type="checkbox"/>
	565	Leave you abandoned during examination	<input type="checkbox"/>
	566	Share results/diagnosis of medical reports with you during examination	<input type="checkbox"/>
	567	Share the results when other could easily hear	<input type="checkbox"/>
	568	Assure you that your medical information/records will be kept confidential	<input type="checkbox"/>
569	Deny you providing any specific services (that you asked for) due to lack of money	<input type="checkbox"/>	

If outcome of pregnancy is pregnancy lost (Outcome #3 in pregnancy history) stop interview and Check for other pregnancy

6. Delivery care				
Now I have some questions to ask you about what happened to you during and after the delivery for CHILD NAME / PREGNANCY NUMBER				
600	Where did you give birth?	1 = Home- GO to 602 2 = Health post – GO to 609 3 = Health centre – GO to 609 4 = Hospital – GO to 609 5 = Other (specify)	_	
601	If OTHER, please specify:	Specify _____		
If delivered at home, why? Select all that apply		For each: 1 = Yes 2 = No		
		602	Always delivered at home	_
		603	Husband/mother/mother-in-law does not allow	_
		604	Don't like health facilities	_
		605	Expensive to go to health facilities	_
		606	Tradition/religious reason	_
		607	Other	_
		608	Specify _____	
If delivered in health post, health centre or hospital, why? Select all that apply		For each: 1 = Yes 2 = No		
		609	Always delivered at a health facility	_
		610	Due to existing complications	_
		611	Referred by HDA/HEW	_
		612	Advised at pregnant women's forum	_
		613	Taken to health facility due to prolonged labour or delivery related risks	_
		614	Convenient	_
		615	Affordable (free)	_
		616	Other	_
617	Specify _____			

618	Who was the primary person that assisted you with the delivery?	1 = Doctor 2 = Nurse/midwife 3 = Health extension worker 4 = HDA 5 = traditional birth attendant 6 = Relative/friend 7 = Nobody 8 = Other	<input type="checkbox"/>
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Who else was present at the delivery? Select all that apply	For each: 1 = Yes 2 = No		
	619	Doctor	<input type="checkbox"/>
	620	Nurse/midwife	<input type="checkbox"/>
	621	Health extension worker	<input type="checkbox"/>
	622	HDA	<input type="checkbox"/>
	623	Traditional birth attendant	<input type="checkbox"/>
	624	Relative/friend	<input type="checkbox"/>
	625	Nobody	<input type="checkbox"/>
626	Other	<input type="checkbox"/>	

627	When you gave birth, did the main person assisting you wash her/his hands with soap before the delivery?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>
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628	When you gave birth, did the main person assisting you wear gloves during delivery?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>
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629	When you gave birth, did the delivery take place on a clean surface? (Clean surface: clean space or carpet or mat)	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>
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630	Were you given a drug called misoprostol to help control bleeding? These are pills.	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>
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631	Interviewer: ask the following if the woman gave birth at a health facility, if no, SKIP to 633 After giving birth, how many days did you stay at the health facility in total?	Enter number of days. Enter 0 if the woman left on the same day as delivery	<input type="text"/>
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632	Was [CHILD NAME/ PREGNANCY NUMBER] delivered by caesarean, that is, did they cut your belly open to take the baby out?	1 = Yes 2 = No	<input type="checkbox"/>
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During the delivery of [CHILD NAME / PREGNANCY NUMBER] did you experience any of the following? Read out the list	For each 1 = Yes 2 = No		
	633	Heavy bleeding	<input type="checkbox"/>
	634	Labour more than 12 hours	<input type="checkbox"/>
635	Loss of consciousness	<input type="checkbox"/>	

	636	Premature labour	<input type="checkbox"/>
	637	Foul discharge	<input type="checkbox"/>
	638	Baby in abnormal position	<input type="checkbox"/>

639	During delivery were you advised to go to a higher health facility to get special care?	1 = Yes 2 = No – GO to 646	<input type="checkbox"/>
640	What was the reason for which you were referred? Interviewer: please check if there is a record on referral; danger signs = see the list	1 = Due to existence of one or more danger signs 2 = Due to lack of equipment/space 3 = Due to lack of trained human resources 4 = Other	<input type="checkbox"/>
641	If OTHER , please specify	Specify _____	
642	When you were referred to a higher health facility, did you go to the higher health facility?	1 = Yes – GO to 645 2 = No	<input type="checkbox"/>
643	If NO , why?	1 = Facility was too far 2 = Cost too much money 3 = Don't like going to different facility 4 = No permission to go 5 = Don't like the quality of care provided 6 = Other	<input type="checkbox"/>
644	If OTHER please specify	Specify _____	
645	Was ambulance made available for you for that referral?	1 = Yes 2 = No	<input type="checkbox"/>
646	Can you tell us whether or not you were satisfied with the delivery care you received? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 648) 3 = Neither satisfied nor dissatisfied (Go to 649)	<input type="checkbox"/>
647	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied -Go to 649 2 = Somewhat satisfied -Go to 649	<input type="checkbox"/>
648	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	<input type="checkbox"/>

Interviewer

Only ask if participant reported having given a birth at a facility ask the following questions (649– 670)

For each: 1 = Yes 2 = No			
<p>During a birth at a health facility, did you experience any of the following with someone?</p> <p>Select all that apply</p>	649	Regularly explain and inform you about the progress or procedure being performed	__
	650	Cover you while taking to the delivery room	__
	651	Delay in providing care after a decision has been made e.g. caesarean section	__
	652	Use abusive language with you during the delivery	__
	653	Leave you abandoned during the delivery	__
	654	Perform any procedure without your consent or informing you (like caesarean sections, blood transfusion, sterilization etc.)	__
	655	Ignore you while asking pain relief/medication during delivery	__
	656	Use harsh tone or shouted on you during the delivery	__
	657	Slap you during the delivery	__
	658	Pinch you irritably during the delivery	__
	659	Beat you during the delivery	__
	660	Push you badly to change your position during the delivery	__
For each: 1 = Yes 2 = No			
<p>Soon after giving birth at a facility, did you experience any of the following with someone?</p> <p>Select all that apply</p>	661	Encourage you to ask questions post-delivery	__
	662	Cover you after the delivery	__
	663	Ignore you while asking pain relief/medication after the delivery	__
	664	Leave you abandoned immediately after the delivery	__
	665	Use harsh tone or shouted on you after the delivery	__
	666	Use abusive language with you after the delivery	__
	667	Ask you to clean delivery couches post-delivery	__
	668	Ask you to clean dirty bathroom/toilets post-delivery	__
	669	Detain for non/partial-payment (e.g. keep you or your child in custody for full	__

		payment)	
670	Did you know where to go to lodge a complain	1 = Yes 2 = No	<input type="checkbox"/>

7. Postnatal care of the mother (PNC)			
Now I want to ask you about any postnatal checks you had for your own health after that birth			
700	Did anyone check on your <u>own</u> health within 6 weeks of giving birth? Probe to see if check was done by HEW/HC staff/HDA/Nurse/Doctor.	1 = Yes 2 = No – GO to Section 8	<input type="checkbox"/>
701	How many days after giving birth did you have your first health check? Clarify that this is a health check for the mother	Enter number of days Enter 99 if not known	<input type="checkbox"/>
702	Where did the first check take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	<input type="checkbox"/>
703	By whom? Put 9 if not known	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA	<input type="checkbox"/>
704	Was a second visit conducted?	1 = Yes 2 = No – GO to 712	<input type="checkbox"/>
705	How many days after giving birth did you have your second health check? Clarify that this is a health check for the mother.	Enter number of days Enter 99 if not known	<input type="checkbox"/>
706	Where did the checking take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	<input type="checkbox"/>
707	By whom? Put 9 if not known	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA	<input type="checkbox"/>
708	Was a third visit conducted?	1 = Yes 2 = No – GO to 712	<input type="checkbox"/>
709	How many days after giving birth did you have your third health check? Clarify that this is a health check for the mother.	Enter number of days Enter 99 if not known	<input type="checkbox"/>
710	Where did the checking take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	<input type="checkbox"/>

711	By whom? Put 9 if not known	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA	<input type="checkbox"/>
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During visits after giving birth, what was done to check your health?

Read List out loud

Mark all that apply

If the visit did not happen at specified time, leave that column of answers blank

	For each: 1 = Yes 2 = No					
	(Question #)	0-2 days	(Question #)	3-7 days	(Question #)	8-42 days
Checked breasts	712	<input type="checkbox"/>	713	<input type="checkbox"/>	714	<input type="checkbox"/>
Advised breast feeding	715	<input type="checkbox"/>	716	<input type="checkbox"/>	717	<input type="checkbox"/>
Oriented about danger signs	718	<input type="checkbox"/>	719	<input type="checkbox"/>	720	<input type="checkbox"/>
Educated on family planning	721	<input type="checkbox"/>	722	<input type="checkbox"/>	723	<input type="checkbox"/>
Information given on nutrition	724	<input type="checkbox"/>	725	<input type="checkbox"/>	726	<input type="checkbox"/>
Referred to a health facility	727	<input type="checkbox"/>	728	<input type="checkbox"/>	729	<input type="checkbox"/>
Measured Blood Pressure	730	<input type="checkbox"/>	731	<input type="checkbox"/>	732	<input type="checkbox"/>
Checked/treated birth-related wound (if applicable)	733	<input type="checkbox"/>	734	<input type="checkbox"/>	735	<input type="checkbox"/>
Other	736	<input type="checkbox"/>	737	<input type="checkbox"/>	738	<input type="checkbox"/>
Specify _____						

739	Can you tell us whether or not you were satisfied with the post-natal care you received? Interviewer: explain that this is care for the mother, not the newborn. Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 741) 3 = Neither satisfied nor dissatisfied (Go to Section 8)	<input type="checkbox"/>
740	IF YES, then what was the level of satisfaction Read both options	1 = Fully satisfied (Go to Section 8) 2 = Somewhat satisfied (Go to Section 8)	<input type="checkbox"/>
741	IF NO, then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	<input type="checkbox"/>

INTERVIEWER: IF THE PREGNANCY OUTCOME IN THE PREGNANCY HISTORY TABLE WAS #2 (STILLBIRTH), END THE INTERVIEW HERE AND CHECK FOR OTHER PREGNANCIES

8. Immediate newborn care

Now I have some questions about what happened to [CHILD NAME] at birth and immediately afterwards.

800	Interviewer: What is the pregnancy ID number of [CHILD NAME]?	Enter ID number from the table	<input type="text"/>
801	Was this a single birth?	1 =Yes 2 =No	<input type="text"/>
802	Was [CHILD NAME] weighed at birth?	1 = Yes 2 = No – GO to 804 3 = Don't know– GO to 804	<input type="text"/>
803	If YES: how much did [CHILD NAME] weigh at birth?	Enter weight in grams e.g. if the weight was 1.9 kilogrammes enter 1900; don't know write 9999. Use the weight recorded on the card if possible	<input type="text"/>
804	Did [CHILD NAME] have any difficulty crying/breathing at birth?	1 = Yes 2 = No – GO to 807 3= Don't know	<input type="text"/>

Did anyone do any of the following to [CHILD NAME] immediately after birth? Select all that apply	For each: 1 = Yes 2 = No		
	805	Rubbing/stimulating	<input type="text"/>
	806	Mouth-to-mouth/resuscitation	<input type="text"/>

807	Where was [CHILD NAME] placed immediately after delivery?	1 = Alone/on the floor 2 = On the mother's Belly/chest 3 = Beside the mother 4 = With someone else 5 = Other 6 = Don't know	<input type="text"/>
808	How long after [CHILD NAME] was born was s/he dried/wiped? Check for time after the baby was born, not time after the placenta came out.	Enter in minutes, 999 if don't know.	<input type="text"/>
809	How long after [CHILD NAME] was born was s/he wrapped in a cloth? Check for time after the baby was born, not time after the placenta came out.	Enter in minutes, 999 if don't know.	<input type="text"/>
810	What was used to tie the cord?	1 = New string/thread 2 = Boiled string/thread 3 = Any string/thread 4 = Clamp 5 = Nothing	<input type="text"/>

		6 = Don't know 7 = Other	
811	What was used to cut the cord?	1 = new razor blade 2 = any razor blade 3 = sterilized scissors 4 = any scissors 5 = don't know 6 = other	<input type="checkbox"/>
812	Was anything applied to the cord after cutting and tying?	1 = Yes 2 = No – GO to 824	<input type="checkbox"/>

		For each: 1 = Yes 2 = No	
If yes: What was applied to the cord just after cutting the cord? Do not prompt, select all that apply	813	Butter	<input type="checkbox"/>
	814	Ash	<input type="checkbox"/>
	815	Ointment (non-medicinal)	<input type="checkbox"/>
	816	Animal dung	<input type="checkbox"/>
	817	Oil	<input type="checkbox"/>
	818	Cold water	<input type="checkbox"/>
	819	Other	<input type="checkbox"/>
820	Was an antiseptic applied to the cord?	1 = Yes 2 = No – GO to 824 3 = Don't know– GO to 824	<input type="checkbox"/>
821	If yes, was this chlorhexidine?	1 = Yes 2 = No– GO to 824 3 = Don't know– GO to 824	<input type="checkbox"/>
822	If YES, for how many days was chlorhexidine applied?	Enter number of days Enter 99 if not known	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
823	If YES, how many times per day was chlorhexidine applied?	Enter number of times applied per day Enter 99 if not known	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
824	Did [CHILD NAME] receive TTC eye ointment soon after delivery?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>
825	When [CHILD NAME] was born, how soon did you bathe him/her?	1 = In the first hour 2 = After one hour – GO to 827 3 = After one day– GO to 828	<input type="checkbox"/>
826	If in the first hour: After how many minutes would you say?	Write number of minutes. Enter 99 if don't know.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
827	If after one hour: After how many hours would you say?	Write number of full hours. e.g. if response is 'after one hour' enter 1, if response is 'after one and a half hours' enter 1, if response is 'after two and a half hours' enter 2. Enter 99 if don't know.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
828			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	If after one day: After how many days would you say?	Write number of full days. e.g. if response is 'after one day' enter 1, if response is 'after one and a half days' enter 1. Enter 99 if don't know.	
829	In the first week of life, did you hold [CHILD NAME] skin to skin against your breasts during the daytime and night-time?	1 = Yes, 1-7 times a day 2 = Yes, 8-12 times a day 3 = Yes, more than 12 times a day 4 = Never 5 = Don't know	<input type="checkbox"/>
830	In the first week of life, did you sleep with [CHILD NAME] against you at night, or did you lay him/her alone on the bed or elsewhere?	1 = Slept with mother 2 = Baby slept alone 3 = Baby slept with another person	<input type="checkbox"/>
831	Did you ever breastfeed [CHILD NAME]?	1 = Yes 2 = No	<input type="checkbox"/>
832	Did you exclusively breastfed [CHILD NAME] during the first 28 days of life?	1 = Yes – GO to 837 2 = No	<input type="checkbox"/>
833	If No, what did you mainly give [CHILD NAME], other than breastmilk?	1 = Water 2 = Non-human milk 3 = Butter 4 = Sugar/glucose/salt water solution 5 = Juice 6 = Tea/infusions 7 = Other	<input type="checkbox"/>
834	If OTHER, specify	Specify _____	
835	And, why did you provide other drinks besides your breast milk?	1 = My breast milk is not enough 2 = I do not stay with NAME throughout the day 3 = Advised by friends or relatives to do so 4 = Tradition or culture 5 = Other	<input type="checkbox"/>
836	If OTHER, specify	Specify _____	
837	How long after birth did you first put [CHILD NAME] to the breast?	1 = In the first hour 2 = After one hour but during the first day 3 = After the first day of life	<input type="checkbox"/>
838	Did you squeeze out and throw away the first milk?	1 = Yes 2 = No	<input type="checkbox"/>

839	In the first 6 weeks after [CHILD NAME] was born, did any health care provider excluding traditional birth attendant check on his/her health? Probe for checks done at the place of birth on the same day as birth, and checks after.	1 = Yes 2 = No - GO to 892	<input type="checkbox"/>
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840	If YES, how many days after birth was [CHILD NAME]'s first health check?	Enter number of days Enter 99 if not known	_ _
841	If YES, where did the health checks on [CHILD NAME] take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	_
842	If YES, who checked on the health of [CHILD NAME]? Probe for most qualified person	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA 6=Don't know	_
843	Was a second check conducted?	1 = Yes 2 = No - GO to 855	_
844	If YES, how many days after birth was [CHILD NAME]'s second health check?	Enter number of days Enter 99 if not known	_ _
845	If YES, Where did the health checks on [CHILD NAME] take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	_
846	If YES, Who checked on the health of [CHILD NAME]? Probe for most qualified person	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA 6=Don't know	_
847	Was a third check conducted?	1 = Yes 2 = No - GO to 855	_
848	If YES- how many days after birth was [CHILD NAME]'s third health check?	Enter number of days Enter 99 if not known	_ _
849	If YES, Where did the health checks on [CHILD NAME] take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	_
850	If YES, Who checked on the health of [CHILD NAME]? Probe for most qualified person	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA 6=Don't know	_
851	Was a forth check conducted?	1 = Yes 2 = No - GO to 855	_

852	If YES, how many days after birth was [CHILD NAME]'s fourth health check?	Enter number of days Enter 99 if not known	<input type="text"/>
853	Where did the checking take place?	1 = In own home 2 = Health post 3 = Health centre 4 = Hospital 5 = Other	<input type="text"/>
854	By whom?	1 = Doctor 2 = Nurse/midwife 3 = HEW 4 = Health Officer/Assistant 5 = HDA 6=Don't know	<input type="text"/>

At any of the health checks, what was done to check the health of [CHILD NAME]?

Interviewer: Read list out loud. Mark all that apply

If the visit did not happen at the specified time, leave that column of answers blank

	For each: 1 = Yes 2 = No					
	(Question #)	0-2 days	(Question #)	3-7 days	(Question #)	8-42 days
Generally examined /looked at baby's body	855	<input type="text"/>	856	<input type="text"/>	857	<input type="text"/>
Weighed baby	858	<input type="text"/>	859	<input type="text"/>	860	<input type="text"/>
Checked cord	861	<input type="text"/>	862	<input type="text"/>	863	<input type="text"/>
Advised breastfeeding	864	<input type="text"/>	865	<input type="text"/>	866	<input type="text"/>
Observed breastfeeding	867	<input type="text"/>	868	<input type="text"/>	869	<input type="text"/>
Advised skin-to-skin contact/warmth	870	<input type="text"/>	871	<input type="text"/>	872	<input type="text"/>
Checked baby for danger signs (including sepsis)	873	<input type="text"/>	874	<input type="text"/>	875	<input type="text"/>
Educated on danger signs	876	<input type="text"/>	877	<input type="text"/>	878	<input type="text"/>
Referred to a health facility	879	<input type="text"/>	880	<input type="text"/>	881	<input type="text"/>
Provided information on washing hands before touching baby	882	<input type="text"/>	883	<input type="text"/>	884	<input type="text"/>
Advised keeping the cord clean	885	<input type="text"/>	886	<input type="text"/>	887	<input type="text"/>
Advised not to bathe the baby within 24 hours after birth	888	<input type="text"/>				

889	Can you tell us whether or not you were satisfied with the immediate newborn care? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 891) 3 = Neither satisfied nor dissatisfied (Go to 892)	<input type="text"/>
890	IF YES , then what was the level of satisfaction Read both options	1 = Fully satisfied Go to 892 2 = Somewhat satisfied Go to 892	<input type="text"/>

891	IF NO , then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	_
892	The last time you gave birth, did you keep your newborn at home for several days or weeks without taking the baby out?	1 = Yes 2 = No – GO to 894	_
893	IF YES , what is the number of days that you kept your newborn in the house?	Enter number of days Enter 999 if not known	_ _
894	The last time you gave birth, how many days passed before you had visitors come to your house to see the baby? This includes visitors for any reason: health care workers, extended family, or friends.	Enter number of days Enter 999 if not known	_ _
895	The last time you gave birth, how many days passed before someone other than you had physical contact with the baby? Physical contact means any kind of touching, even if the person did not hold the baby.	Enter number of days Enter 999 if not known	_ _

9. Care of sick newborns

900	<p>Interviewer – stop to check: was the baby born after September 2004] Ethiopian calendar?</p> <p>If yes, continue with interview.</p> <p>If no, end interview at this point and continue with other women aged 13-49 in this household.</p>	1 = Yes 2 = No-End interview	_
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Interviewer: Now I want to talk to you about any sickness [CHILD NAME] experienced in the first 28 days of life

901	Has [CHILD NAME] ever been sick during first 28 days of life?	1 = Yes 2 = No	_
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Can I just check, has [CHILD NAME] ever had any of the following symptoms during the first 28 days of life?

Read list of symptoms out loud

	Age at first episode	Was care sought for?	If YES, who did you seek care from?	If care was sought, who cared for (CHILD NAME?)	If care was not sought, why not?
<p>Enter 1 if Yes and continue along row</p> <p>Enter 2 if No and go to next symptom (row)</p> <p>If no symptoms, go to Section 10</p>	Enter age in number of days	1 = Yes 2 = No	<p>1 = Health post</p> <p>2 = Health centre</p> <p>3 = Hospital</p> <p>4 = HDA</p> <p>5 = Traditional Healers</p> <p>6 = Pharmacy</p>	<p>1 = HEW</p> <p>2 = Nurse</p> <p>3 = Health Officer</p> <p>4 = Pharmacist</p> <p>5 = Doctor</p> <p>6 = Traditional healer</p> <p>7 = Other</p>	<p>1 = Expected him/her to get better</p> <p>2 = Health facility too far</p> <p>3 = Cost of treatment too expensive</p> <p>4 = Don't trust the facility</p> <p>5 = Family member didn't allow</p> <p>6 = Community advisor</p>

												advised against it 7 = Other	
Reduced feeding	902	<input type="checkbox"/>	903	<input type="checkbox"/>	904	<input type="checkbox"/>	905	<input type="checkbox"/>	906	<input type="checkbox"/>	907	<input type="checkbox"/>	
Child was underweight	908	<input type="checkbox"/>	909	<input type="checkbox"/>	910	<input type="checkbox"/>	911	<input type="checkbox"/>	912	<input type="checkbox"/>	913	<input type="checkbox"/>	
Difficult or fast breathing	914	<input type="checkbox"/>	915	<input type="checkbox"/>	916	<input type="checkbox"/>	917	<input type="checkbox"/>	918	<input type="checkbox"/>	919	<input type="checkbox"/>	
Chest in-drawing	920	<input type="checkbox"/>	921	<input type="checkbox"/>	922	<input type="checkbox"/>	923	<input type="checkbox"/>	924	<input type="checkbox"/>	925	<input type="checkbox"/>	
Unusually hot or cold	926	<input type="checkbox"/>	927	<input type="checkbox"/>	928	<input type="checkbox"/>	929	<input type="checkbox"/>	930	<input type="checkbox"/>	931	<input type="checkbox"/>	
Less active than usual	932	<input type="checkbox"/>	933	<input type="checkbox"/>	934	<input type="checkbox"/>	935	<input type="checkbox"/>	936	<input type="checkbox"/>	937	<input type="checkbox"/>	
Yellow palms/soles/e yes	938	<input type="checkbox"/>	939	<input type="checkbox"/>	940	<input type="checkbox"/>	941	<input type="checkbox"/>	942	<input type="checkbox"/>	943	<input type="checkbox"/>	
Had diarrhea	944	<input type="checkbox"/>	945	<input type="checkbox"/>	946	<input type="checkbox"/>	947	<input type="checkbox"/>	948	<input type="checkbox"/>	949	<input type="checkbox"/>	
Convulsions	950	<input type="checkbox"/>	951	<input type="checkbox"/>	952	<input type="checkbox"/>	953	<input type="checkbox"/>	954	<input type="checkbox"/>	955	<input type="checkbox"/>	
Skin pustules	956	<input type="checkbox"/>	957	<input type="checkbox"/>	958	<input type="checkbox"/>	959	<input type="checkbox"/>	960	<input type="checkbox"/>	961	<input type="checkbox"/>	
Cord red or draining puss	962	<input type="checkbox"/>	963	<input type="checkbox"/>	964	<input type="checkbox"/>	965	<input type="checkbox"/>	966	<input type="checkbox"/>	967	<input type="checkbox"/>	
Other (specify)	968	<input type="checkbox"/>	969	<input type="checkbox"/>	970	<input type="checkbox"/>	971	<input type="checkbox"/>	972	<input type="checkbox"/>	973	<input type="checkbox"/>	
Specify _____													

Interviewer: fill in questions 974-983 only if in the above table the interviewee mentioned that care was sought out for any one of the symptoms mentioned

974	If any of the above symptoms occurred After how many days did you seek care the first time?	Write number of days from the onset of illness; if first day of illness, write 0; If possible use the medical record to confirm 99 if care not sought	<input type="checkbox"/>
975	Was the [CHILD NAME] diagnosed with very severe disease by a health worker? Interviewer: list the signs for very severe disease for the mother	1 = Yes 2 = No	<input type="checkbox"/>
976	Was [CHILD NAME] prescribed medicine for his/her illness?	1 = Yes 2 = No	<input type="checkbox"/>
977	Did [CHILD NAME] receive 7 consecutive days of gentamycin injection?	1 = Yes 2 = No	<input type="checkbox"/>
978	Did [CHILD NAME] receive 7 consecutive days of Amoxicillin? Interviewer: explain Amoxicillin as an oral tablet that is dissolved and taken as a liquid.	1 = Yes 2 = No	<input type="checkbox"/>

979	At any time during the illness, did [CHILD NAME] take any drugs for the illness?	1 = Yes 2 = No	<input type="checkbox"/>
980	Was [CHILD NAME] managed with expressed breast milk?	1 = Yes 2 = No	<input type="checkbox"/>
981	Can you tell us whether or not you were satisfied with the care for the sick newborn? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 983) 3 = Neither satisfied nor dissatisfied (Go to Section 10)	<input type="checkbox"/>
982	IF YES , then what was the level of satisfaction Read both options	1 = Fully satisfied (Go to Section 10) 2 = Somewhat satisfied (Go to Section 10)	<input type="checkbox"/>
983	IF NO , then what was the level of dissatisfaction Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	<input type="checkbox"/>

Section 10. Children no longer alive (and died before reaching 28 days)

Interviewer: if child is no longer alive and died before reaching 28 days, ask the following questions around symptoms, care-seeking, and cause of death

I understand that it is not easy to talk about children who have died and so please do let me know if you need time to answer the questions. This information is important and will allow the government can develop programs to improve children's health.

Which symptoms did you observe in (CHILD NAME'S) immediately before death? Select all that apply	For each: 1 = Yes 2 = No		
	1000	Difficult or fast breathing	<input type="checkbox"/>
	1001	Chest in-drawing	<input type="checkbox"/>
	1002	Unusually hot or cold	<input type="checkbox"/>
	1003	Less active than usual	<input type="checkbox"/>
	1004	Yellow palms/soles/eyes	<input type="checkbox"/>
	1005	Had diarrhea	<input type="checkbox"/>
	1006	Convulsions	<input type="checkbox"/>
	1007	Yellow palms/soles/eyes	<input type="checkbox"/>
	1008	Skin pustules	<input type="checkbox"/>
	1009	Cord red or draining puss	<input type="checkbox"/>
1010	Other	<input type="checkbox"/>	
1011	If OTHER, please specify	Specify _____	

1012	If CHILD NAME died due to an illness, was care sought for that illness?	1 = Yes 2 = No—go to end of questionnaire	
1013	If yes, who provided that care? Put 9 if not known	1 = HDA 2 = HEW 3 = Nurse 4 = Doctor 5 = Health Officer 6 = Pharmacist 7 = Other	_
1014	If care was sought before [CHILD NAME] died, what was the cause of death diagnosed by the health providers	1 = Pneumonia 2 = Diarrhea 3 = Severe infections 4 = Other (Specify)___	
1015	If OTHER	(Specify)_____	

Interviewer: Please double check:

1. Is there another woman aged 13-49 in this household who has not been interviewed?
2. Is there another woman in this household who has been pregnant between [DATE] and [DATE] and has not been interviewed?
- (3) Is there another woman in this household who has given birth between [DATE] and [DATE] and has not been interviewed?
- (4) Is there another woman with a newborn who has not been interviewed?

If yes to any of them, please make sure you interview them

If No, end of interview – thank the participant for their time.

b) HEALTH DEVELOPMENT ARMY QUESTIONNAIRE

Section 1: HDA living area characteristics		
100	Date (dd/mm/yyyy)	_ _ _ / _ _ _ / _ _ _ _ _ _ _
101	Region	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
102	Zone	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
103	Woreda name	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
104	Kebele name	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
105	Gote name	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
106	PHCU (cluster) code	_ _ _ _
107	HDA Number	_ _ _
108	Unique HDA ID	_ _ _ _ / _ _ _ _ Cluster (Q106) HDA # (Q107)
109	GPS latitude	_ _ _ : _ _ _ _ _ _ _ _ _ _ _
110	GPS longitude	_ _ _ : _ _ _ _ _ _ _ _ _ _ _
111	Where were the coordinates taken?	1 = Health center 2 = Health post 3 = Home of HDA _ _
112	Interviewer Initials	Enter initials _ _ _
113	Did you read the HDA the consent form?	1 = Yes 2 = No _ _
114	Did the HDA agree to be interviewed?	1 = Yes (continue to section 2) 2 = No _ _
115	If NOT, Why not?	_____ END

Visits		1 st	2 nd	3 rd	Final Visit
Date (dd/mm/yyyy)		_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	Day _ _ Month _ _ Year _ _ _ _ Result _
<i>Interviewer's name</i>					
<i>Result (Enter relevant code below)</i>		_	_	_	
<i>If not completed during this interview, when is the next visit (appointment)</i>	<i>Date</i> (dd/mm/yyyy)		_ _ / _ _ / _ _ _ _	_ _ / _ _ / _ _ _ _	
	<i>Time</i>				
Result Codes: 1. <i>Completed</i> 2. <i>Partly completed</i> 3. <i>Postponed</i> 4. <i>Not at home</i> 5. <i>No-one competent to respond</i> 6. <i>Refused</i>					

If refused end Interview

Section 2: Background of Health Development Army

Interviewer:

Thank you very much for agreeing to respond to this survey. I first would like to ask a few basic questions about your background.

200	What is your birth date?	Enter number Enter 99/9999 if month and year is not known	mm __ __ yyyy __ __ __ __
201	What is your age now?	Enter number Enter 99 if age is not known	__ __
202	Do you reside in this kebele	1 = Yes 2 = No - GO to 204	__
203	If YES , in which gote do you reside in this kebele	Specify name of gote _____	
204	What is the highest grade of schooling that you completed? Enter grade number completed	Enter number	__ __
205	For how many years/month have you worked as an HDA?	Write number of months and years	mm __ __ yy __ __
206	How many households are under your supervision?	Enter number	__ __ __
207	Is there a functional kebele command post in your kebele that meets on a monthly basis?	1 = Yes 2 = No-(Go to section 3)	__
208	If YES: Are you a member of that committee?	1 = Yes 2 = No (GO to Section 3)	__
209	If YES: Did you attend the command post meeting held last month?	1 = Yes 2 = No	__

Section 3: Knowledge

Interviewer:

I would now like to ask you some questions that relate to maternal and newborn health.

For all knowledge questions probe by saying 'anything else' before moving to the next question

For each: 1 = Yes 2 = No			
What are the main aspects of antenatal care for women who are pregnant? Do not prompt, select all mentioned	300	Promote a minimum 4 ANC consultations at a health facility	__
	301	Promote first ANC consultation at health center	__
	302	Ensure pregnant women have a birth plan	__

	303	Promote institutional delivery	<input type="checkbox"/>
	304	Prevent illness and promote health	<input type="checkbox"/>
	305	Educate on danger signs associated (pregnancy, childbirth, and postpartum period)	<input type="checkbox"/>
	306	Promote breastfeeding	<input type="checkbox"/>
	307	Education on family planning	<input type="checkbox"/>
	308	Nutrition education	<input type="checkbox"/>
<p>If home delivery occurs, what critical components of safe and clean delivery process should be conducted for a newborn?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	309	Not washing baby right away (delay bathing for 24 hrs)	<input type="checkbox"/>
	310	Using clean razor blades	<input type="checkbox"/>
	311	Not putting anything on the umbilical cord	<input type="checkbox"/>
	312	Keeping the baby warm	<input type="checkbox"/>
<p>What are the critical aspects of postnatal care that should be done after a woman delivers?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	313	Conduct visits on the 1 st , 3 rd , 7 th and 42 nd day post delivery	<input type="checkbox"/>
	314	Check newborn for danger signs	<input type="checkbox"/>
	315	Promote vaccination for newborn	<input type="checkbox"/>
	316	Refer to health facility	<input type="checkbox"/>
	317	Promote breastfeeding	<input type="checkbox"/>

Section 4: Training of Health Development Army

Interviewer:
I would now like to ask you some questions about training or orientation that you have received.

In the last 12 months, have you received any training or orientation for the following services?

400	How to identify and systematically report pregnant women	1 = Yes 2 = No (GO to 403)	<input type="checkbox"/>
401	If YES , from whom?	1 = HP 2 = HC 3 = Other	<input type="checkbox"/>
402	If OTHER , please specify	Specify _____	
403	How to use the family health card to (FHC) promote ANC, PNC, and facility delivery and also teach danger sign	1 = Yes 2 = No (go to 406)	<input type="checkbox"/>
404	If YES , from whom?	1 = HP 2 = HC 3 = Other	<input type="checkbox"/>

405	If OTHER , please specify	Specify _____	
406	How to identify and educate on danger signs in pregnant women?	1 = Yes 2 = No (go to 409)	__
407	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
408	If OTHER , please specify	Specify _____	
409	How to refer for ANC care to the health facility?	1 = Yes 2 = No (go to 412)	__
410	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
411	If OTHER , please specify	Specify _____	
412	How to educate on birth preparedness plan for pregnant women? (<i>Arranging money, transport, decide where to deliver</i>)	1 = Yes 2 = No (go to 415)	__
413	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
414	If OTHER , please specify	Specify _____	
415	How to promote institutional delivery for pregnant women?	1 = Yes 2 = No (go to 418)	__
416	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
417	If OTHER , please specify	Specify _____	
418	How and when to provide home visits for recently delivered women?	1 = Yes 2 = No (go to 421)	__
419	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
420	If OTHER , please specify	Specify _____	
421	How to refer for PNC care to the health facility?	1 = Yes 2 = No (go to 424)	__
422	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
423	If OTHER , please specify	Specify _____	
424	How to identify and educate on danger signs for newborn?	1 = Yes 2 = No (go to 427)	__
425	If YES , from whom?	1 = HP 2 = HC 3 = Other	__

426	If OTHER , please specify	Specify _____	
427	How to refer sick newborns to the health facility?	1 = Yes 2 = No (go to 430)	__
428	If YES , from whom?	1 = HP 2 = HC 3 = Other	__
429	If OTHER , please specify	Specify _____	
What types of materials and tools did you receive at the time of the training? Read list. Select all that apply	For each: 1 = Yes 2 = No		
	430	Mother and child card (Family Health Card)	__
	431	Data collection forms (e.g. pregnancy registration forms)	__
	432	Leaflets about ANC, PNC, delivery and newborn care	__
	433	Other, specify	__
	434	Specify _____	
435	Can we ask whether or not you were satisfied with the newborn care training received? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 437) 3 = Neither satisfied nor dissatisfied (GO to Section 5)	__
436	If YES , then what was the level of satisfaction? Read both options	1 = Fully satisfied (GO to Section 5) 2 = Somewhat satisfied (GO to Section 5)	__
437	If NO , then what was the level of dissatisfaction? Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied	__

Section 5: Supervision and reporting

Interviewer:

I would like to ask you questions about supportive supervisions you have received. By supportive supervision I mean being visited by individuals from region, zone, woreda, kebele/command post, health center and health post to discuss, review, and give feedback on your work

500	Have you received a supportive supervisory visit in the last 3 months?	1 = Yes 2 = No (go to 513)	__
If YES : From whom? Read list. Select all mentioned	For each: 1 = Yes 2 = No		
	501	Woreda	__
	502	Health Center	__
	503	Health Post (HEW)	__
	504	Kebele – Command post	__
	505	Other	__

		506	Specify	_____
507	How many times did you receive the visit in the last 3 months?	Enter total number of times		__
508	Who did you receive a supervision visit from last time? Select one	1 = Woreda 2 = Health center 3 = Health post/HEW 4 = Kebele-command post 5 = Other		__
509	If OTHER , please specify	Specify _____ *		
510	Can we ask whether or not you satisfied with the supportive supervision you received? Do not read list of options	1 = Yes was satisfied 2 = No was not satisfied (GO to 512) 3 = Neither satisfied nor dissatisfied (GO to 513)		__
511	IF YES , then what was the level of satisfaction? Read both options	1 = Fully satisfied (GO to 513) 2 = Somewhat satisfied (GO to 513)		__
512	IF NO , then what was the level of dissatisfaction? Read both options	1 = Fully dissatisfied 2 = Somewhat dissatisfied		__
REPORTING				
513	Have you reported about your work in the past three months?	1 =Yes (GO to 515) 2 = No		__
514	If NO , Why not?	Specify _____ (GO to 545)		
If YES: to whom? Read list. Select all mentioned		For each: 1 = Yes 2 = No		
		515	Woreda	__
		516	Health Center	__
		517	Health Post (HEW)	__
		518	Kebele –Command post	__
		519	Development team leader	__
		520	Other	__
521	If OTHER , specify _____			
522	How many times did you report in the past 3 months?	Enter number		__ __
523	Have you reported on pregnant women you identified in the past three months?	1 = Yes 2 = No (GO to 527)		__
524	If YES , how many times?	Enter number		__ __
525	If YES , to whom? Select one	1 = Woreda 2 = Health center		__

		3 = Health post/HEW 4 = Kebele-command post 5 = Development team leader 6 = Other		
526	If OTHER, specify	Specify _____		
527	Have you reported on ANC care you provided in the past three months? (educating on <i>birth preparedness and facility delivery, checking for danger signs of pregnant women</i>)	1 = Yes 2 = No (GO to 531)	__	
528	If YES, how many times?	Enter number	__ __	
529	If YES , to whom? Select one	1 = Woreda 2 = Health center 3 = Health post/HEW 4 = Kebele-command post 5 = Development team leader 6 = Other	__	
530	If OTHER, specify	Specify _____		
531	Have you reported on a post natal visit to a household in the past three months? (<i>1st, 3rd, 7th and 42nd day visits</i>)	1 = Yes 2 = No (GO to 535)	__	
532	If YES, how many times?	Enter number	__ __	
533	If YES , to whom? Select one	1 = Woreda 2 = Health center 3 = Health post/HEW 4 = Kebele-command post 5 = Development team leader 6 = Other -	__	
534	If OTHER, specify	Specify _____		
535	Have you you reported on newborn care in the past three months? (counseling for PNC, <i>check for danger signs, referral</i>)	1 = Yes 2 = No (GO to 539)	__	
536	If YES, how many times?	Enter number	__ __	
537	If YES , to whom? Select one	1 = Woreda 2 = Health center 3 = Health post/HEW 4 = Kebele-command post 5 = Development team leader 6 = Other	__	
538	If OTHER, specify	Specify _____		
What reporting format do you utilize to report? Select all mentioned		For each: 1 = Yes 2 = No		
		539	Verbal	__
		540	Paper form	__
		541	Pre-filled pictorial form	__
		542	None	__
	543	Other (specify)	__	

	544	Specify _____		
545	Have you and the other HDAs in this kebele met with the HEW in the last three months?		1 = Yes 2 = No - GO to 555 <input type="checkbox"/>	
546	If YES: how many times did you meet with the HEW as a group last three months?		Enter total number of times <input type="checkbox"/>	
If YES: Do you do any of the following with the HEWs? Read options. Select all that apply		For each: 1 = yes, 2 = No		
		547	Conduct monthly meetings	<input type="checkbox"/>
		548	Plan activities together	<input type="checkbox"/>
		549	Organize pregnant women's conference	<input type="checkbox"/>
		550	Household visits	<input type="checkbox"/>
		551	Conduct health related Campaigns	<input type="checkbox"/>
		552	Discuss about referrals (pregnant women, recently delivered mothers/newborns and for those with danger signs)	<input type="checkbox"/>
		553	Other	<input type="checkbox"/>
554	Specify _____			
555	Do you organize pregnant women's conference?		1 = Yes 2 = No - GO to Section 6 <input type="checkbox"/>	
556	If YES, how often do you organize this event?		1 = Once a week 2 = Every two weeks 3 = Every month 4 = Other <input type="checkbox"/>	
557	If OTHER, Specify frequency		Specify _____	

Section 6: Practice			
Interviewer: <i>I would now like to ask some questions about your normal activities and practice.</i>			
600	Have you listed all the women of reproductive age in your catchment area?		1 = Yes - GO to 602 2 = No <input type="checkbox"/>
601	If not, Why not?		Specify _____
602	How many households are under your catchment area?		Enter number <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
603	Did you identify pregnant women in the last three months?		1 = Yes 2 = No - GO to 605 <input type="checkbox"/>
604	If YES: how many?		Enter number <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
605	Did you visit a household and educate pregnant women in the last three months? Educate using family health card on danger signs during pregnancy, ANC etc		1 = Yes 2 = No - GO to 607 <input type="checkbox"/>

606	If YES: how many?	Enter number	_ _	
607	Did you refer any pregnant women to a higher level (HP or HC) of care for ANC in the last three months?	1 = Yes 2 = No – GO to 609	_	
608	If YES: how many?	Enter number	_ _	
609	Did you refer any pregnant women to a higher level of care for danger signs in the last three months?	1 = Yes 2 = No – GO to 619	_	
610	If YES: how many?	Enter number	_ _	
<p>If YES, what were the reasons for referring pregnant mothers?</p> <p>Read list, select all that apply</p>		For each: 1 = Yes 2 = No		
		611	Severe abdominal pain	_
		612	Offensive discharge from birth canal	_
		613	Fever	_
		614	Headache, dizziness or blurred vision	_
		615	Convulsions or unconsciousness	_
		616	Swollen hands and face	_
		617	Vaginal bleeding	_
618	Prolonged labor	_		
619	Did you refer any women in labor to higher level of care in the last three months? (Health Center or Hospital)	1 = Yes 2 = No – GO to 621	_	
620	If YES: how many?	Enter number	_ _	
621	Did you provide home visits to women who recently delivered in the last three months?	1 = Yes 2 = No- GO to 623	_	
622	If YES: how many?	Enter number	_ _	
623	Did you educate any recently delivered mothers on maternal and newborn danger signs during in the past three months?	1 = Yes 2 = No – GO to 625	_	
624	If YES: how many?	Enter number	_ _	
625	In this community, is it customary for mothers to keep their newborns at home after birth for several days or weeks without taking the baby out?	1 = yes 2 = no - GO to 627	_	
626	IF YES, what is the average number of days that newborns are kept in the house without going out?	Enter number of days	_ _ _	
627	In this community, is it is customary to have no visitors come and see the baby for several days or weeks? This includes visitors for any reason: health care workers, extended family, or friends.	1 = yes 2 = no - GO to 629	_	
628	IF YES, what is the average number of days to have no visitors come and see the baby?	Enter number of days	_ _ _	
629	In this community, is it customary for only the mother to have physical contact with the baby during this period?	1 = yes 2 = no - GO to 631	_	
630	IF YES, what is the average number of days for only the mother to have physical contact with the baby?	Enter number of days	_ _ _	
631	Were there any sick newborns in your network of	1 = Yes	_	

	households in the last three months?	2 = No – GO to 641		
632	IF YES , Did you visit them?	1 = Yes 2 = No – GO to 641	_	
633	IF YES , Did you refer them to the health facility?	1 = Yes 2 = No – GO to 641	_	
634	If YES : how many?	Enter number	_ _	
What were the reasons for referral? Read list. Choose all that apply.		For each: 1 = Yes 2 = No		
		635	Convulsions	_
		636	Stopped feeding or significantly reduced feeding	_
		637	Severe chest in drawing	_
		638	Fast breathing	
		639	Fever	_
		640	Movement only when stimulated or No movement even when stimulated	_
In the last three months did you meet any of the following to deliver maternal and newborn health education? Read list. Choose all that apply.		For each: 1 = Yes 2 = No		
		641	Religious leaders	_
		642	Edir	_
		643	Women' savings groups	_
		644	Command post	_
		645	Traditional birth attendants	_
		646	Other (Specify)	_
647	Specify_____			

Interviewer:

Thank you very much for taking the time to participate in this survey

c) **HEALTH POST QUESTIONNAIRE**

Section 1: Facility Identifiers		
100	Date (dd/mm/yyyy)	_ _ _ / _ _ _ / _ _ _ _ _
101	Region	_ _ _ _ _ _ _ _ _ _ _ _ _
102	Zone	_ _ _ _ _ _ _ _ _ _ _ _ _
103	Woreda name	_ _ _ _ _ _ _ _ _ _ _ _ _
104	PHCU code	_ _ _ _ _
105	Kebele name	_ _ _ _ _ _ _ _ _ _ _ _ _
106	Kebele (cluster) code	_ _ _ _ _ _ _ _ _ _ _ _ _
107	HEW ID number	_ _ _ _ _
108	Health Post name	_ _ _ _ _ _ _ _ _ _ _ _ _
109	Facility Ownership	1 = Government 2 = NGO 3 = Other <input type="checkbox"/>
110	<i>GPS Longitude</i> Take coordinates of health post	_ _ _ : _ _ _ _ _ _ _ _
111	<i>GPS Latitude</i> Take coordinates of health post	_ _ _ : _ _ _ _ _ _ _ _
112	Where is the interview taking place?	1 = Health post 2 = Health centre 3 = Home of HEW <input type="checkbox"/>
113	Interviewer Initials	_ _ _
114	Did you read the HEW the consent form?	1 = yes 2 = no <input type="checkbox"/>
115	Did the HEW agree to be interviewed?	1= yes (<i>continue with interview</i>) 2 = no <input type="checkbox"/>
116	<i>If not, why not?</i>	_____ END

SECTION 2: BACKGROUND OF HEW			
Interviewer: <i>Thank you very much for agreeing to respond to this survey. I would first like to ask you about background and training</i>			
200	What is your birth date?	dd __ __ mm __ __ yyyy __ __ __ __	
201	What is the highest grade of schooling that you completed?	<i>Enter grade number</i>	__ __
202	For how long have you worked as an HEW (including work at other kebeles)?	<i>Write number of years, If less than one year, enter number of months only</i>	__ __ Years __ __ Months
203	For how long have you worked as an HEW in this kebele?	<i>Write number of years, If less than one year, enter number of months only</i>	__ __ Years __ __ Months
204	Do you reside in this kebele?	1 = Yes 2 = No	__
205	Does the kebele provide you with housing?	1 = Yes 2 = No	__
206	How many HEWs work in this health post?	<i>Enter number, including the person being interviewed</i>	__ __
207	Is there a health extension worker available every day of the week? Probe: even when the health post is closed.	1 = Yes 2 = No	__
208	How many days a week is the health post open?	<i>Enter number of days</i>	__

SECTION 3. ALL HEWs KNOWLEDGE			
Interviewer: <i>I would now like to ask you some questions that relate to maternal and newborn health.</i>			
Note: for all unprompted Knowledge questions, move on to next question when 4 incorrect answers have been given.			
What are the primary aspects of focused antenatal care? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	300	Minimum of 4 consultations	__
	301	First consultation at Health Center	__
	302	Ensure woman has a birth plan	__
	303	Promote institutional delivery	__
	304	Prevent illness and promote health	__
	305	Detect illnesses and manage complications (this includes STI/HIV infections)	__
306	Educate danger signs (pregnancy, childbirth, and post partum)	__	

	307	Promote breastfeeding	<input type="checkbox"/>
	308	Education on family planning	<input type="checkbox"/>
	309	Nutrition education	<input type="checkbox"/>
<p>What are the main components of the first ANC visit?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	310	Calculate EDD)	<input type="checkbox"/>
	311	Check presence of danger signs	<input type="checkbox"/>
	312	Measure blood pressure	<input type="checkbox"/>
	313	Measure weight	<input type="checkbox"/>
	314	Inject TT vaccine if women is eligible	<input type="checkbox"/>
	315	Provide iron and folate to be taken for 6 months	<input type="checkbox"/>
	316	Education on nutrition	<input type="checkbox"/>
	317	Education on ITN use	<input type="checkbox"/>
	318	Education on PMTCT	<input type="checkbox"/>
	319	Education on HIV testing and STI	<input type="checkbox"/>
	320	Managing STI	<input type="checkbox"/>
	321	Education on BPCR	<input type="checkbox"/>
	322	Link mother with HDA network	<input type="checkbox"/>
323	Provide HEW number to family	<input type="checkbox"/>	
324	Encourage women to visit HC during first trimester	<input type="checkbox"/>	
325	Check history for past pregnancies with difficulties	<input type="checkbox"/>	
<p>What are the main components of second and onwards ANC visits?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	326	Measure weight	<input type="checkbox"/>
	327	Encourage use of Iron and folate	<input type="checkbox"/>
	328	Check for danger signs and refer	<input type="checkbox"/>
<p>What are the major danger signs or identification of high risk pregnancies?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	329	Severe abdominal pain	<input type="checkbox"/>
	330	Offensive discharge from birth canal	<input type="checkbox"/>
	331	Fever	<input type="checkbox"/>
	332	Headache, dizziness or blurred vision	<input type="checkbox"/>
	333	Convulsions or unconsciousness	<input type="checkbox"/>
	334	Swollen hands and face	<input type="checkbox"/>
	335	Vaginal bleeding	<input type="checkbox"/>
336	Have you received training on safe birth delivery?	1 = Yes 2 = No (GO TO 346)	<input type="checkbox"/>
<p>For a woman in labour, what are the main observations that you make as you monitor her progress?</p>	For each: 1 = Yes 2 = No		
	337	Fetal heartbeat	<input type="checkbox"/>
	338	Colour of amniotic fluid	<input type="checkbox"/>
	339	Degree of moulding (skull bone overlap)	<input type="checkbox"/>

Do not prompt, select all mentioned	340	Dilation of the cervix	<input type="checkbox"/>
	341	Descent of the head	<input type="checkbox"/>
	342	Uterine contractions	<input type="checkbox"/>
	343	Maternal blood pressure	<input type="checkbox"/>
	344	Maternal temperature	<input type="checkbox"/>
	345	Maternal pulse	<input type="checkbox"/>
What are the main danger signs that might occur after birth? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	346	Vaginal bleeding	<input type="checkbox"/>
	347	Severe abdominal pain	<input type="checkbox"/>
	348	Fever	<input type="checkbox"/>
	349	Severe headache	<input type="checkbox"/>
	350	Abnormal body movement (fits/spasms)	<input type="checkbox"/>
	351	Loss of consciousness	<input type="checkbox"/>
	352	Foul smelling discharge	<input type="checkbox"/>
353	Sever pain in calf with or without swelling	<input type="checkbox"/>	
What are the main components of immediate newborn care? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	354	Deliver baby onto mother's abdomen	<input type="checkbox"/>
	355	Dry and wrap baby	<input type="checkbox"/>
	356	Assess breathing	<input type="checkbox"/>
	357	Delay cord clamping for three minutes	<input type="checkbox"/>
	358	Tie and cut cord appropriately	<input type="checkbox"/>
	359	Skin to skin contact	<input type="checkbox"/>
	360	Initiate breastfeeding	<input type="checkbox"/>
	361	Apply TTC eye ointment	<input type="checkbox"/>
	362	Apply chlorohexidine on cord	<input type="checkbox"/>
	363	Give Vitamin K	<input type="checkbox"/>
	364	Weight baby	<input type="checkbox"/>
What are the main signs for birth asphyxia? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	365	No breathing	<input type="checkbox"/>
	366	Gasping	<input type="checkbox"/>
	367	Breathing poorly (less than 30 breaths per minute)	<input type="checkbox"/>
When the newborn presents signs of birth asphyxia, what initial steps do you take? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	368	Position baby on back	<input type="checkbox"/>
	369	Clear the airways with gauze	<input type="checkbox"/>
	370	Ventilate with appropriate size ambu bag / face mask	<input type="checkbox"/>
	371	Refer to health center/hospital if baby remains weak or has irregular breathing after 20 min	<input type="checkbox"/>

	372	Provide three follow up visits in the first 24 hrs (6 hrs, 12 hrs and 24 hrs)	<input type="checkbox"/>	
373	How many PNC home visits should you conduct in the first 6 weeks?	Enter number of visits If only 1 complete 374a then skip to 378a If only 2 complete up to 375a then skip to 378a If only 3 complete up to 376a then skip to 378a	<input type="checkbox"/>	
374	On which day should you conduct the first visit? Do not prompt	Enter number in days	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
375	On which day should you conduct the second visit? Do not prompt	Enter number in days	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
376	On which day should you conduct the third visit? Do not prompt	Enter number in days	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
377	On which week should you conduct the fourth visit? Do not prompt	Enter number in weeks	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
What are the main components of the first PNC visit for the mother? Do not prompt, select all mentioned		For each: 1 = Yes 2 = No		
		378	Check for post partum danger sings	<input type="checkbox"/>
		379	Take body temperature	<input type="checkbox"/>
		380	Give TT vaccine	<input type="checkbox"/>
		381	Give Vitamin A	<input type="checkbox"/>
		382	Encourage Iron tablet use if mother did not use for 6 months during pregnancy	<input type="checkbox"/>
		383	Education on nutrition	<input type="checkbox"/>
		384	Education on family planning	<input type="checkbox"/>
		385	Provide contraception	<input type="checkbox"/>
What are the main components of subsequent (3 rd and 7 th days and 6 th week) PNC visits for mother? Do not prompt, select all mentioned		For each: 1 = Yes 2 = No		
		387	Check for danger signs	<input type="checkbox"/>
		388	Check if there are problems with breast feeding and solve problem	<input type="checkbox"/>
		389	Education on family planning,	<input type="checkbox"/>
		390	Education on nutrition	<input type="checkbox"/>
		391	Education on hygiene	<input type="checkbox"/>

Section 4. Knowledge continued				
What are the main components of the first PNC visit for newborn? Do not prompt, select all mentioned		For each: 1 = Yes 2 = No		
		400	Advice washing hands before touching baby	<input type="checkbox"/>
		401	Check for danger sings	<input type="checkbox"/>
		402	Check for congenital abnormalities	<input type="checkbox"/>
		403	Measure temp	<input type="checkbox"/>
		404	Measure weight	<input type="checkbox"/>
		405	Apply TTC eye ointment	<input type="checkbox"/>
		406	Encourage exclusive breast feeding for	<input type="checkbox"/>

		baby	
	407	Advice to delay bathing of baby for 24 hrs	<input type="checkbox"/>
	408	Encourage skin to skin contact	<input type="checkbox"/>
	409	Provide cord care (Chlorohexidine)	<input type="checkbox"/>
	410	Education on appropriate cord care (Chlorohexidine)	<input type="checkbox"/>
	411	Vaccinate for polio and BCG	<input type="checkbox"/>
	412	Teach mother on how to recognize newborn danger signs using family health card	<input type="checkbox"/>
<p>What are the main components (3rd and 7th and 6th week) of subsequent PNC visits for newborn?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	413	Check for newborn danger signs	<input type="checkbox"/>
	414	Advice to keep cord clean	<input type="checkbox"/>
	415	Asses breastfeeding	<input type="checkbox"/>
	416	Advise on breastfeeding	<input type="checkbox"/>
	417	Ensure baby is kept warm	<input type="checkbox"/>
	418	Check baby's weight	<input type="checkbox"/>
<p>When a newborn weighs less than 1.5 kgs or has a gestational age of less than 32 weeks, what special care do you provide?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	419	Continue feeding with expressed breast milk	<input type="checkbox"/>
	420	Monitor ability to breastfeed	<input type="checkbox"/>
	421	Cover baby well including head	<input type="checkbox"/>
	422	Hold close to mother	<input type="checkbox"/>
	423	Refer urgently with mother to hospital	<input type="checkbox"/>
<p>When a newborn weighs between 1.5 - 2.5 kgs or has a gestational age of 32-<37 weeks, what special care do you provide?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	424	Make sure the baby is warm (skin to skin/kangaroo technique)	<input type="checkbox"/>
	425	Educate on optimal breastfeeding	<input type="checkbox"/>
	426	Monitor ability to breastfeed	<input type="checkbox"/>
	427	Monitor baby for the first 24 hours	<input type="checkbox"/>
	428	Ensure/educate on infection prevention	<input type="checkbox"/>
<p>What are the main signs for good attachment during breast feeding?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	429	Chin touching breast	<input type="checkbox"/>
	430	Mouth open wide	<input type="checkbox"/>
	431	Lower lip turned out	<input type="checkbox"/>
	432	More areola showing above	<input type="checkbox"/>
<p>What are the main signs for feeding problems in a newborn?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	433	Not well-attached to breast	<input type="checkbox"/>
	434	Not suckling effectively	<input type="checkbox"/>
	435	Less than 8 breastfeeds in 24 hours	<input type="checkbox"/>
	436	Switching to another breast before one is emptied	<input type="checkbox"/>
	437	Receives other foods or drinks (even water)	<input type="checkbox"/>
	438	Underweight for age	<input type="checkbox"/>

	439	Thrush (ulcers or white patches in mouth)	<input type="checkbox"/>
<p>When a baby shows signs of feeding problems or is underweight, what initial steps do you take?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	440	Advise mother to breastfeed as often and for as long as the infant wants day and night	<input type="checkbox"/>
	441	Teach mother correct positioning and attachment	<input type="checkbox"/>
	442	Advise to breastfeed at least eight times in 24 hours	<input type="checkbox"/>
	443	Educate on exclusive breastfeeding	<input type="checkbox"/>
	444	Teach the mother to treat thrush at home	<input type="checkbox"/>
	445	Follow-up any feeding problem or thrush in two days	<input type="checkbox"/>
	446	Follow-up under weight for age in 14 days	<input type="checkbox"/>
<p>What are the main signs for very severe disease in newborns?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	447	Convulsions	<input type="checkbox"/>
	448	Stopped feeding or significantly reduced feeding	<input type="checkbox"/>
	449	Severe chest in drawing	<input type="checkbox"/>
	450	Fast breathing	<input type="checkbox"/>
	451	Fever with 38 or more and 35 or less	<input type="checkbox"/>
	452	Movement only when stimulated or no movement even when stimulated	<input type="checkbox"/>
<p>When the newborn presents signs of very severe disease, what initial steps do you take?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	453	Explain the situation to the mother/caregiver	<input type="checkbox"/>
	454	Continue to breastfeed or give breast milk that has been expressed	<input type="checkbox"/>
	455	Advise mother on the need for referral	<input type="checkbox"/>
	456	Keep airways open	<input type="checkbox"/>
	457	Begin a dose of amoxicillin and gentamycin antibiotics (pre-referral)	<input type="checkbox"/>
	458	Refer	<input type="checkbox"/>
	459	When referral is not possible treat with amoxicillin and gentamycin daily for 7 days	<input type="checkbox"/>
<p>What are the main signs for local bacterial infection in newborns?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	460	Umbilicus red	<input type="checkbox"/>
	461	Umbilicus draining pus	<input type="checkbox"/>
	462	Skin pustules	<input type="checkbox"/>
<p>When the newborn presents signs of local bacterial infection, what initial steps do</p>	For each: 1 = Yes 2 = No		
	463	Give amoxicillin for 5 days	<input type="checkbox"/>

you take? Do not prompt, select all mentioned	464	Follow up care on 2 nd day	<input type="checkbox"/>
	465	Advice mother when to return	<input type="checkbox"/>
	466	Breastfeed more frequently	<input type="checkbox"/>
What are the main signs for jaundice in newborns? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	467	Yellow skin	<input type="checkbox"/>
When the newborn presents signs of jaundice, what initial steps do you take? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	469	Breastfeed more frequently	<input type="checkbox"/>
	470	Advise mother to keep young infant warm	<input type="checkbox"/>
	471	Expose to sunshine 20 to 30 minutes every day	<input type="checkbox"/>
What are the main symptoms/signs for severe jaundice in newborns? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	472	Follow-up in 2 days	<input type="checkbox"/>
	473	Palms yellow	<input type="checkbox"/>
	474	Soles yellow	<input type="checkbox"/>
When the newborn presents symptoms /signs of sever jaundice what initial steps do you take? Do not prompt, select all mentioned	475	Age less than 24 hours	<input type="checkbox"/>
	476	Age 14 days or more	<input type="checkbox"/>
	For each: 1 = Yes 2 = No		
	477	Breastfeed more frequently	<input type="checkbox"/>
	478	Advise mother on the need for referral	<input type="checkbox"/>
What are the main symptoms/signs for severe dehydration caused by diarrhea in newborns? Do not prompt, select all mentioned	479	Refer urgently to health center /hospital	<input type="checkbox"/>
	480	Advise mother to cover baby well	<input type="checkbox"/>
	481	Advise mother to keep baby close to her body	<input type="checkbox"/>
	For each: 1 = Yes 2 = No		
	482	Movement only when stimulated or no movement even when stimulated	<input type="checkbox"/>
When the newborn presents signs of severe dehydration caused by diarrhea what initial steps do you take? Do not prompt, select all mentioned	483	Sunken eyes	<input type="checkbox"/>
	484	Skin pinch goes back very slowly	<input type="checkbox"/>
	For each: 1 = Yes 2 = No		
	485	Refer urgently to health center/hospital	<input type="checkbox"/>
What are the main signs for some dehydration caused by diarrhea in newborns? Do not prompt, select all mentioned	486	Ensure mother gives child ORS on the way to health center/hospital	<input type="checkbox"/>
	487	Advise mother to breastfeed more frequently and longer	<input type="checkbox"/>
	488	Advise mother to keep young infant warm	<input type="checkbox"/>
Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	489	Restless and irritable	<input type="checkbox"/>
	490	Sunken eyes	<input type="checkbox"/>
Do not prompt, select all mentioned	491	Skin pinch goes back slowly	<input type="checkbox"/>

For each: 1 = Yes 2 = No			
When the newborn presents signs of some dehydration caused diarrhea what initial steps do you take? Do not prompt, select all mentioned	492	Give fluid and breast milk for some dehydration	<input type="checkbox"/>
	493	Give zinc treatment for 10 days	<input type="checkbox"/>
	494	Advise mother to breast feed more frequently and longer	<input type="checkbox"/>
	495	Advise mother when to return	<input type="checkbox"/>
	496	Follow up in 2 days	<input type="checkbox"/>

Section 5. Training of the HEW			
Interviewer: <i>I would now like to ask you some questions on your training.</i>			
In the last 12 months, have you received any training for the following services?			
500	Providing family planning services	1 = Yes 2 = No (GO TO 503)	<input type="checkbox"/>
501	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
502	IF OTHER	Specify _____	
503	Providing antenatal services	1 = Yes 2 = No (GO TO 506)	<input type="checkbox"/>
504	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
505	If OTHER	Specify _____	
506	Calculating EDD?	1 = Yes 2 = No (GO TO 509)	<input type="checkbox"/>
507	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
508	IF OTHER	Specify _____	
509	Educate/inform pregnant women on birth preparedness and complication readiness?	1 = Yes 2 = No (GO TO 512)	<input type="checkbox"/>
510	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
511	Other	Specify _____	
512	Screening for syphilis	1 = Yes 2 = No (GO TO 515)	<input type="checkbox"/>
513	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
514	IF OTHER	Specify _____	
515	PMTCT	1 = Yes 2 = No ((GO TO 518)	<input type="checkbox"/>
516	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	<input type="checkbox"/>
517	If OTHER	Specify _____	

518	Attending normal deliveries	1 = Yes 2 = No ((GO TO 521)	__
519	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
520	IF OTHER	Specify_____	
521	Misoprostol use	1 = Yes 2 = No ((GO TO 524)	__
522	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
523	IF OTHER	Specify_____	
524	Providing post natal care to mother	1 = Yes 2 = No (GO TO 527)	__
525	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
526	IF OTHER	Specify_____	
527	Providing postnatal care to newborn	1 = Yes 2 = No ((GO TO 530)	__
528	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
529	IF OTHER	Specify_____	
530	Managing asphyxia?	1 = Yes 2 = No (GO TO 533)	__
531	If YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
532	IF OTHER	Specify_____	
533	Using Chlorohexidine for clean cord care	1 = Yes 2 = No ((GO TO 536)	__
534	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
535	IF OTHER	Specify_____	
536	Diagnosing and treating newborns with very severe disease	1 = Yes 2 = No (GO TO 539)	__
537	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
538	IF OTHER	Specify_____	
539	Diagnosing and treating neonates with local bacterial infection	1 = Yes 2 = No (GO TO 542)	__
540	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
541	IF OTHER	Specify_____	
542	Diagnosing and treating neonates with jaundice/severe jaundice	1 = Yes 2 = No (GO TO 545)	__
543	IF YES , most recently from whom?	1 = HC	__

		2 = Woreda health office 3 = NGO/Private/other (specify)	
544	IF OTHER	Specify_____	
545	Diagnosing and treating neonates with diarrhea	1 = Yes 2 = No ((GO TO 548)	__
546	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
547	IF OTHER	Specify_____	
548	Diagnosing and managing neonates with feeding problem or who are underweight	1 = Yes 2 = No (GO TO 551)	__
549	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
550	IF OTHER	Specify_____	
551	Managing neonatal very severe disease with amoxicillin	1 = Yes 2 = No(GO TO 554)	__
552	If YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
553	IF OTHER	Specify_____	
554	Managing neonatal very severe disease with gentamycin	1 = Yes 2 = No(GO TO 557)	__
555	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
556	IF OTHER	Specify_____	
557	Supervision of HDA	1 = Yes 2 = No (GO TO 560)	__
558	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
559	IF OTHER	Specify_____	
560	iCCM training	1 = Yes 2 = No (GO TO 563)	__
561	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
562	If specify	Specify_____	
563	Using referral forms	1 = Yes 2 = No(GO TO 566)	__
564	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
565	If specify	Specify_____	
566	Using/filling family folder	1 = Yes 2 = No(GO TO 569)	__
567	IF YES , most recently from whom?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
568	If specify	Specify_____	

569	Have you attended (refresher) integrated training for services to mothers and newborns?	1 = Yes 2 = No (GO TO 572)	__
570	IF YES , most recently who organised the integrated training?	1 = HC 2 = Woreda health office 3 = NGO/Private/other (specify)	__
571	IF OTHER	Specify _____	
572	Can you tell us whether or not you were satisfied with the newborn training received? (Do not give options to the respondent)	1 = Yes was satisfied 2 = No was not satisfied (GO to 574) 3 = Neither satisfied nor dissatisfied (Go to Section 6)	__
573	IF YES , then what was the level of satisfaction (give both options to the respondent)	1. Fully satisfied (Go to Section 6) 2. Somewhat satisfied (Go to Section 6)	__
574	IF NO , then what was the level of dissatisfaction (give both options to the respondent)	1. Fully dissatisfied 2. Somewhat dissatisfied	__

SECTION 6: SUPERVISION

Interviewer:

I would now like to ask some questions about supportive supervision you have received. By supportive supervision I mean being visited by individuals from the region, zone, woreda and/or health center to discuss, review and give feedback on your work.

600	Have you received a supportive supervisory visit in the last 3 months?	1 = Yes 2 = No (If no, go to 629)	__	
IF YES: Who from? Select all mentioned		For all: 1 = yes, 2 = no		
		601	Federal Ministry of Health	__
		602	Region	
		603	Zone	
		604	Woreda health office	
		605	PHCU/health centre	__
		606	NGO	__
		607	Other (specify)	__
608	Specify _____			
609	If 500 yes: How many times did you receive this visit in the last 3 months?	Enter total number of times	__ __	
610	Who did you receive a supervision visit from the last time? Select one	1 = Woreda Health Office 2 = PHCU/health centre 3 = NGO 4 = Other (specify)	__	
611	IF OTHER	Specify _____		
If YES: Did that visit include any of the following?		For all: 1 = yes, 2 = no		

Select all mentioned	612	Discussing level of reporting from HDA on early identification of pregnancy	<input type="checkbox"/>
	613	Discussing provision focused ANC	<input type="checkbox"/>
	614	Discussing promotion of institutional delivery	<input type="checkbox"/>
	615	Discussing safe and clean delivery	<input type="checkbox"/>
	616	Discussing immediate newborn care including cord care (chlorohexidine)	<input type="checkbox"/>
	617	Discussing recognition of asphyxia, initial stimulation and resuscitation of newborn babies	<input type="checkbox"/>
	618	Discussing prevention and management of hypothermia	<input type="checkbox"/>
	619	Discussing management of pre-term and/or low birth weight neonates	<input type="checkbox"/>
	620	Discussing management of very severe disease in newborns	<input type="checkbox"/>
	621	Discussing HEW activities with HDA	<input type="checkbox"/>
	622	Observing record keeping and reporting	<input type="checkbox"/>
	623	Checking/delivering supplies/training manuals, job aides, request forms	<input type="checkbox"/>
	624	Observing client interaction	<input type="checkbox"/>
	625	Conducted household visits together	<input type="checkbox"/>
	626	Providing feedback to you on your work	<input type="checkbox"/>
627	Other (specify)	<input type="checkbox"/>	
628	Specify _____		

Interviewer:
I would now like to ask you some questions about performance review and clinical mentoring. By clinical mentoring, I mean when health center and health post staff meet together to discuss performance, targets, and ways to achieve targets?

629	In the past 6 months, have the health center and health post staff met together to discuss performance, targets, and ways to achieve targets?	1 = Yes 2 = No (SKIP TO 541)	<input type="checkbox"/>
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Did that meeting cover performance and targets on the following?		For each: 1 = Yes 2 = No	
	630	Early identification of pregnancy	<input type="checkbox"/>
	631	Focused ANC	<input type="checkbox"/>
	632	Promotion of institutional delivery	<input type="checkbox"/>
	633	Safe and clean delivery	<input type="checkbox"/>
	634	Immediate newborn care including cord care (chlorohexidine)	<input type="checkbox"/>
	635	Recognition of asphyxia, initial stimulation and resuscitation of newborn babies	<input type="checkbox"/>
	636	Prevention and management of hypothermia	<input type="checkbox"/>
637	Cover management of pre-term and/or	<input type="checkbox"/>	

		low birth weight neonates	
	638	Management of neonatal/very severe disease	<input type="checkbox"/>
639	Did that meeting extract data from HEW newborn registers?	1 = Yes 2 = No	<input type="checkbox"/>
640	At that meeting, did the health center staff get a chance to offer mentoring directly to you the HEWs under this health center?	1 = Yes 2 = No	<input type="checkbox"/>

641	Have you received a supportive supervisory visit in the last 3 months specifically for iCCM?	1 = Yes 2 = No (GO to 650)	<input type="checkbox"/>	
If YES: Who from? Select all mentioned		For all: 1 = yes, 2 = no		
		642	Federal Ministry of Health	<input type="checkbox"/>
		643	Regional health bureau	<input type="checkbox"/>
		644	Zonal health department	<input type="checkbox"/>
		645	Woreda health office	<input type="checkbox"/>
		646	PHCU/health centre	<input type="checkbox"/>
		647	NGO	<input type="checkbox"/>
		648	Other (specify)	<input type="checkbox"/>
649	Specify	<input type="text"/>		
650	Can you tell us whether or not you were satisfied with the supportive supervision received? Do not read options	1 = Yes was satisfied 2 = No was not satisfied (GO to 652) 3 = Neither satisfied nor dissatisfied (Go to Section 7)	<input type="checkbox"/>	
651	IF YES , then what was the level of satisfaction? Read options	1. Fully satisfied (Go to Section 7) 2. Somewhat satisfied (Go to Section 7)	<input type="checkbox"/>	
652	IF NO , then what was the level of dissatisfaction? Read options	1. Fully dissatisfied 2. Somewhat dissatisfied	<input type="checkbox"/>	

SECTION 7. HEWs services provided in the last 3 months			
Interviewer: I would now like to ask you about the services you that you provided in the last 3 months.			
Refer to HEWs record books (at the health post registers) to complete the following; only count events attended by the specific HEW being interviewed:			
700	Interviewer: do you have access to the HEW written records for this section?	1 = yes 2 = no	<input type="checkbox"/>
701	Do you map the pregnant women in your community? Interviewer: check the posters displayed at the health post to see if the HEW does map pregnant women.	1 = yes 2 = no	<input type="checkbox"/>

702	Do you conduct pregnant women conference in the community?	1 = yes 2 = no	__
703	How frequently do you conduct the pregnant women's conference?	1 = Once a week 2 = every two weeks 3 = once a month	__
704	Did you provide pregnancy care to any women in the three months?	1 = yes 2 = no GO TO 706	__
705	IF YES: How many women did you provide ANC to in the last three months?	Enter number	__ __
706	Did you refer any pregnant women from this health post to a health center or hospital in the last three months?	1 = yes 2 = no GO TO 708	__
707	IF YES: how many?	Enter number	__ __
708	Did you assist a labour in the last three months?	1 = yes 2 = no GO TO 710	__
709	IF YES: How many deliveries did you attend in the last three months	Enter number	__ __
710	Did you refer any women in labour from this health post to a health center or hospital in the last three months? (Health Center or Hospital)	1 = yes 2 = no GO TO 712	__
711	IF YES: How many?	Enter number	__ __
712	Did you see any women to provide postpartum care in the last three months?	1 = yes 2 = no GO TO 714	__
713	IF YES: How many women did you see for PNC in the last three months?	Enter number	
714	Did you refer any post partum women from this health post to a health center or hospital in the past three months?	1 = yes 2 = no GO TO 716	__
715	IF YES: How many?	Enter number	__ __
716	Did you see any newborns to provide a postnatal check for in the last three months?	1 = yes 2 = no GO TO 718	__
717	IF YES: How many newborns did you provide a postnatal check for in the last three months?	Enter number	__ __
718	Did you refer any newborns from this health post to a health center or hospital in the past three months?	1 = yes 2 = no GO TO 720	__
719	IF YES: How many?	Enter number	__ __
720	Did you give care for asphyxia, initial stimulation, or resuscitation to newborn in the past three months?	1 = yes 2 = no GO TO 722	__
721	IF YES: How many?	Enter number	__ __
722	Did you use chlorohexidine for newborn cord care in the last three months?	1 = yes 2 = no GO TO 724 3 = Chlorhexidine not available	__
723	IF YES: How many?	Enter number	__ __
724	Did you give care for prevention and management of hypothermia in the last three months?	1 = yes 2 = no GO TO 726	__
725	IF YES: How many?	Enter number	__ __
726	Did you provide care for pre-term and/or low birth weight neonates in the last three months?	1 = yes 2 = no GO TO 728	__
727	IF YES: How many?	Enter number	__ __

728	Did you treat newborns with suspected very severe disease in the last three months?	1 = yes 2 = no GO TO 731 3 = Antibiotics not available	__
729	IF YES: how many?	Enter number	__ __
730	IF YES: how many completed the treatment	Enter number	__ __
731	Did you refer any newborns from this health post to a health center or hospital for very severe disease in the past three months?	1 = yes 2 = no GO TO 733	__
732	IF YES: How many?	Enter number	__ __
733	Did you see any newborns with diarrhea in the last three months?	1 = yes 2 = no GO TO 735	__
734	IF YES, how many?	Enter number	__ __
735	Did you see any newborns with jaundice in the last three months?	1 = yes 2 = no GO TO 737	__
736	IF YES, how many?	Enter number	__ __
737	Are the maternity record books completely up to date until the day before survey?	1 = yes 2 = no	__
738	What is number of maternity cases maintained in the last three months in the maternity register?	Enter number	__ __
For each: 1 = Yes 2 = No			
<p>In the last three months did you meet any of the following to discuss maternal and newborn health?</p> <p>Select all that apply</p>	739	Religious leaders	__
	740	Health based or community based organizations	__
	741	Women Savings Associations	__
	742	Command post	__
	743	Traditional birth attendants	__
	744	Other (specify)	__
	745	Specify _____	
746	In this kebele, is it customary for mothers to keep their newborns at home after birth for several days or weeks without taking the baby out?	1 = Yes 2 = No – GO to 748	__
747	IF YES, what is the average number of days that newborns are kept in the house without going out?	Enter number of days	__ __
748	In this kebele, is it customary to have no visitors come and see the baby for several days or weeks? This includes visitors for any reason: health care workers, extended family, or friends.	1 = Yes 2 = No - GO to 750	__
749	IF YES, what is the average number of days to have no visitors come and see the baby?	Enter number of days	__ __
750	In this kebele, is it customary for only the mother to have physical contact with the baby for several days or weeks?	1 = Yes 2 = No – GO to Section 8	__
751	IF YES, what is the average number of days for only the mother to have physical contact with the baby?	Enter number of days	__ __

SECTION 8. ALL HEWs - Recalled activities at the last delivery

Interviewer:

I would now like to ask you a delivery you attended in the last 3 months

Use the register to identify the last birth attended by the HEW being interviewed

800	Have you ever attended a delivery?	1 = yes 2 = no if no, go to Section 9	<input type="checkbox"/>
801	Was the birth within the past 3 months?	1 = yes 2 = no GO to Section 9	<input type="checkbox"/>
802	Where did the delivery take place?	1 = Health Post 2 = Home 3 = Other (specify)	<input type="checkbox"/>
803	IF OTHER	Specify _____	
804	Do you remember the details of the delivery that took place on [date], that you attended?	1 = yes 2 = no if no, go to Section 9	<input type="checkbox"/>

About that delivery:

Interviewer – use the health post record books as well as questioning the HEW to complete this information

805	Did the labour end in a live birth?	1 = yes 2 = no (GO TO 809)	<input type="checkbox"/>
806	Did you weigh the baby?	1 = yes 2 = no (GO TO 808)	<input type="checkbox"/>
807	Was the baby low birth weight? (<2500g, or <2.5kg)	1 = yes 2 = no 3 = don't remember	<input type="checkbox"/>
808	Was the baby born prematurely (<37 weeks gestation)?	1 = Yes 2 = No 3 = don't remember	<input type="checkbox"/>
809	Was the mother referred from this health post to a health center or hospital?	1 = Yes 2 = No	<input type="checkbox"/>
810	Was the newborn referred from this health post to a health center or hospital?	1 = Yes 2 = No	<input type="checkbox"/>
811	Was the mother alive after delivery?	1 = Yes 2 = No	<input type="checkbox"/>
812	Did the woman receive misoprostol?	1 = Yes 2 = No	<input type="checkbox"/>
813	Was there another member of staff available to assist you when you delivered the baby?	1 = Yes 2 = No	<input type="checkbox"/>

<p>What immediate care did you give the newborn?</p> <p>Do not prompt, select all mentioned</p>	For each: 1 = Yes 2 = No		
	814	Clean the baby's mouth before the shoulder comes out	<input type="checkbox"/>
	815	Clean the baby's mouth, face and nose	<input type="checkbox"/>
	816	Ensure the baby is breathing	<input type="checkbox"/>
	817	Ensure the baby is dry	<input type="checkbox"/>
	818	Observe for colour	<input type="checkbox"/>
	819	Ensure the baby is kept warm (skin to skin)	<input type="checkbox"/>
	820	Administer TTC for the eyes	<input type="checkbox"/>
	821	Weigh the baby	<input type="checkbox"/>
	822	Care for the umbilical cord	<input type="checkbox"/>
823	Initiate breastfeeding within the first 30	<input type="checkbox"/>	

		minutes	
	824	Evaluate/examine the newborn within the first hour	<input type="checkbox"/>
825	Was there a need to resuscitate the baby?	1 = yes 2 = no(GO TO 833)	<input type="checkbox"/>
If YES What main actions did you take? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	826	Opening the airways	<input type="checkbox"/>
	827	Cleaning the mouth/use suction devise	<input type="checkbox"/>
	828	Wrapping the baby	<input type="checkbox"/>
	829	Drying the baby	<input type="checkbox"/>
	830	Use the ambu bag / face mask	<input type="checkbox"/>
	831	Heart massage	<input type="checkbox"/>
What were the key elements of cord care? Do not prompt, select all mentioned	For each: 1 = Yes 2 = No		
	832	Apply water	<input type="checkbox"/>
	833	Apply alcohol	<input type="checkbox"/>
	834	Apply chlorhexidine	<input type="checkbox"/>
	835	Apply other (antiseptic)	<input type="checkbox"/>
	836	Apply nothing	<input type="checkbox"/>
	837	Wrapped with a dry dressing	<input type="checkbox"/>
	838	Other (specify)	<input type="checkbox"/>
	839	Specify _____	

SECTION 9. For Health Extension Worker about Health Development Army (HDA) and Command Post

Interviewer:
Now I want to ask you about the work you do with the HDA in your kebele

900	Are there any community health promoters/HDA working in this kebele?	1 = yes 2 = no (GO TO 939)	<input type="checkbox"/>
901	How many female HDAs 1-5 network?	Enter Number	<input type="text"/>
902	How many HDAs 1-30 network?	Enter Number	<input type="text"/>

Do you orient/train HDA in your kebele on the following in the last 3 months? Read out the options. Select all that apply	For each: 1 = Yes 2 = No		
	903	MNH problems in the community	<input type="checkbox"/>
	904	Importance of early identification of pregnant woman	<input type="checkbox"/>
	905	Importance of ANC	<input type="checkbox"/>
	906	How to approach pregnant woman in the community	<input type="checkbox"/>
	907	How to register pregnant woman in the community	<input type="checkbox"/>
	908	How to report pregnant women to HEWs	<input type="checkbox"/>

	909	Recognizing danger signs during pregnancy and delivery	<input type="checkbox"/>
	910	Recognizing danger signs for mother	<input type="checkbox"/>
	911	Recognizing danger signs for newborn	<input type="checkbox"/>
	912	Use of the family health card	<input type="checkbox"/>
	913	Generate demand for maternal, newborn, child health and nutrition	<input type="checkbox"/>
<p>Do you conduct any of the following with the HDAs in this kebele?</p> <p>Read out the options. Select all that apply</p>	For each: 1 = Yes 2 = No		
	914	Conduct monthly meetings	<input type="checkbox"/>
	915	Plan activities together	<input type="checkbox"/>
	916	Set and review targets	<input type="checkbox"/>
	917	Provide supportive supervision <i>By supportive supervision I mean meeting with HDAs to discuss, review and give feedback to their work.</i>	<input type="checkbox"/>
	918	Discuss and/or accept referrals	<input type="checkbox"/>
	919	Other (<i>specify</i>)	<input type="checkbox"/>
	920	Specify	<input type="checkbox"/>
	921	None of the above	<input type="checkbox"/>
<p>What kind of information you receive from HDA?</p> <p>Read out the options. Select all that apply</p>	For each: 1 = Yes 2 = No		
	922	Number of women of reproductive age in the community	<input type="checkbox"/>
	923	Reproductive history of women in the community	<input type="checkbox"/>
	924	Birth control status of women in the community	<input type="checkbox"/>
	925	Number of pregnant women in the community	<input type="checkbox"/>
	926	Number of deliveries	<input type="checkbox"/>
	927	Number of newborns	<input type="checkbox"/>
	928	Number of newborns with danger sings	<input type="checkbox"/>
929	In the last three months, did your receive information on number of pregnant women in the community from the HDA?	1 = Yes 2 = No (GO TO 931)	<input type="checkbox"/>
930	From how many HDAs?	Enter Number	<input type="checkbox"/> <input type="checkbox"/>
931	In the last three months, did your receive information on number of women who need PNC visits from the HDA?	1 = Yes 2 = No(GO TO 933)	<input type="checkbox"/>
932	How many?	Enter Number	<input type="checkbox"/> <input type="checkbox"/>
933	In the last three months, did your receive information on number of newborns with danger signs from the HDA?	1 = Yes 2 = No(GO TO 935)	<input type="checkbox"/>
934	How many?	Enter Number	<input type="checkbox"/> <input type="checkbox"/>

935	In the last three months, did your receive information on number of newborns with very severe disease from the HDA?	1 = Yes 2 = No(GO TO 937)	_	
936	How many?	Enter Number	_ _	
937	Have you met with the HDAs in this kebele as a group in the last 3 months?	1 = Yes 2 = No(GO TO 939)	_	
938	IF YES , How many times?	Enter number of times	_	
Interviewer: Now I want to ask you about the work you do with Command Post and model families in your kebele				
939	Is there a kebele Command Post in your kebele?	1 = Yes 2 = No (GO TO 950)	_	
940	IF YES: Are you a member of that committee?	1 = Yes (go 2 = No (go to 942)	_	
941	IF YES: How many meetings you have attended in last three months?	Enter Number	_ _	
942	Do you receive reports on pregnant women in the community from the command post?	1 = Yes 2 = No	_	
Do you submit reports to the command post on the following?		For all: 1 = yes 2 = no		
		943	ANC	_
		944	PNC	_
		945	Delivery	_
		946	Family planning	_
		947	Other (specify)	_
948	Specify	_____		
949	In the last three months has the health post received a supervisory visit from the command post?	1 = yes 2 = no	_	
950	Are there any model families in your kebele	1 = yes 2 = no(GO TO Section 10)	_	
951	If YES: How many?	Enter number, enter 99 if don't know	_ _	

SECTION 10. FACILITY, EQUIPMENT, MEDCINE AND JOB AIDS

Interviewer: I would now like to ask you questions about the facility, equipment, medicine and job aids at this health post.

Walk around the facility with the in-charge (or representative) and personally check the availability of equipment and stock.

Does the facility have the following essential support services?

1000	What is the main source of drinking water?	1 = Piped connection into house 2 = Piped connection into yard 3 = Public standpipes	_
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		4 = Boreholes 5 = Protected dug wells 6 = Protected springs 7 = Rainwater collection 8 = Surface water 9 = Open dug wells 10 = Unprotected springs 11 = Vendor provided water 12 = Bottled water 13 = Tanker	
1001	Water supply available on day of survey	1 = Yes 2 = No	<input type="checkbox"/>
1002	Electricity connection or other power sources (example, gas/solar generator)	1 = Yes 2 = No	<input type="checkbox"/>
1003	Electricity supply on day of survey?	1 = Yes 2 = No	<input type="checkbox"/>
1004	Functional sterilizer, cooker or stove?	1 = Yes 2 = No	<input type="checkbox"/>
1005	Functional fridge?	1 = Yes 2 = No	<input type="checkbox"/>
1006	Toilets accessible to facility users?	1 = Yes 2 = No	<input type="checkbox"/>
1007	Is there a cell phone signal at this health post?	1 = Yes 2 = No	<input type="checkbox"/>
1008	Motorised transport for referral	1 = Yes 2 = No(GO TO 1016)	<input type="checkbox"/>
1009	IF YES: How many motorbikes are available?	Enter number of motor bikes	<input type="checkbox"/>
1010	Is it all functional today?	1 = Yes 2 = No	<input type="checkbox"/>
1011	IF YES: How many three-wheelers are available?	Enter number of three-wheelers (eg. Bajaj)	<input type="checkbox"/>
1012	Is it all functional today?	1 = yes 2 = no	<input type="checkbox"/>
1013	IF YES: How many cars/ambulances are available?	Enter number of cars/ambulance	<input type="checkbox"/>
1014	IF YES: Is it all functional today?	1 = Yes 2 = No	<input type="checkbox"/>
1015	IF YES: Is the vehicle for referral in the facility now?	1 = Yes 2 = No	<input type="checkbox"/>
1016	The last time there was an obstetric referral from the health post to the health centre which transport was used?	1 = facility owned vehicle 2 = district office owned vehicle 3 = she used her own vehicle 4 = public transport 5 = non-motorized vehicle 6 = Red Cross (NGO) ambulance 7 = Don't know	<input type="checkbox"/>
Which means of communication do you have to speak to another facility?		For each: 1 = Yes 2 = No	
	1017	Facility landline/mobile phone	<input type="checkbox"/>
	1018	Staff member mobile phone	<input type="checkbox"/>
	1019	Phone outside the facility	<input type="checkbox"/>
	1020	Radio	<input type="checkbox"/>
	1021	In person communication	<input type="checkbox"/>
	1022	No means of communication	<input type="checkbox"/>

1023	The last maternal referral from the health post to health center did you speak to the facility directly?	1 = Yes 2 = No(<i>go to 1025</i>) 3 = <i>Don't know</i>	__
1024	IF YES , Which means of communication did you use?	1 = Facility landline/mobile phone 2 = Staff member mobile phone; 3 = Phone outside the facility 4 = Radio 5 = In person communication; 6 = No means of communication	__
1025	The last maternal referral from the health post to health center did an HEW accompany her?	1 = Yes 2 = No 3 = <i>Don't know</i>	__
1026	The last maternal referral from the health post to health center did an HDA accompany her?	1 = Yes 2 = No 3 = <i>Don't know</i>	__
1027	How many women were referred from this health post to a health center or hospital for obstetric/maternal care in last three months?	Enter number	__
1028	The last neonatal referral from health post to health center did you speak to the facility directly?	1 = Yes 2 = No(<i>go to 1030</i>) 3 = <i>Don't know</i>	__
1029	If YES , Which means of communication did you use?	1 = Facility landline/mobile phone 2 = Staff member mobile phone; 3 = Phone outside the facility 4 = Radio 5 = In person communication; 6 = No means of communication	__
1030	The last time neonatal referral from health post to health center did an HEW accompany the mother?	1 = Yes 2 = No 3 = <i>Don't know</i>	__
1031	The last maternal referral from the health post to health center did an HDA accompany her?	1 = Yes 2 = No 3 = <i>Don't know</i>	__
1032	How many neonates were referred from this health post to the health center or hospital in last three months?	Enter number	__
1033	When referring from this health post to the health center for further care do you use referral forms?	1 = Yes 2 = No probe; Check to see an official woreda referral form	__
1034	Do you receive any back referral forms on cases you have referred?	1 = Yes 2 = No	__
1035	Do you use family folders?	1 = Yes 2 = No	__
1036	If YES, have you completed family folders for your whole kebele?	1 = Yes 2 = No	__

Does the facility have the following functional equipment today?		For each: 1 = Yes 2 = No	
	1037	Ambu bag / face mask	__
	1038	Clinical Thermometer, digital	__

	1039	Infant scale	<input type="checkbox"/>
	1040	Weighing sling	<input type="checkbox"/>
	1041	Blood pressure cuff	<input type="checkbox"/>
	1042	Stethoscope	<input type="checkbox"/>
	1043	Watch or clock	<input type="checkbox"/>
	1044	Tape measure	<input type="checkbox"/>
	1045	Examination couch	<input type="checkbox"/>
	1046	Drape	<input type="checkbox"/>
	1047	Washable mackintosh	<input type="checkbox"/>
	1048	Dustbin	<input type="checkbox"/>
	1049	Uristix	<input type="checkbox"/>
	1050	Cups/drinking water	<input type="checkbox"/>
	1051	Sharps container	<input type="checkbox"/>
	1052	Chlorine bleach	<input type="checkbox"/>
	1053	Bucket for decontamination solution	<input type="checkbox"/>
	1054	Contaminated waste container	<input type="checkbox"/>
	1055	Soap and towel or handrub	<input type="checkbox"/>
	1056	Clean glove	<input type="checkbox"/>
	1057	Syringe with needle	<input type="checkbox"/>
Does the facility have the following medicines today?		For each:1 = Yes2 = No	
	1058	Vitamin k 1 mg	<input type="checkbox"/>
	1059	Vitamin A 200,000 IU	<input type="checkbox"/>
	1060	Vitamin A 100,000 IU	<input type="checkbox"/>
	1061	TTC eye ointment	<input type="checkbox"/>
	1062	Chlorohexidine	<input type="checkbox"/>
	1063	Gentamycin 10 mg/ml	<input type="checkbox"/>
	1064	Amoxicillin suspension (125 mg/5 ml)	<input type="checkbox"/>
	1065	Amoxicillin tab 250 mg (dispersible)	<input type="checkbox"/>
	1066	Paracetamol	<input type="checkbox"/>
	1067	Iron	<input type="checkbox"/>
	1068	Folate	<input type="checkbox"/>
	1069	Anthelminths	<input type="checkbox"/>
	1070	BCG	<input type="checkbox"/>
1071	Polio vaccine	<input type="checkbox"/>	
Does the facility have the following job aids and forms today?		For each:1 = Yes 2 = No	
	1072	Family health cards	<input type="checkbox"/>
	1073	Vaccination cards	<input type="checkbox"/>
	1074	Family folder	<input type="checkbox"/>
	1075	Stock card/bin card	<input type="checkbox"/>
	1076	HMIS forms (monthly and quarterly reporting)	<input type="checkbox"/>
	1077	Request and re-supply form	<input type="checkbox"/>

	1078	Supervision checklist	<input type="checkbox"/>
	1079	Chart booklet	<input type="checkbox"/>
	1080	Birth Preparedness and Complication Readiness (BPCR) form	<input type="checkbox"/>
	1081	Young Infant Record Form	<input type="checkbox"/>
	1082	ICCM registration book for 0- under 2 months	<input type="checkbox"/>
	1083	ICCM registration book 2 -59 months	<input type="checkbox"/>
	1084	Pregnant woman and outcome registration book	<input type="checkbox"/>

Which of the following test kits are available in this facility today?

1085	Pregnancy test kit	1 = Yes 2 = No	<input type="checkbox"/>
1086	Proteinuria	1 = Yes 2 = No	<input type="checkbox"/>
1087	Does the facility offer HIV diagnostic tests?	1 = Yes 2 = No(<i>go to 1089</i>)	<input type="checkbox"/>
1088	IF YES: Does the facility have HIV rapid tests in stock today? (e.g. <i>Capillis, SD Biotline, Determine, Statpak, Unigold</i>)	1 = Yes 2 = No	<input type="checkbox"/>
1089	Does the facility offer syphilis diagnosis/?	1 = Yes at this clinic; 2 = No, not at this clinic (<i>go to 1092</i>)	<input type="checkbox"/>
1090	IF YES: Does the facility have syphilis RPR syphilis tests in stock today?	1 = Yes 2 = No(<i>go to 1092</i>)	<input type="checkbox"/>
1091	IF YES: Does the facility have syphilis rapid tests in stock today?	1 = Yes 2 = No	<input type="checkbox"/>
1092	Does the facility have anaemia tests, e.g. Haemoglobin colour scale/Tallquist	1 = Yes 2 = No	<input type="checkbox"/>
1093	Does the facility offer glucose level tests to assess gestational diabetes as part of ANC?	1 = Yes 2 = No	<input type="checkbox"/>

Section 11. Facility Services

Interviewer:

I would like to now ask you questions on services offered at this health post in the past three months.

1100	Has safe and clean delivery with clean gloves been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
1101	Has immediate newborn care been consistently offered in past three months?	1 = Yes 2 = No	<input type="checkbox"/>
1102	Has chlorhexidine been used for cord care consistently in the past three months?	1 = Yes (GO to 1104) 2 = No	<input type="checkbox"/>
1103	IF NO , was it because chlorhexidine was not available?	1 = Yes 2 = No	<input type="checkbox"/>

1104	Has recognition of asphyxia, initial stimulation and resuscitation of newborn babies care been consistently offered in the past three months??	1 = Yes 2 = No	_ _
1105	Has prevention and management of hypothermia for newborn babies been consistently offered in the past three months?	1 = Yes 2 = No	_ _
1106	Has management of pre-term and/or low birth weight neonates been consistently offered in the past three months?	1 = Yes 2 = No	_ _
1107	Has treatment of neonatal very severe disease been consistently offered in the past three months?	1 = Yes 2 = No	_ _
1108	IF YES: is treatment of neonatal very severe disease available today?	1 = Yes 2 = No	_ _
1109	Is treatment of neonatal very severe disease available every day of the week, if needed?	1 = Yes 2 = No	_ _
1110	Have post-natal health checks for mothers been consistently offered in the past three months?	1 = Yes 2 = No	_ _
1111	Have post-natal health checks for newborns been consistently offered in the past three months?	1 = Yes 2 = No	_ _
1112	Has Kangaroo Mother Care (KMC) been consistently offered in the past three months?	1 = Yes 2 = No	_ _

Section 12. Register review by the data collector

Interviewer: *I would now like to take a look at your registers to abstract information about the community in this kebele and the services provided them.*

Please look at the HEW registers to collect the following information. For questions 1200-1203 collect the most up to date information. For questions 1204 onwards collect information for the three months preceding the date of the interview.

Write 9999 if not available.

1200	Number of people in the kebele	_ _ _ _ _ _ _
1201	Number of households in the kebele	_ _ _ _ _ _ _
1202	Total number of women of reproductive age	_ _ _ _ _ _ _
1203	Total number of under 5 children in the kebele	_ _ _ _ _ _ _
1204	Expected number pregnancies	_ _ _ _ _ _ _
1205	Expected number of births	_ _ _ _ _ _ _
1206	Expected number of facility births	_ _ _ _ _ _ _
1207	Number of pregnant women identified	_ _ _ _ _ _ _
Obtain data from ANC registers for the past 3 months		
1208	Number of women receiving ANC visit	_ _ _ _ _ _ _
1209	Number of women receiving 1 visit	_ _ _ _ _ _ _
1210	Number of women receiving 2 visits	_ _ _ _ _ _ _
1211	Number of women receiving 3 visits	_ _ _ _ _ _ _
1212	Number of women receiving 4 visits	_ _ _ _ _ _ _

1213	Number of women receiving more than 4 visits	_ _ _ _ _
1214	Number of births attended by the HEW	_ _ _ _ _
1215	Number of total births	_ _ _ _ _
1216	Number of live births	_ _ _ _ _
1217	Number of newborn deaths (28 days or less)	_ _ _ _ _
1218	Is there family folder used in this health post	1 = Yes go to 1226 2 = No
1219	Is there Post Natal Care register in this health post	1 = Yes go to 1226 2 = No
If Post Natal Care register is not available but family folder is available, obtain the information from the family folder given for the past 3 month. Ask the HEWs to separate those		
1220	Number of PNC visits provided to the mother	_ _ _ _ _
1221	Number receiving 1 visit	_ _ _ _ _
1222	Number receiving 2 visits	_ _ _ _ _
1223	Number receiving 3 visits	_ _ _ _ _
1224	Number receiving 4 visits	_ _ _ _ _
1225	Number receiving more than 4 visits	_ _ _ _ _
1226	Number of PNC visits provided to the newborn	_ _ _ _ _
1227	Number receiving 1 visit	_ _ _ _ _
1228	Number receiving 2 visits	_ _ _ _ _
1229	Number receiving 3 visits	_ _ _ _ _
1230	Number receiving 4 visits	_ _ _ _ _
1231	Number receiving more than 4 visits	_ _ _ _ _
If information is not available from register books on the following, enquire from the HEW where to obtain the following information for the past 3 months		
1232	Number of live births with birth weight <2500 grammes (or <2.5kg)	_ _ _ _ _
1233	Number of newborns treated for asphyxia, initial stimulation, or resuscitation by the HEW	_ _ _ _ _
1234	Number of newborns given chlorohexidine cord care by the HEW	_ _ _ _ _
1235	Number of newborns treated for hypothermia by the HEW	_ _ _ _ _
1236	Number of pre-term and/or low birth weight neonates treated by the HEW	_ _ _ _ _
Obtain data from iCCM 0-2 month registration book for information below for the past 3 months		
1237	Number of sick newborns seen by HEWs	_ _ _ _ _
1238	Number of sick newborns treated by HEWs	_ _ _ _ _
1239	Number of sick newborns with very severe disease seen by HEWs	_ _ _ _ _
1240	Number of sick newborns with very severe disease who initiated treatment (gentamycin)	_ _ _ _ _
1241	Number of sick newborns with very severe disease that completed treatment	_ _ _ _ _
1242	Number of sick newborns with very severe disease that were referred to a higher facility	_ _ _ _ _
1243	Number of newborns treated for diarrhea by HEWs	_ _ _ _ _

1244	Number of newborns treated for jaundice by HEWs	_ _ _ _ _ _ _
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Thank the respondent for taking the time to take part in the survey.

d) HEALTH CENTER QUESTIONNAIRE

HEALTH CENTER QUESTIONNAIRE

The in-charge is the first choice for all sections unless otherwise specified. If another member of the staff -such as the senior MCH nurse, laboratory, pharmacy- is able to answer all questions (staffing, supervision, medicine & supplies, services provided, and record reviews), this is also acceptable.

Section 1. Facility Identifiers			
100	Date (dd/mm/yyyy)	_ _ _ / _ _ _ / _ _ _ _ _	
101	Region	_ _ _ _ _ _ _ _ _ _ _ _ _ _	
102	Zone	_ _ _ _ _ _ _ _ _ _ _ _ _ _	
103	Woreda name	_ _ _ _ _ _ _ _ _ _ _ _ _ _	
104	PHCU code	_ _ _ _ _	
105	Health Center name	_ _ _ _ _ _ _ _ _ _ _ _ _ _	
106	GPS Latitude Take coordinates of health center	_ _ _ : _ _ _ _ _ _ _ _	
107	GPS Longitude Take coordinates of health center	_ _ _ : _ _ _ _ _ _ _ _	
108	Interviewer Initials	_ _ _	
109	Facility Ownership	1 = Government 2 = NGO 3 = Mission	_ _
	<i>Did you read the consent form?</i>	1 = Yes 2 = No	_ _
110	<i>Did the official agree to be interviewed?</i> If YES go to section #2 and continue with interview	1 = Yes 2 = No	_ _
111	If not Why not?	_____	
		End interview	

Section 2. PHCU information and health center staffing			
Ask head of health Center for the information below			
Interviewer: <i>Thank you very much for agreeing to respond to this survey. I first would like to ask some questions about the primary health care unit as well as health center staffing.</i>			
200	How many health posts are under this health center?	Enter number	__
201	How many Health Extension Workers (HEWs) in total work under this health center?	Enter number	__
How many of each of the following staff work in this health center? Read list		Enter number for each one	
	202	Nurse	__
	203	Midwife	__
	204	Health officer	__
	205	Urban Health Extension Worker	__
206	Pharmacist/drugist	__	
207	How many of the staff in this health center have been trained specifically in Community Based Newborn Care (CBNC)?	Enter number	__
208	Are there any other non-governmental organizations maternal and newborn health initiatives happening at this health center?	1 = Yes 2 = No (GO TO Section 3)	__
209	If YES , what is the name of the organization that is supporting this work?	Specify _____	
If YES , what is the focus area? Read list		For each: 1 = Yes 2 = No	
	210	ANC	__
	211	Delivery	__
	212	PNC	__
	213	Maternal post-partum	__
	214	Sick newborn care	__
215	Other	__	
216	If YES , what is the name of the initiative?	Specify _____	
217	Is there a second non-governmental organization maternal and newborn health initiative happening at this health center?	1 = Yes 2 = No (Go to Section 3)	__
218	If YES , what is the name of the organization that is supporting this work?	Specify _____	
If YES , what is the focus area? Read list		For each: 1 = Yes 2 = No	
	219	ANC	__
	220	Delivery	__
	221	PNC	__
222	Maternal post-partum	__	

	223	Sick newborn care	_
	224	Other	_
225	If YES , what is the name of the initiative?		Specify _ _ _ _
226	Is there a third non-governmental organization maternal and newborn health initiative happening at this health center?		1 = Yes 2 = No (Go to Section 3) _
227	If YES , what is the name of the organization that is supporting this work?		Specify _ _ _ _
If YES , what is the focus area? Read list	For each: 1 = Yes 2 = No		
	228	ANC	_
	229	Delivery	_
	230	PNC	_
	231	Maternal post-partum	_
	232	Sick newborn care	_
233	Other	_	
234	If YES , what is the name of the initiative?		Specify _ _ _ _
How many of staff that have been trained in Maternal and Child Health (MCH) have left this Health Center in the past three months?	Enter number for each one		
	235	Nurse	_ _
	236	Midwife	_ _
	237	Health officer	_ _
	238	Urban Health Extension Worker	_ _
	239	Pharmacist/drugist	_ _
	240	Lab technician	_ _
241	Emergency Surgical Officer	_ _	
242	In your catchment area, how many HEWS have left the Health Posts in this woreda in the past three months?		Enter number _ _

Section 3. Supervision conducted

Interviewer:

Please find a health extension supervisor to answer the following questions if not ask head of health Center

I would now like to ask you some questions about supportive supervision provided by the health center. By supportive supervision, I mean visits by health center staff to health posts to discuss, review and give feedback on HEWs work.

300	Has anyone in the health center conducted a supportive supervisory visit to a health post in the last 3 months?	1 = Yes 2 = No (SKIP TO 321) 3 = Don't know	_
301	If 300 is yes: How many of the health posts in your PHCU have been visited for supportive supervision in the last 3 months?	Enter number of health posts, 99 if don't know.	_ _
302	If 300 yes: How many health posts have been visited for supportive supervision two times in the last 3 months?	Enter number of health posts, 99 if don't know.	_ _

303	If 300 yes: How many health posts have been visited for supportive supervision three times in the last 3 months?	Enter number of health posts, 99 if don't know.	_ _
If 300 yes, did that supportive supervision visit include any of the following? Read list	For each: 1 = Yes 2 = No		
	304	Discussing on the reporting of early identification of pregnancy	_
	305	Discussing provision of Focused ANC	_
	306	Discussing promotion of institutional delivery	_
	307	Discussing safe and clean delivery	_
	308	Discussing immediate newborn care including cord care (chlorohexidine)	_
	309	Discussing recognition of asphyxia, initial stimulation, and resuscitation of newborn babies	_
	310	Discussing prevention and management of hypothermia	_
	311	Discussing management of pre-term and/or low birth weight neonates	_
	312	Discussing management of very severe disease in newborns	_
	313	Discussing HEW activities with HDA	_
	314	Observing record keeping and reporting	_
	315	Checking/delivering supplies/training manuals, job aides, request forms	_
	316	Observing client interaction	_
	317	Conducted household visits together	_
318	Providing feedback to you on your work	_	
319	Other, specify	_	
320	Specify _____		_
321	Have you provided supportive supervisory visits to HEWs in the last 3 months specifically for iCCM?	1 = yes 2 = no	_
Interviewer: Ask the head of the health center or MCH head for this set of questions I would now like to ask you some questions about performance review and clinical mentoring (PRCMM). By performance review and clinical mentoring, I mean when health center and health post staff meet together to discuss performance, targets, and ways to achieve targets?			
322	In the past 6 months, have the health center and health post staff met together to discuss performance, targets, and ways to achieve targets (PRCMM)?	1 = Yes 2 = No (SKIP TO Section 4)	_
Did that meeting cover performance and targets on the following? Read list	For each: 1 = Yes 2 = No		
	323	Early identification of pregnancy	_
	324	Focused ANC	_
	325	Promotion of institutional delivery	_
	326	Safe and clean delivery	_
327	Immediate newborn care including cord care (chlorohexidine)	_	

	328	Recognition of asphyxia, initial stimulation and resuscitation of newborn babies	__
	329	Prevention and management of hypothermia	__
	330	Cover management of pre-term and/or low birth weight neonates	__
	331	Management of neonatal/very severe disease	__
332	Did that meeting extract data from HEW's 0- 2 month (newborn) registers?		1 = Yes 2 = No __
333	At that meeting, did your health center staff get a chance to offer mentoring directly to the HEWs under this health center?		1 = Yes 2 = No __

Section 4. Supervision received

Interviewer:

I would now like to ask some questions about supportive supervision received by the health center from woreda/zone/region.

Ask the head of health center

400	Have you received a supportive supervision visit in the last 3 months?	1 = Yes 2 = No (SKIP TO Section 5)	__
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If Yes: Who from? Select all mentioned	For each: 1 = Yes 2 = No		
	401	Federal Ministry of Health	__
	402	Region	__
	403	Zone	__
	404	Woreda health office	__
	405	NGO	__
	406	Other (specify)	__
407	Specify _____		

408	If 400 is yes: How many times did you receive a supportive supervision visit in the last 3 months?	Enter number of visits, 99 if don't know.	__ __
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If 400 yes, did that supportive supervision visit include the following? Read list	For each: 1 = Yes 2 = No		
	409	Discussing on the reporting of early identification of pregnancy	__
	410	Discussing provision of Focused ANC	__
	411	Discussing promotion of institutional delivery	__
	412	Discussingsafe and clean delivery	__
	413	Discussing immediate newborn care including cord care (chlorohexidine)	__

	414	Discussing recognition of asphyxia, initial stimulation, and resuscitation of newborn babies	<input type="checkbox"/>	
	415	Discussing prevention and management of hypothermia	<input type="checkbox"/>	
	416	Discussing management of pre-term and/or low birth weight neonates	<input type="checkbox"/>	
	417	Discussing management of very severe disease in newborns	<input type="checkbox"/>	
	418	Discussing HEW activities with HDA	<input type="checkbox"/>	
	419	Observing record keeping and reporting	<input type="checkbox"/>	
	420	Checking/delivering supplies/training manuals. job aides, request forms	<input type="checkbox"/>	
	421	Observing client interaction	<input type="checkbox"/>	
	422	Conducted household visits together	<input type="checkbox"/>	
	423	Providing feedback to you on your work	<input type="checkbox"/>	
	424	Other, specify	<input type="checkbox"/>	
	425	Specify _____		
426	Can you tell us whether or not you were satisfied with the supportive supervision received? Do not read list of options		1 = Yes was satisfied 2 = No was not satisfied (GO to 428) 3 = Neither satisfied nor dissatisfied (Go to Section 5)	<input type="checkbox"/>
427	IF YES , then what was the level of satisfaction? Read both options		1 = Fully satisfied 2 = Somewhat satisfied	<input type="checkbox"/>
428	IF NO , then what was the level of dissatisfaction? Read both options		1 = Fully dissatisfied 2 = Somewhat dissatisfied	<input type="checkbox"/>

Section 5. Facility, equipment, medicines, and job aids at the health center

For the first part of this section, speak with the head of the health center. Walk around the facility with the respondent and personally check the availability of equipment and stock.

For 500-513 ask head of health center

Interviewer:

I would now like to ask you questions about the facility, equipment, medicines, and job aids at this health center.

500	What is the main source of drinking water? Do not prompt	1 = Piped connection into house 2 = Piped connection into yard 3 = Public standpipes 4 = Boreholes 5 = Protected dug wells 6 = Protected springs	<input type="checkbox"/>
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		7 = Rainwater collection 8 = Surface water 9 = Open dug wells 10 = Unprotected springs 11 = Vendor provided water 12 = Bottled water 13 = Tanker		
501	Water supply available on day of survey?	1 = Yes 2 = No	__	
Does the health center have:		For each: 1 = Yes 2 = No		
		502	Electricity connection or other power sources (example, gas/solar generator)	__
		503	Electricity supply on day of survey	__
		504	Functional sterilizer, cooker or stove	__
		505	Functional fridge	__
		506	Toilets accessible to facility users	__
507	Is there a cell phone signal at the health center?	1 = Yes 2 = No	__	
508	Is there a cell phone signal at the health center today?	1 = Yes 2 = No	__	
509	Does the health center have functional motorised transport for incoming referrals? If the motorized transport is not functional the answer is no	1 = Yes 2 = No (go to 514)	__	
510	If YES: How many motorbikes are available?	Enter number of motorbikes	__	
511	If YES: How many three-wheelers are available? (<i>eg. Bajaj</i>)	Enter number of three-wheelers	__	
512	If YES: How many cars/ambulances are available?	Enter number of cars/ambulances	__	
513	If YES: Is the vehicle for referral in the facility now?	1 = Yes 2 = No	__	
514	The last time there was an obstetric referral from a health post to the health center which transport was used?	1 = Facility owned vehicle 2 = Woreda office owned vehicle 3 = own personal vehicle 4 = Public transport 5 = Non-motorised vehicle 6 = Red Cross (NGO) ambulance 7 = Don't know	__	
Which means of communication do you have to speak to another facility?		For each: 1 = Yes 2 = No		
		515	Facility landline/mobile phone	__
		516	Staff member mobile phone	__
		517	Phone outside the facility	__
		518	Radio	__
		519	In person communication	__
		520	No means of communication	__
521	Other	__		
Ask the MCH head for the questions below				
522	The last time a woman was referred from a health post to the health center for obstetric care did a health center staff member speak to the health post HEW directly?	1 = Yes 2 = No (go to 524) 3 = Don't know	__	

523	If YES , Which means of communication was used?	1 = Facility landline/mobile phone 2 = Staff member mobile phone 3 = Phone outside the facility 4 = Radio 5 = In person communication	<input type="checkbox"/>	
524	The last time a woman was referred from a health post to the health center for obstetric care did an HEW accompany her?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>	
525	The last time a woman was referred from a health post to the health center for obstetric care did an HDA accompany her?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>	
526	The last time a neonate was referred from a health post to the health center for neonatal care did a health center staff member speak to the health post directly?	1 = Yes 2 = No (go to 528) 3 = Don't know	<input type="checkbox"/>	
527	If YES , Which means of communication was used?	1 = Facility landline/mobile phone 2 = Staff member mobile phone 3 = Phone outside the facility 4 = Radio 5 = In person communication	<input type="checkbox"/>	
528	The last time a neonate was referred from a health post to the health center for neonatal care did an HEW accompany them?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>	
529	The last time a neonate was referred from a health post to the health center for neonatal care did an HDA accompany them?	1 = Yes 2 = No 3 = Don't know	<input type="checkbox"/>	
530	When referring for further maternal and newborn care do you use referral forms? Probe: Check to see an official woreda referral form	1 = Yes 2 = No	<input type="checkbox"/>	
531	Do you receive any back referral forms for maternal and newborn care on cases you have referred?	1 = Yes 2 = No	<input type="checkbox"/>	
<p>Does the facility have the following functional equipment today?</p> <p>Walk around the facility with the respondent and personally check the availability of equipment</p>		For each: 1 = Yes 2 = No		
		532	Ambu bag/Face mask	<input type="checkbox"/>
		533	Clinical Thermometer, digital	<input type="checkbox"/>
		534	Infant scale	<input type="checkbox"/>
		535	Weighing sling	<input type="checkbox"/>
		536	Blood pressure cuff	<input type="checkbox"/>
		537	Stethoscope	<input type="checkbox"/>
		538	Watch/ clock /mobile phone clock	<input type="checkbox"/>
		539	Tape measure	<input type="checkbox"/>
		540	Examination couch	<input type="checkbox"/>
		541	Drape	<input type="checkbox"/>
		542	Washable mackintosh	<input type="checkbox"/>
		543	Dustbin	<input type="checkbox"/>
		544	Uristix	<input type="checkbox"/>
545	Cups/drinking water /bottles	<input type="checkbox"/>		
546	Sharps container	<input type="checkbox"/>		
547	Chlorine bleach	<input type="checkbox"/>		
548	Bucket for decontamination solution	<input type="checkbox"/>		
549	Contaminated waste container	<input type="checkbox"/>		

	550	Soap and towel or handrub	<input type="checkbox"/>
	551	Suction bulb for newborn care	<input type="checkbox"/>
	552	Warmer for newborn care	<input type="checkbox"/>
	553	Heater (for KMC) Bed (for KMC)	<input type="checkbox"/>
	554	Water for injection	<input type="checkbox"/>
	555	NG tube	<input type="checkbox"/>
	556	IV cannula	<input type="checkbox"/>
	557	IV fluid 5% DW	<input type="checkbox"/>
	558	IV fluid 5% NS	<input type="checkbox"/>
	559	Surgical glove	<input type="checkbox"/>
	560	Clean glove	<input type="checkbox"/>
	561	Syringe with needle	<input type="checkbox"/>

Ask a druggist or pharmacist for the questions below

<p>Does the facility have the following medicines today? Walk around the facility with the respondent and personally check the availability of medicine</p>		For each:1 = Yes 2 = N	
	562	Vitamin k 1 mg	<input type="checkbox"/>
	563	Vitamin A 200,000 IU	<input type="checkbox"/>
	564	Vitamin A 100,000 IU	<input type="checkbox"/>
	565	TTC eye ointment	<input type="checkbox"/>
	566	Chlorohexidine	<input type="checkbox"/>
	567	Gentamycin 10 mg/ml, box of 50 amp	<input type="checkbox"/>
	568	Amoxicillin suspension (125 mg/5 ml)	<input type="checkbox"/>
	569	Amoxicillin tab 250 (dispersible)	<input type="checkbox"/>
	570	Ampicillin powder for inj, 500 mg	<input type="checkbox"/>
	571	Paracetamol	<input type="checkbox"/>
	572	Iron	<input type="checkbox"/>
	573	Folate	<input type="checkbox"/>
	574	Anthelminths	<input type="checkbox"/>
	575	BCG	<input type="checkbox"/>
576	Polio vaccine	<input type="checkbox"/>	

577	The last time you received gentamycin to be distributed to the health posts, who delivered it to you?	1 = PFSA 2 = Woreda Health Office 3 = NGO (ex. L10K, IFHP, Save the Children) 4 = UNICEF 5 = Other 6 =Have never received (GO to 580)	<input type="checkbox"/>
578	In the last three months, did you receive it on time?	1 = Yes 2 = No	<input type="checkbox"/>
579	The last time you received amoxicillin to be distributed to the health posts, who delivered it to you?	1 = PFSA 2 = Woreda Health Office 3 = NGO (ex. L10K, IFHP, Save the Children) 4 = UNICEF 5 = Other 6 =Have never received (GO to 582)	<input type="checkbox"/>
580	In the last three months, did you receive it on time?	1 = Yes 2 = No	<input type="checkbox"/>
581	The last time you received chlorhexidine to be	1 = PFSA 2 = Woreda Health Office	<input type="checkbox"/>

	distributed to the health posts, who delivered it to you?	3 = NGO (ex. L10K, IFHP, Save the Children) 4 = UNICEF 5 = Other 6 = Have never received (GO to 584)	
582	In the last three months, did you receive it on time?	1 = Yes 2 = No	<input type="checkbox"/>

Ask HMIS, record keeping or HEW supervisor department

Does the facility have the following job aids and forms today? Walk around the facility with the respondent and personally check the availability of job aids and forms		For each: 1 = Yes 2 = No	
		583	Family health cards
584	Vaccination cards	<input type="checkbox"/>	
585	Stock card/bin card	<input type="checkbox"/>	
586	HMIS forms (monthly and quarterly reporting)	<input type="checkbox"/>	
587	Request and re-supply form	<input type="checkbox"/>	
588	Supervision checklist	<input type="checkbox"/>	
589	Chart booklet	<input type="checkbox"/>	
590	Birth Preparedness and Complication Readiness (BPCR) form	<input type="checkbox"/>	
591	Young Infant Record Form (2 month infants)	<input type="checkbox"/>	
592	IMNCI registration book for 0- under 2 months	<input type="checkbox"/>	
593	IMNCI registration book 2 -59 months	<input type="checkbox"/>	
594	Pregnant woman and outcome registration book	<input type="checkbox"/>	

Section 6. Availability of diagnostics

Current availability of diagnostics

Ask laboratory department

Walk around the facility with the respondent and personally check the availability of laboratory equipment

600	Are pregnancy test kits available at this facility today?	1 = Yes 2 = No	<input type="checkbox"/>
601	Are proteinuria test kits available at this facility today?	1 = Yes 2 = No	<input type="checkbox"/>
602	Does the facility offer HIV diagnostic tests?	1 = Yes 2 = No (go to 604)	<input type="checkbox"/>
603	If YES: Does the facility have HIV rapid tests in stock today? (e.g. SD, Statpak, Bioline, Determine, , Unigold,)	1 = Yes 2 = No	<input type="checkbox"/>
604	Does the facility offer syphilis diagnosis/?	1 = Yes at this clinic 2 = No, not at this clinic (go to 607)	<input type="checkbox"/>
605	If YES: Does the facility have syphilis RPR syphilis tests in stock today?	1 = Yes 2 = No	<input type="checkbox"/>
606	If YES yes: Does the facility have syphilis rapid tests in stock today?	1 = Yes 2 = No	<input type="checkbox"/>
607	Does the facility have anaemia tests?	1 = Yes	<input type="checkbox"/>

	<i>e.g. Haemoglobin colour scale/Tallquist, Sahl method</i>	2 = No	
608	Does the facility offer glucose level tests to assess gestational diabetes as part of ANC?	1 = yes 2 = no	<input type="checkbox"/>

Section 7. Facility Services

For this section, the head of Maternal and Child Health (usually a nurse or midwife) is the first choice to answer the questions. If this is not possible, the in-charge is the second choice.

Interviewer:

I would now like to discuss which services have been consistently offered at this health center in the past three months.

700	Has skilled delivery with surgical gloves been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
701	Has immediate newborn care including cord care been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
702	Has chlorhexidine been used for cord care consistently in the past three months?	1 = Yes (go to 704) 2 = No	<input type="checkbox"/>
703	IF NO , was it because chlorhexidine was not available?	1 = Yes 2 = No	<input type="checkbox"/>
704	Has recognition of asphyxia, initial stimulation and resuscitation of newborn babies been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
705	Has prevention and management of hypothermia for newborn babies been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
706	Has management of pre-term and/or low birth weight neonates been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
707	Has treatment of neonatal very severe disease been consistently offered in the past three months?	1 = Yes 2 = No (GO to 709)	<input type="checkbox"/>
708	IF YES: is treatment of neonatal very severe disease available today?	1 = Yes 2 = No	<input type="checkbox"/>
709	Is treatment of neonatal very severe disease available every day of the week, if needed?	1 = Yes 2 = No	<input type="checkbox"/>
710	Have post-natal health checks for mothers been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
711	Have post-natal health checks for newborns been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>
712	If maternity/delivery care services are offered: How many days per week are delivery services available 24 hours/day?	Enter number of days from 1-7	<input type="checkbox"/>
713	Are there ever any meetings where service statistics for delivery services are discussed with staff working at this facility?	1 = Yes 2 = No	<input type="checkbox"/>
714	Has Kangaroo Mother Care (KMC) been consistently offered in the past three months?	1 = Yes 2 = No	<input type="checkbox"/>

Section 8. Register review by the data collector

Interviewer:

I would now like to look at your registers to abstract information about the community and the services provided.

Please look at the registers to collect the following information for the previous 3 months.

For questions 800- 803 collect the most up to date information using the health center data

For questions 804 onwards collect information for three months preceding the date of the interview

Write number for each. Write 9999 if not available

800	Number of people living and covered by the health posts under the health center	_ _ _ _ _ _ _
801	Number of households covered by all the health posts under the health center	_ _ _ _ _ _ _
802	Total number of women of reproductive age covered by all the health posts under the health center	_ _ _ _ _ _ _
803	Total number of under 5 children covered by all the health posts under the health center	_ _ _ _ _ _ _
804	Expected number of pregnancies covered by all the health posts under the health center	_ _ _ _ _ _ _
805	Expected number of births covered by all the health posts under the health center (<i>include all birth outcomes</i>)	_ _ _ _ _ _ _
806	Expected number of facility births in the health center	_ _ _ _ _ _ _
807	Total number of births in the health posts in this PHCU	_ _ _ _ _ _ _
808	Number of pregnant women covered by all the health posts under the health center	_ _ _ _ _ _ _
Obtain data for the following from ANC register		
809	Number of women covered by all the health posts under the health center receiving ANC visits	_ _ _ _ _ _ _
810	Number of women covered by all the health posts under the health center receiving 1 ANC visit	_ _ _ _ _ _ _
811	Number of women covered by all the health posts under the health center receiving 2 ANC visits	_ _ _ _ _ _ _
812	Number of women covered by all the health posts under the health center receiving 3 ANC visits	_ _ _ _ _ _ _
813	Number of women covered by all the health posts under the health center receiving 4 ANC visits	_ _ _ _ _ _ _
814	Number of women covered by all the health posts under the health center receiving more than 4 ANC visits	_ _ _ _ _ _ _
815	Number of women receiving ANC visits at the health center	_ _ _ _ _ _ _
816	Number of women receiving 1 st ANC visit at the health center	_ _ _ _ _ _ _
817	Number of women receiving 2 nd ANC visit at the health center	_ _ _ _ _ _ _

818	Number of women receiving 3 rd ANC visit at the health center	_ _ _ _ _ _ _
819	Number of women receiving 4 th ANC visit at the health center	_ _ _ _ _ _ _
820	Number of women receiving more than 4 visits at the health center	_ _ _ _ _ _ _
821	Number of total births covered by all the health posts under the health center	_ _ _ _ _ _ _
822	Number of live births covered by all the health posts under the health center	_ _ _ _ _ _ _
823	Number of deliveries in the health center <i>Include all birth outcomes</i>	_ _ _ _ _ _ _
824	Number of total births in the health center	_ _ _ _ _ _ _
825	Number of still births in the health center	_ _ _ _ _ _ _

Obtain data for the following from delivery register
On the register find the APGAR column and count the number of times each score is recorded and enter the number

Number of live births at the health center with a five minute APGAR score of:	For each: enter number		
	826	1	_ _ _ _ _ _ _
	827	2	_ _ _ _ _ _ _
	828	3	_ _ _ _ _ _ _
	829	4	_ _ _ _ _ _ _
	830	5	_ _ _ _ _ _ _
	831	6	_ _ _ _ _ _ _
	832	7	_ _ _ _ _ _ _
	833	8	_ _ _ _ _ _ _
	834	9	_ _ _ _ _ _ _
	835	10	_ _ _ _ _ _ _
836	Number with no APGAR score recorded	_ _ _ _ _ _ _	

Obtain data for the following from PNC register

837	Number of PNC visits for the mother provided covered by all the health posts under the health center	_ _ _ _ _ _ _
838	Number receiving 1 st PNC visit for the mother covered by all the health posts under the health center	_ _ _ _ _ _ _

839	Number receiving 2 nd PNC visit for the mother covered by all the health posts under the health center	_ _ _ _ _ _ _
840	Number receiving 3 rd PNC visit for the mother covered by all the health posts under the health center	_ _ _ _ _ _ _
841	Number receiving 4 th PNC visit for the mother covered by all the health posts under the health center	_ _ _ _ _ _ _
842	Number of PNC visits for the child covered by all the health posts under the health center	_ _ _ _ _ _ _
843	Number receiving 1 st PNC visit for the child covered by all the health posts under the health center	_ _ _ _ _ _ _
844	Number receiving 2 nd PNC visit for the child covered by all the health posts under the health center	_ _ _ _ _ _ _
845	Number receiving 3 rd PNC visit for the child covered by all the health posts under the health center	_ _ _ _ _ _ _
846	Number receiving 4 th PNC visit for the child covered by all the health posts under the health center	_ _ _ _ _ _ _
847	Number of PNC visits for the mother provided at the health center	_ _ _ _ _ _ _
848	Number receiving 1 st PNC visits for the mother at the health center	_ _ _ _ _ _ _
849	Number receiving 2 nd PNC visits for the mother at the health center	_ _ _ _ _ _ _
850	Number receiving 3 rd PNC visits for the mother at the health center	_ _ _ _ _ _ _
851	Number receiving 4 th PNC visits for the mother at the health center	_ _ _ _ _ _ _
852	Number of PNC visits for the child provided at the health center	_ _ _ _ _ _ _
853	Number receiving 1 st PNC visits for the child at the health center	_ _ _ _ _ _ _
854	Number receiving 2 nd PNC visits for the child at the health center	_ _ _ _ _ _ _
855	Number receiving 3 rd PNC visits for the child at the health center	_ _ _ _ _ _ _
856	Number receiving 4 th PNC visits for the child at the health center	_ _ _ _ _ _ _
If information is not available from register books on the following, enquire from the health center or staff where to obtain the following information for the past 3 months		
857	Number of women who gave birth that received misoprostol at the health center	_ _ _ _ _ _ _
858	Number of live births with birth weight <2500 grammes (or <2.5kg) in the catchment area	_ _ _ _ _ _ _
859	Number of live births with birth weight <2500 grammes (or <2.5kg) in the health center	_ _ _ _ _ _ _
860	Number of newborns treated for asphyxia, initial stimulation, or resuscitation in the catchment area	_ _ _ _ _ _ _
861	Number of newborns treated for asphyxia, initial stimulation, or resuscitation in the health center	_ _ _ _ _ _ _
862	Number of newborns given chlorohexidine cord care in the catchment area	_ _ _ _ _ _ _

863	Number of newborns given chlorohexidine cord care at the health center	_ _ _ _ _ _ _
864	Number of newborns treated for hypothermia in the catchment area	_ _ _ _ _ _ _
865	Number of newborns treated for hypothermia at the health center	_ _ _ _ _ _ _
866	Number of pre-term and/or low birth weight neonates treated in the catchment area	_ _ _ _ _ _ _
867	Number of pre-term and/or low birth weight neonates treated at the health center	_ _ _ _ _ _ _
Obtain data for the following from IMNCI register books		
868	Number of sick newborns seen by health center in the catchment area	_ _ _ _ _ _ _
869	Number of sick newborns seen by health center at the health center	_ _ _ _ _ _ _
870	Number of sick newborns that were treated in the catchment area	_ _ _ _ _ _ _
871	Number of sick newborns that were treated at the health center	_ _ _ _ _ _ _
872	Number of newborns treated for diarrhea in the catchment area	_ _ _ _ _ _ _
873	Number of newborns treated for diarrhea at the health center	_ _ _ _ _ _ _
874	Number of newborns treated for jaundice in the catchment area	_ _ _ _ _ _ _
875	Number of newborns treated for jaundice at the health center	_ _ _ _ _ _ _
876	Number of sick newborns with very severe disease seen in the catchment area	_ _ _ _ _ _ _
877	Number of sick newborns with very severe disease seen by the health center at the health center	_ _ _ _ _ _ _
878	Number of sick newborns who initiated treatment (with amoxicillin/ampicillin/gentamycin) for very severe disease in the catchment area	_ _ _ _ _ _ _
879	Number of sick newborns who initiated treatment (with amoxicillin/ampicillin/gentamycin) for very severe disease at the health center	_ _ _ _ _ _ _
880	Number of sick newborns with very severe disease that received 7 consecutive days of gentamycin injections in the catchment area	_ _ _ _ _ _ _
881	Number of sick newborns with very severe disease that received 7 consecutive days of gentamycin injections at the health center	_ _ _ _ _ _ _
882	Number of sick newborns with very severe disease that had to be referred back to the health post to complete treatment	_ _ _ _ _ _ _
883	Number of sick newborns with very severe disease that had to be referred from the health center to a hospital	_ _ _ _ _ _ _

Thank the respondent for taking the time to take part in the survey.

Annex 3: Proposed indicators at household level reflecting coverage of key MNH interventions along the continuum of care

CBNC Components 1 and 2: Early identification of pregnancy and Provision of Focused Antenatal Care
ANC coverage: First ANC visit at <16 weeks of pregnancy
ANC coverage: attendance at least once during pregnancy
ANC coverage: attendance four times during pregnancy
ANC coverage: gestational age at first ANC visit
ANC completeness overall and by type of provider
Content of ANC: Tetanus Toxoid
Content of ANC Iron supplements
Pregnancy care: Breastfeeding advice
Birth preparedness

CBNC components 3 and 4: Promotion of safe and clean delivery including provision of misoprostol in case of home deliveries or deliveries at health post level
Delivery Care: Facility delivery
Delivery Care: professional attendant
Delivery Care: referral
Birth attendant washed hands
Birth attendant wore gloves
Delivered on clean surface
Use of misoprostol during delivery

CBNC components 5, 6 and 7: Provision of immediate newborn care, including application of chlorhexidine on cord; prevention and management of hypothermia; recognition of asphyxia, initial stimulation and resuscitation of newborn baby

Use of clean instrument to tie cord

Use of clean instrument to cut cord

Safe cord care

Newborn dried immediately after birth

Newborn wrapped immediately after birth

Skin to Skin care (immediate)

Newborn placed with mother

Breastfeeding within 1 hour of birth

Exclusive Breastfeeding for first 28 days

Newborn check 2 days

Newborn check 3-7 days

Newborn check 8-42 days

Number of newborn checks by 42 days

Provider of first postnatal check of newborn

Postnatal check of the mother 2 days

Postnatal check of the mother 3-7 days

Postnatal check of the mother 8-42 days

Number of postnatal checks of the mother by 42 days

Provider of first postnatal check of the mother

CBNC components 8 and 9: Management of pre-term or low birth weight neonates; management of neonatal sepsis or very severe disease at community level

Newborn weight at birth

Formal medical care for sick neonates

Newborns with infection who received antibiotic regimen

Annex 4. Front-Line Worker and Health Facility Indicators

Table 1. Front-line Worker (FLW) indicators

Category	Definition	Numerator	Denominator
Care provided by FLW	Services provided by FLW	Number of FLWs providing services	Number of FLWs surveyed
FLW training (received)	Training received by FLW and from whom	Number of FLWs receiving training by specified providers	Number of FLWs surveyed
FLW training (provided)	Training provided by FLW and to whom	Number of FLWs providing training to specified others	Number of FLWs surveyed
FLW supervision (received)	Supervision received by FLW in last 12 months and from whom	Number of FLWs receiving supervision	Number of FLWs surveyed
FLW meetings with CHP/HDA/TTBA	Meetings between FLW and CHP/HDA/TTBA	Number of FLWs meeting with CHP/HDA/TTBA	Number of FLWs surveyed
Nurse/midwife meetings with FLW/CHP/HDA/TTBA	Meetings between Nurse/midwife and FLW/CHP/HDA/TTBA	Number of Nurse/midwife and FLW/CHP/HDA/TTBA	Number of Nurse/midwife surveyed
Health committees and model families	Is there a health committee in the kebele	Number of FLW with a health committee in their kebele	Number of FLWs surveyed
Model families	Is there a model family in the kebele	Number of FLW with a model family in their kebele	Number of FLWs surveyed
FLW workload	Provision of pregnancy and newborn care in the last month	Number of pregnant women and newborns seen in last month	N/A
FLW referrals	Referrals made in the last month	Number of postpartum women referred and number of newborns referred in last month	N/A
FLW activities at most recent delivery (including cord care)	Activities undertaken at most recent deliver by FLW	Number of FLWs undertaking specific activities at their most recent delivery	Number of FLWs surveyed
FLW knowledge	Frontline worker knowledge of appropriate ANC and PNC care	Number of FLWs correctly answering knowledge questions	Number of FLWs surveyed
FLW knowledge of sepsis detection and treatment	FLW knowledge of sepsis detection and treatment	Number of FLWs correctly answering knowledge questions on sepsis	Number of FLWs surveyed

Table 2. Health Facility (HF) indicators

Category	Definition	Numerator	Denominator
Existence of essential support services	Essential support services available at HFs	Number of HFs with essential support services	Number of HFs surveyed
Existence of essential equipment	Essential equipment available at HFs	Number of HFs with essential equipment	Number of HFs surveyed
Existence of essential drugs	Essential drugs available at HFs	Number of HFs with essential drugs	Number of HFs surveyed
Existence of essential vaccines	Essential vaccines at HFs	Number of HFs with essential vaccines	Number of HFs surveyed
Existence of essential diagnostics	Essential diagnostics available at HFs	Number of HFs with essential diagnostics	Number of HFs surveyed
Routine services offered	Routine services offered at HF	Number of HFs offering routine services	Number of HFs surveyed
Staff present at HF on day of survey	Staff present at HF on day of survey	Number of HFs with specific staff present on day of survey	Number of HFs surveyed
Supervision visits received by HF in the last six months	Visits by supervisors to HF over last six months	Number of HFs receiving visits from supervisors in last six months	Number of HFs surveyed
Usual practice during deliveries	Practices routinely undertaken during a delivery at the HF	Number of HFs undertaking specific practices	Number of HFs surveyed
Number of deliveries at HF over last six months	Number of deliveries at HF over last six months	Number of deliveries at HF over last six months	N/A
Number of live births at HF over last six months	Number of live births at HF over last six months	Number of live births at HF over last six months	N/A
Number of newborns referred for extra care/treatment during last six months	Number of newborns referred for extra care/treatment during last six months	Number of newborns referred for extra care/treatment during last six months	Number of live births at HF in the last six months
Number of newborns referred for sepsis treatment during last six months	Number of newborns referred for sepsis treatment during last six months	Number of newborns referred for sepsis treatment during last six months	Number of live births at HF in the last six months
Number of newborns admitted for extra care/treatment during last six months	Number of newborns admitted for extra care/treatment during last six months	Number of newborns admitted for extra care/treatment during last six months	Number of live births at HF in the last six months
Number of newborns admitted for sepsis treatment during last six months	Number of newborns admitted for sepsis treatment during last six months	Number of newborns admitted for sepsis treatment during last six months	Number of live births at HF in the last six months

Table 3. Frontline worker survey data elements

<p>Frontline worker demographics</p> <p>Residence of FLW Age and gender of FLW Employment history Education level Training received</p> <p>Frontline worker responsibilities</p> <p>Services provided Time spent on providing services</p> <p>Frontline worker work load</p> <p>Num. and place of pregnancy care interactions Num. of and reasons for pregnancy referrals Num. and place of delivery care interactions Num. of and reasons for delivery referrals Num. and place of post partum care interactions Num. of and reasons for PPC referrals Num. and place of newborn check interactions Num. of and reasons for newborn referrals</p>	<p>Frontline worker supervision</p> <p>Supervision of FLW by different supervisors Timing/content of supervision received</p> <p>Recalled activities at last delivery interaction</p> <p>Demographics of the mother Stage of labour at presentation Preparations for clean and safe delivery Monitoring progress of labour AMTSL Immediate newborn care provided</p> <p>Knowledge of the frontline worker</p> <p>Knowledge of antenatal care Knowledge of birth planning Knowledge of labour monitoring Action in the event of pregnancy danger signs Action in the event of intra-partum danger signs Action in the event of post partum/natal danger sign</p>
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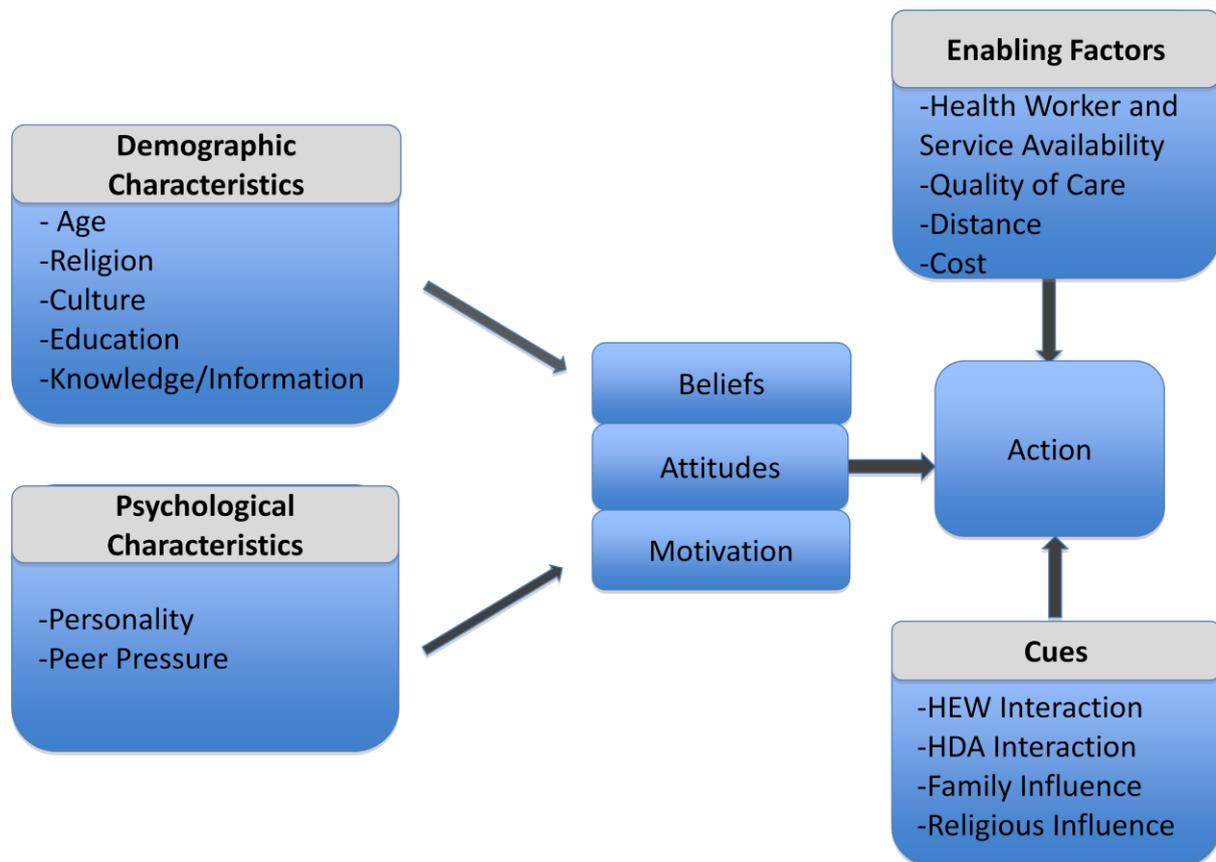
Table 4. Health facility survey data elements

<p>Facility characteristics</p> <p>Location Type Ownership</p> <p>Essential support services</p> <p>Availability of clean water, electricity Availability of transport, telecommunications Functionality of fridge/sterilizer</p> <p>Facility readiness</p> <p>Essential equipment and drugs for antenatal care Essential equipment and drugs for routine and assisted delivery care Availability of vaccines and diagnostics Availability of transport</p>	<p>Staff and services available</p> <p>Routine services available Out of hours services available Staff employed, cadre and responsibilities Supervision at facility in last six months Appropriate technology and usual practice</p> <p>Facility records - data extraction</p> <p>Number of antenatal interactions Number of deliveries Outcome of deliveries Number of referrals out of facility Number of women and newborns seen with complications at the facility</p>
--	---

Annex 5: Potential indicators for contextual factors

Type of Characteristic		Indicator
General	1	Total population (most recent estimates)
	2	Urban population
	3	Rural population
	4	Number of MCH NGOs
Baseline Health	5	Under-5-Mortality
	6	Maternal mortality
	7	Newborn mortality
	8	Infant mortality
	9	Prevalence of malnutrition
		HIV-prevalence
Health Services		Health Facilities
	10	Number of hospitals
	11	Number of health centres
	12	Number of health posts
		Human Resource
	13	Number of HDA
	14	Health Officer
	15	Clinical Nurse Degree and Diploma
	16	Midwife Nurse Degree and Diploma
	17	Health Extension Workers
	18	Rural HEWs
	19	Urban HEWS
	20	Total Number of Health Professionals
		MCH Services
	21	N Family Planning new and repeat acceptors
	22	N women attending ANC
	23	N women delivering in a health facility
	24	Deliveries attended by skilled birth attendant
	25	Deliveries attended by Health Extension Workers
	26	Institutional Maternal death
	27	Institutional Neonatal death
	28	First Postnatal attendance
	29	ANC Clients receiving HIV test
	30	Number of ambulances available

Annex 6: Theoretical framework for healthcare seeking behaviour at the household level



Annex 7. Qualitative study consent forms

QUALITATIVE INFORMED CONSENT FORM -HOUSEHOLD

INFORMED DECISIONS FOR ACTIONS (IDEAS)

1. Participant Information Sheet

“Good morning /Good afternoon”

My name is ----- I am working in the research team organized by JaRco consulting firm and London School of Hygiene and Tropical Medicine as a data collector. I will ask you some questions about issues related to maternal and newborn health for some minutes. Before the question I will provide you full information of the study so that you will make an informed decision to my request.

Project title

Measurement, Learning and Evaluation Study on the Improvement of Health and Survival of Mothers and Babies in Ethiopia.

Duration of the study

It will take up to one hour for each questionnaire to be completed.

Purpose of the Study

The overall purpose of this study is to improve the health of mothers and their babies by improving policies and individual health practices.

The work being carried out has two main purposes. First, to find out more about the way in which families get health care in their own homes, at health posts and at health centres. In particular, for women and babies it is important to know how many times families get health care and how good that health care is. With this information we will be able to give advice about the type of families who need more help and the services that still need to be strengthened. Second, to find out more about the things that people are already doing to improve the health of mothers and babies. With this information we will be able to give advice about the activities that are successful, and those that need strengthening.

Confidentiality

I strongly assure you that your name and other identifiers will not be disclosed to anyone outside of the study.

Procedures

Specifically, I am going to ask you information about types of health services you have received related to maternal, newborn and child health issues. You were selected to participate in this study because you are believed to have significant knowledge and experience in issues relating to maternal, newborn and child health.

Risk and Benefits of the Study

By participating in this study and answering our questions you will not receive any direct benefit. However, you will help to increase our understanding about Maternal, Children and Newborn Health in Ethiopia. The result of this study will contribute in generating evidence and knowledge to inform policy and practice at national and global levels. This study involves your provision of information through pre-developed questionnaires and the organization will keep your data in a safe place which

can only be accessed by the study team. Therefore I want to assure you that your participation in this study will not involve any risks to you.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or to not answer any questions that you feel uncomfortable. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspect of your social life, and future medical care you should require or any other benefits to which you are entitled. If there is anything unclear or you need further information about, I am happy to provide it.

Whom to contact

In any case if you need any information. You can contact in the following address:

*The Federal Democratic Republic Of Ethiopian Ministry of Science and Technology,
National Research Ethics Review Committee
Secretariat*

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Fax: 251-011-1-562749

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Principal Investigator: Feleke Fanta

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JaRco consulting Firm Director: Tsegahun Tessema

Address: P.O.B: 43107 Addis Ababa Ethiopia

Tel: 0113724656/0113724657

Fax: 0113724655

E-mail: Tsegahun@jarrco.info

2. Declaration of the Volunteer Study Participant

I understand that the purpose of the study is to collect information regarding maternal, child and newborn health. I have read the above information, or it has been read to me. I have had the opportunity to ask questions and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate in this study and understand that I have the right to withdraw at any time without in any way affecting my social life or medical care.

Signature of Informant _____ Date _____

Name of Informant _____

Signature of Witness _____ Name of Witness _____

Signature of Data Collector _____ Name of Data Collector _____

QUALITATIVE INFORMED CONSENT FORM (Frontline Workers and HDA)

INFORMED DECISIONS FOR ACTIONS (IDEAS)

1. Participant Information Sheet

“Good morning /Good afternoon”

My name is ----- I am working in the research team organized by JaRco consulting firm and London School of Hygiene and Tropical Medicine as a data collector. I will ask you some questions about issues related to maternal and newborn health for some minutes. Before the question I will provide you full information of the study so that you will make an informed decision to my request.

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Duration of the study

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Confidentiality

I strongly assure you that your name and other identifiers will not be disclosed to anyone outside of the study.

Procedures

Specifically, I am going to ask you information about types of health services you have received related to maternal, newborn and child health issues. You were selected to participate in this study because you are believed to have significant knowledge and experience in issues relating to maternal, newborn and child health.

Risk and Benefits of the Study

By participating in this study and answering our questions you will not receive any direct benefit. However, you will help to increase our understanding about Maternal, Children and Newborn Health in Ethiopia. The result of this study will contribute in generating evidence and knowledge to inform policy and practice at national and global levels. This study involves your provision of information through pre-developed questionnaires and the organization will keep your data in a safe place which can only be accessed by the study team. Therefore I want to assure you that your participation in this study will not involve any risks to you.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or to not answer any questions that you feel uncomfortable. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspect of your social life, and future medical care you should require or any other benefits to which you are entitled. If there is anything unclear or you need further information about, I am happy to provide it.

Whom to contact

In any case if you need any information. You can contact in the following address:

*The Federal Democratic Republic Of Ethiopian Ministry of Science and Technology,
National Research Ethics Review Committee*

Secretariat

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2. Declaration of the Volunteer Study Participant

I understand that the purpose of the study is to collect information regarding maternal, child and newborn health. I have read the above information, or it has been read to me. I have had the opportunity to ask questions and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate in this study and understand that I have the right to withdraw at any time without in any way affecting my social life or medical care.

Signature of Informant _____ Date _____

Name of Informant _____

Signature of Witness _____ Name of Witness _____

Signature of Data Collector _____ Name of Data Collector _____

Annex 8: Qualitative study topic guides

Draft Topic Guide –Qualitative

Woreda ID No. |__| |__| Kebele ID No. |__| |__|

Participant ID No. |__|__|__| Gender Female / Male Researcher initials |__|__|__|

Interviewee type |__|__| Date |__|__|/|__|__|/|__|__| Audio file number |__|__|__|

Interviewee title _____

Objective:

- To understand households primary source of health services provision
- To define household cultural and traditional practices regarding Antenatal Care, Delivery, Post natal care and newborn care
- To define the beliefs and attitudes of households regarding health seeking behaviour
- Understand the kinds of health services utilized by households in the health post/health centre level with regard to Antenatal Care, Delivery, Post natal care and newborn care

Household:

- Could you briefly outline your role in this community and how long you have lived in this community?
- How important is seeking health care to you and your family?
- How often do you go to get health care at the health facility?
- What are they types of health services you utilize when you go to a health facility?
- **Probe:**
 - *Immunization*
 - *ANC*
 - *PNC*
 - *Delivery*
 - *Other*
- Who are the persons involved in providing health care in your community?
Probe:
 - *Role of person (i.e. HEWs, nurse)*
- What types of health care services do they provide?
- What types of health care services have you received at the your household?
- Where do you seek health services?
Probe:
 - *Health Post*
 - *Health Centre*
 - *Hospital*
 - *Private Clinic*
 - *Other*
- To what extent do you utilize the service the health extension workers provide?
Probe:
 - *Often*
 - *Only during Labor and Delivery*
 - *Only during Post Natal Care (PNC)*
 - *Other*

- Who is involved in your decision making to utilize health services at the health centre/health post in your household?

Probe:

- *Family members (i.e. husband, mother, mother-in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers (i.e. HEW)*
- *HDA*

- What conditions make you utilize health services at the health centre/ health post?

Probe;

- *Illness of a child*
- *Illness of a family member*
- *Routine follow up for immunization*

- What are the cultural practices in your community that pregnant women have to do ?

- What are things you prepare for your delivery period?

• **Probe:**

- *Birth preparedness plan*

- What are the traditional cultural practices that occur during the period of delivery?

Probe:

- *Where delivery occurs (i.e. facility, at home)*
- *Thermal care for newborn baby*
- *Cord Care*
- *Breastfeeding*

- Can you describe any danger signs for pregnant women before she delivers ?

- Can you describe any danger signs for a newborn?

- How important is it for you to seek care at the health post for ANC, delivery and PNC?

• **Probe**

- *Frequency of going to a health facility or obtaining service at home by HEW or HDA*

- To what extent do you utilize the health post/health centre?

Probe:

- Frequency of time visited
- When do they use the services i.e. Antenatal care, sick child

- What are some of the health information and materials you have obtained with regard to ANC, Delivery and PNC?

Probe:

- *Family Health Card*
- *Printed materials*
- *Media/radio*
- *Pregnant women forum*

- What are some of the barriers to seek health services at the health centre/health post

Probe:

- *Economic*
- *Distance*
- *Unavailability of service or health worker*

- What would enable you to utilize the health services during the period of your pregnancy for ANC, PNC, and delivery services?

Probe:

- *Economic*
- *Distance*
- *Availability of health workers*

- How have Health Extension Workers and Health Development Army influence/assisted your community in seeking health services at the health post and health centre?

Probe:

- *Community mobilization*
- *Volunteers*
- *Campaigns-Vaccine, Vitamin A distribution*

Frontline Worker Topic Guide (HEW, Health Centre Staff)

Woreda ID No. |__| |__| Kebele ID No. |__| |__|

Participant ID No. |__|__|__| Gender Female / Male Researcher initials |__|__|__|

Interviewee type |__|__| Date |__|__|/|__|__|/|__|__| Audio file number |__|__|__|

Interviewee title _____

Objective:

- To understand frontline workers health service provisions
- To gain frontline workers perspective on the cultural and traditional practices in their community with regards to Antenatal Care, Delivery, Post natal care and newborn care
- To understand the kinds of health services provided by frontline workers in the health post/health centre level with regard to Antenatal Care, Delivery, Post Natal Care and newborn care
- To understand support frontline workers received with training and service provisions
- To define the working relationship of frontline workers with Health Development Army (HDA)

Frontline Worker:

- Could you briefly outline your role in this community and how long you have been in this role?
- What are the types of services you provide?
- What types of preventative services do you provide?
- What types of curative services do you provide?
- In what settings do you provide your services?

Probe:

- Home visit
- At facility level
- How do you find out who is pregnant?

Probe:

- *Forms used*
- Could you describe the most utilized service in order of utilization in your health facility ?(*Covers CBNC related Contact, Case, Capture, Completion*)

Probe:

- Family planning:
- *Immunization –*
- *ANC*
- *PNC –.*
- *Delivery*
- *Other*
- Do you use the Family Health Card (FHC)? We did not really receive an orientation or training so we use our own system of recording various things rather than the FHC.
- Could you describe any influential leaders in the community you serve?

Probe;

- *Religious leaders*
- *Spiritual leaders*

- What is the role of spiritual leaders in the context of the providing services during

Probe:

- *Pregnancy*
- *Delivery (i.e. thermal care, cord care, breastfeeding)*
- *Postnatal care*
- *Newborn care*

- Who is involved in the decision making process during pregnancy/ANC utilization of health services? (

Probe:

- *Family members (i.e. husband, mother, mother in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers(i.e. HEW)*
- *HDA*

- Who is involved in the decision process on where to delivery for women?

Probe:

- *Family members (i.e. husband, mother, mother in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers(i.e. HEW)*
- *HDA*

- Who is involved in the decision process on seek care after delivery (PNC) for women?

Probe:

- *Family members (i.e. husband, mother, mother in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers(i.e. HEW)*
- *HDA*

- Who is involved in the decision process on seek care after for danger signs?

Probe:

- *Family members (i.e. husband, mother, mother in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers(i.e. HEW),*
- *HDA*

- In your opinion what are the cultural practices involved that makes care seeking to health facilities limited?

Probe:

- *Pregnancy*
- *Delivery (i.e. thermal care, cord care, breastfeeding)*
- *Postnatal care*
- *Newborn care*

- What are the strategies laid in place for identifying pregnant women? To what extent have you been able to achieve this activity?

Probe:

- *Policy/directives in place*
- *trainings received*
- *Tools/materials/ personnel used for identification*

- What materials and tools do you use for providing birth preparedness plans set up for pregnant women?
- What are the strategies laid in place for initiation of antenatal care? To what extent have you been able to achieve this activity?

Probe:

- *Policy/directives in place*
- *trainings received*
- *Tools/materials used for service provision i.e. checklist*

- What are the strategies laid in place for delivery? To what extent have you been able to achieve this activity?

Probe:

- *Policy/directives in place*
- *trainings received*

- What are the strategies laid in place for initiation of postnatal care? To what extent have you been able to achieve this activity?

Probe:

- *Policy/directives in place*
- *trainings received*

- What are the factors that would enhance your work in providing better health services and referral related to MCH, Newborn health?

Probe:

- *Improved knowledge and skills*
- *Improved working conditions*
- *Payment*
- *Staffing*

- What are some of the BCC materials you have distributed to provide services?

Probe:

- *Family health card*
- *Other materials (i.e. Leaflets)*

- What types of events have you held to provide your community health services related to Maternal and Child health?

Probe:

- *Campaigns (i.e. vaccination, malaria indoor residual spraying, vitamin A)*
- *Meetings with HDA for ANC, delivery, PNC services*

- Who assists you in the health outreach programs you provide?

Probe:

- *Community Volunteers*
- *Health Development Army*
- *Woreda health bureau supervisor*

- What would you describe to be the main constraints to seeking health care in your community and facility?

Probe:

- *Supply shortage*
- *Ambulance for delivery*
- *lacking Training*
- *Closure of health facility*
- *Distance*
- *Financial limitations*

- Please describe the challenge you face that prevents you from performing your duties?
- What methods should be used to assist you to perform your duties?

Probe:

- *Trainings*
- *Supervision*
- *other*

- Please describe some programs or trainings that have strengthened your service provision?

Probe:

- *Improved skills*
- *Increased knowledge on management of ANC, Delivery, PNC,*
- *Increased knowledge on management of newborn illness*

- What tools do you utilize to follow up on services like Post Natal Care and newborn illness?

Probe:

- *Family Folder*
- *Family Health Card (FHC)*
- *other data collection instruments*

- How do you describe your linkage with between (For HC- Health post/health centre; For HP Health Centre/Woreda) and what ways has this supported your work?

Probe:

- *Performance Review and Clinical Mentoring Meetings*
- *Supervision for HMIS/iCCM/Data*

- What is the process for referral and back referral between the health centre and health post for ANC, Delivery and PNC, newborn care?

Probe:

- *Types of forms used*
- *Number of times of meetings per month or per week*

- How has the procurement and distribution of products enhance your services?
- What are the challenges that limited your work?

Health Development Army (HDA) Topic Guide

Woreda ID No. |__| |__| Kebele ID No. |__| |__|

Participant ID No. |__|__|__| Gender Female / Male Researcher initials |__|__|__|

Interviewee type |__|__| Date |__|__|/|__|__|/|__|__| Audio file number |__|__|__|

Interviewee title _____

Objective

- To understand the roles of Health Development Army (HDAs) for identification of pregnancy, referral of pregnant women, delivery and newborn care.
- To gain HDAs perspective on the cultural and traditional practices in their community with regards to Antenatal Care, Delivery, Post natal care and newborn care
- To understand support HDAs received with training and tools they utilize for provision of service
- To define the working relationship of frontline workers with HDAs

Health Development Army:

- Could you briefly outline your role in this community and how long you have been in this role?
- What are the types of services you provide?
- What are the general patterns of care seeking behaviour in your community?
- How would you describe the outlook of the community towards utilizing the health facility system?

Probe:

- *Constraints*
- *Strength*
- *Trust in the system*

- What types of health services do patients seek at the health centre/health post?

Probe:

- *Immunization*
- *ANC*
- *PNC*
- *Delivery*
- *Other*

- Who is involved in the decision making process to utilize health services at the health centre/health post?

Probe:

- *Family members (i.e. husband, mother, mother in-law)*
- *Non-family members (i.e. friends)*
- *Frontline health workers (i.e. HEW)*
- *HDA*

- What are the traditional cultural practices in your community during the period of pregnancy?
- What are the traditional cultural practices that occur during the period of delivery in your community?
Probe:
 - *Thermal Care*
 - *Breastfeeding*
 - *Cord Care*
- What are some of the social and constraints to obtain health services related to pregnancy, delivery and post natal?
Probe:
 - *Financial*
 - *Distance*
 - *Cultural*
- What types of training have you received in addressing Newborn Care?
- What types of materials and tools have you been equipped by the HEWs to conduct your work after the training?
Probe:
 - *Family Health Card (FHC)*
 - *Data collection instruments*
 - *Materials for follow up of pregnant women*
 - *Materials for PNC follow up*
 - *ANC, PNC Kits*
- What types of activities did you conduct in the past 6 months to enhance services for Focused Antenatal Care, delivery, Post Natal Care and newborn illness at the community level?
- What tools do you use for identifying pregnant women, labor notification, recently delivered women, and sick young infants in your community or catchment area
Probe:
 - *Pregnant Women Forum*
 - *Faith Based Organizations*
 - *Others*
- How often do you meet with HEWs for supervision, and what is the essential component to strengthen your work?
Probe:
 - *Supervision*
 - *Technical support*
- What are some of challenges and strengths in working with the HEWs?
- What other means of resources have you used in providing your services in your catchment area?
Probe:

- *Pregnant mothers forum*
 - *Faith Based Organizations*
 - *Others*
- What are the challenges and rewards of utilizing these systems?

Annex 9: Model expanded field notes

Interview 01_01__01_WO_IDI_011013

Background

What are the enablers of health care seeking behaviour for ANC? Barriers?

What are the enablers of health care seeking behaviour for delivery? Barriers?

What are the enablers of health care seeking behaviour for PNC? Barriers?

What are the enablers of health care seeking behaviour for Newborn care? Barriers?

Who are the decision makers in the community?

How do decision makers influence practices of health seeking behaviour? Catalysing actors?

Mechanisms of influence and decision makers?

Other factors that influence health seeking behaviour?

Cultural practices that are enablers to health seeking behaviour?

Cultural practices that are barriers to health seeking behaviours

Current MNCH programs and reporting structure how it influences behaviours

General impressions:

Annex 10: Draft pre-analysis template

What are the <i>most important</i> barriers/ enablers for seeking care for ANC?			
What are factors <i>enable</i> care seeking?	How/why do they <i>enable</i> ?	What factors <i>inhibit</i>	How/why do they <i>inhibit</i> ?
Who are the main <i>important</i> barriers/ enablers for seeking care for delivery?			
Which factors <i>enable</i>	How/why do they <i>enable</i> ?	Which factors <i>inhibit</i>	How/why do they <i>inhibit</i> ?
Who are the main <i>important</i> barriers/ enablers for seeking care for PNC?			
Which factors <i>enable</i>	How/why do they <i>enable</i> ?	Which factors <i>inhibit</i>	How/why do they <i>inhibit</i> ?
Who are the main <i>important</i> barriers/ enablers for seeking care for newborn care?			
Which factors <i>enable</i>	How/why do they <i>enable</i> ?	Which factors <i>inhibit</i>	How/why do they <i>inhibit</i> ?
Decision making: who is involved in the process for seeking care			
Who <i>enable</i> decision making?	How/why do they <i>enable</i> the decision-making?	Who/what factors <i>inhibit</i> decision making?	How/why do they <i>inhibit</i> ?
Cultural beliefs: what are the barriers/enablers for newborn care?			
What factors <i>enable</i> ?	How/why do they <i>enable</i> ?	What factors <i>inhibit</i> ?	How/why do they <i>inhibit</i> ?
What are the current MCH related programs?			
What are the Referral System and Reporting?			



Annex 11: Schematic showing activities, deliverables and timeline for CBNC evaluation

