

# Performance Assessment of Midwives trained through the H4+ initiative: Accelerated Midwifery Training Programme in Ethiopia

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### Performance Assessment of Midwives trained through the H4+ initiative: Accelerated Midwifery Training Programme in Ethiopia



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## TABLE OF CONTENTS:

LIST OF TABLES AND FIGURES.....	2
ACKNOWLEDGEMENTS .....	4
ACRONYMS .....	5
EXECUTIVE SUMMARY .....	6
SECTION-1: INTRODUCTION, BACKGROUND AND OBJECTIVES OF THE AMT PROGRAMME....	10
1.1. Background .....	10
1.2. Accelerated Midwifery training Programme (AMTP) .....	11
SECTION-2: OBJECTIVES OF THE ASSESSMENT and METHODS.....	13
2.1 Objectives of the Assessment.....	13
2.2. Methods, data sources, instruments and analysis.....	13
2.3 Limitations and Challenges found in the field work and data collection.....	15
2.4. Description of study participants.....	16
SECTION-3: FINDINGS .....	18
3.1. Contribution of the AMTP graduates to access and quality of MNCH care .....	18
3.2. AMTP graduates Competency (self-assessment) .....	21
3.3. Performance of the AMTP Graduates .....	29
3.3.1. <i>AMTP Graduates area of assignment and workload</i> .....	29
3.3.2. <i>Graduates Performance on Management of obstetric complications</i> .....	30
3.4. Work environment.....	35
3.5. Mentorship Program .....	37
SECTION-4: DISCUSSION .....	40
SECTION - 5: CHALLENGES, LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS...	40
5.1: Challenges of AMTP graduates .....	42
5.2: Lessons Learned .....	42
5.3. Conclusions .....	43
5.4. Recommendations .....	43
ANNEXES .....	45
ANNEX 1 - SELECTED BIBLIOGRAPHY.....	46
ANNEX 2 - LIST OF WOREDA AND HEALTH CENTERS INVOLVED IN THE ASSESSMENT .....	49
ANNEX 3 - LIST OF TRAINING INSTITUTIONS INVOLVED IN THE AMTP .....	52
ANNEX 4 - CASE STUDIES .....	53
ANNEX 5 - CHRONOLOGY OF THE ASSESSMENT.....	55
ANNEX 6: DATA COLLECTION TOOLS.....	56
ANNEX 7 - TERMS OF REFERENCE.....	57

## LIST OF TABLES AND FIGURES

- Fig 1: Trends in maternal mortality ratio (per 100 000 live births) in Ethiopia 1990-2015
- Fig -2: Number of midwives available in Ethiopia between 2002- 2015
- Fig - 3: Mean volume of service (cases served) at the health centers 12 months prior and 12 months after assignment of AMTP graduates findings of register review (N= 96 Health Centers)
- Fig 4: Mean annual number of deliveries per health centers 12 months prior and 12 months after assignment of AMTP graduates by region (N= 96 Health Centers)
- Fig - 5: Mean volume of service (cases served) at the health centers 12 months prior and 12 months after assignment of AMTP graduates. Findings of register review (N= 96 Health Centers)
- Fig -6: Mean volume of FP service at the health centers 12 months prior and 12 months after assignment of AMTP graduates. Findings of register review (N= 96 Health Centers)
- Fig - 7: AMTP graduates who feel competent in performing ANC activities and services (N=215)
- Fig - 8: AMTP graduates who reported performing ANC activities and services frequently (weekly or daily) (N=215)
- Fig 9: AMTP graduates who feel competent in performing Labor and delivery activities and services (N=215)
- Fig 10: Proportion of AMTP graduates who feel competent to perform fourteen key obstetric functions during labor and delivery, by region (N=215)
- Fig 11: AMTP graduates who reported performing Labor and delivery activities and services frequently (weekly or daily) (N=215)
- Fig 12: AMTP graduates who feel competent in performing newborn care and post-partum activities and services (N=215)
- Fig 13: AMTP graduates who reported performing newborn care and post-partum activities and services frequently (weekly or daily) (N=215)
- Fig 14: AMTP graduates who feel competent in performing PMTCT activities and services (N=215)
- Fig 15: AMTP graduates who reported never performing PMTCT activities and services (N=215)
- Fig 16: AMTP graduates who feel competent in performing family planning activities and services (N=215)
- Fig 17: AMTP graduates who reported performing FP activities and services frequently (weekly or daily) (N=215)
- Fig 18: AMTP graduates who feel competent in performing abortion care activities and services (N=215)
- Fig 19: AMTP graduates who reported never performing abortion care activities and services (N=215)
- Fig 20: AMTP graduates who feel competent in performing MVA by region (N=215)
- Fig 21: Areas of assignment for AMTP graduates in the past 12 Months (N=215) From AMTP graduates questionnaires
- Fig 22: Proportion of time spent in MNCH services by AMTP graduates in past 12 months (N=215)
- Fig 23: AMTP graduates performance of initial assessment/Patient evaluation at admission (N=288 cases) findings of last 5 patient pathway mapping
- Fig 24: AMTP graduates performance of follow up Patient evaluation and Management (N=288 cases and n\* = 90) findings of last 5 patient pathway mapping
- Fig 25: Interventions provided for cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping
- Fig 26: Maternal outcome of cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping

Fig 27: Perinatal outcome of cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping

Fig 28. Obstetric and newborn care equipment available, functional and being used at the health centers (N=100). Findings of the clinical walkthrough.

Fig-29: AMTP graduates report on incentives received (N=215)

Table -1: Stakeholders interviewed in each region by type

Table 2: Background information of study participants: AMTP graduates interviewed (N= 215)

Table 3: Number of currently available midwives, by type of health facility and area of work (N= 91)

Table 4: Characteristics of the 288 patients with obstetric complications whose medical records were collected in health centers for the “Last Five Patients” review. (N= 288)

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It is understood that the views and conclusions presented in this report are those of the consultants and not of the sponsoring institutions. The consultants take responsibility for the views and conclusions.

## ACRONYMS

AMDD	Averting Maternal Death and Disability
AMTP	Accelerated midwifery training program
AMTPG	Accelerated midwifery training program graduates
ANC	Antenatal care
ART	Anti retroviral therapy
BEmONC	Basic Emergency Obstetric and Newborn Care
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CSA	Central Statistics Authority
CS (C/S)	Caesarean Section
EDHS	Ethiopian Demographic and Health Survey
EmONC	Emergency obstetric and newborn care
EC	Ethiopian Calendar
EFY	Ethiopian Fiscal Year
EMA	Ethiopian Midwives association
FMoH	Federal Ministry of Health
H4+	Joint support for MNH from UNFPA, UNICEF, WB, WHO, UN-Women, UNAIDS
HEW	Health Extension Workers
HRD	Human resource development
HRH	Human resources for health
HSC	health Science colleges
HSDP	Health Sector Development Plan
ICM	International Confederation of Midwives
IESO	Integrated Emergency Surgical Officer
IUCD	Intra uterine contraceptive device
Gyn/Obs	Gynecology and obstetrics specialist
L&D	Labor and delivery
MDG	Millennium Development Goal
MNH	Maternal and newborn health
MNCH	Maternal, newborn and child health
MVA	Manual vacuum aspiration
OR	Operation room
PMTCT	Prevention of Mother to child transmission
PNC	Postnatal care
RHB	Regional Health Bureau
SBA	Skilled birth attendance
SDG	Sustainable Development Goals
SNNP	Southern Nations, Nationalities and Peoples Region
SPSS	Statistical package for social Sciences
TFR	Total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WB	World Bank
WHO	World Health Organization
WoHO	Woreda Health Office

## EXECUTIVE SUMMARY

### Objectives and Methods:

The objective of this exercise is to assess the performance of the graduates trained through the Accelerated Midwifery Training Programme (AMTP) that was conducted in the years 2012 to 2015 as a response to the dire need for competent professional midwives in Ethiopia.

The assessment was conducted in 100 woredas in five regions (Oromia, Amhara, Somali, Benishangul Gumuz and Gambella). The assessment used both qualitative and quantitative data. National policy, strategy and program documents were reviewed. A total of 85 key informant interviews (KII) were conducted with stakeholders at federal level and in the five regions at regional health bureaus, woreda health offices, and health facilities. A total of 215 AMTP graduates were interviewed. A total of 288 medical records of cases with obstetric complications were reviewed for their adherence to management protocols. Service registers of 97 health centers were examined to explore caseloads and activities. The MNH service delivery environment was observed through the “clinical walkthrough” technique in 100 health centers. Data were analyzed using SPSS-PC and Atlas-ti. The fieldwork was somehow limited by data accessibility challenges, quality of medical records, budgetary constraints and occasional (or rarely?) non availability of key informants. There were major limitations in the documentation data obtained during fieldwork, particularly the medical records of the complicated cases. Similarly facility registers were often incomplete and retrieving registers dating from three years back was impossible.

### Key findings:

All stakeholders unanimously reported that the training has boosted the number of midwives in the country. Since the AMTP is implemented, the great majority of health centers have two midwives (or three in the bigger ones), a dramatic increase in institutional deliveries, a wider range of MNCH services including long acting contraceptives, PMTCT, ANC, BEmONC, and newborn care.

According to data on service provided in the 97 health centers, the total number of antenatal visits (both the first and the fourth) as well as the number of deliveries (total and normal) increased significantly between the 12-month periods before and after the deployment of the AMTP graduates (+48% for normal deliveries), but the number of services for complicated cases did not increase significantly between the two periods. In the family planning activities, the most important difference between the two periods was a significant increase in the use of the long acting contraceptive methods, injectables repeat, IUCD and implants.

The review of the facility registers shows reduction in mean number of maternal and perinatal deaths with the placement of AMTP graduates. From what is recorded on the facility registers it appears there was a mean of 0.33 maternal deaths pre health center in the 12 months prior to the placement of the AMTP graduates, as opposed to 0.24 in the 12 months after the deployment of the AMTP graduates. Similarly, a mean of 2.6 perinatal deaths per health center were reported in the 12 months before as opposed to 2.2 in the 12 months after the deployment of the AMTP graduates.

Over 90% of the AMTP graduates interviewed felt self-confident in their competence in delivering services in the following areas: Family Planning, Antenatal Care, Labour and Delivery, Post-natal (newborn) and Postpartum Care, Prevention of Mother to Child

Transmission of HIV, Abortion (diagnosis and management), Diagnosis and referral of common gynecology cases. However there remained some gaps for certain activities, particularly skills related with instrumental delivery, abortion care (use of MVA) and long term contraceptive methods.

According to data from 91 woreda health office nearly all (99%) of the AMTP were assigned at health center and 99% were working at MNCH service delivery outlets. There is high work load on the midwives - 38% reported working much longer than the prescribed time, particularly with long and frequent duty sessions. They were also involved in community-based activities and in the supervision and support of the Health Extension Workers.

In order to assess the competence and the quality of care provided by the AMTP graduates when dealing with complicated obstetric cases, the evaluators picked up 288 files of the last five complicated cases in 67 Health Centres, studied these files, and established the sequence of services performed against National protocol. The initial assessment, and physical examination at admission were properly documented in only 30% to 40% of the assessed cases on the average, depending on the functions. The management and evaluation of the cases were properly documented in 40 to 50 % of the cases on the average, depending on the functions. For example the partograph was attached in 48% of the cases. However only 36% used the partograph properly according to the national protocol. The active management of the third stage of labour was performed and documented in 61% of the relevant cases. The most frequent response by AMTP graduates to complications was to refer (67% of the cases).

To assess the working environment, a combination of stakeholders interviews and clinical walkthrough methods were employed and triangulated. One hundred health centers were visited by enumerators with lists of items, staffing, buildings, beds, equipment, instruments, and drugs to see what was available, functional and used. It was found that some essential equipment was missing (or not used which has functionally the same result), such as the vacuum extractor in 35% of the health centers, MVA in 47%, suction machine in 82%, incubator in 84% of health centers. The most frequently missing drug was magnesium sulphate, which is internationally recognized as life-saving in cases of pre-eclampsia and eclampsia, and still missing or not used in 70% of the health centers.

The 215 AMTP graduates surveyed were asked on incentives received since they joined their post and majority reported to receive duty (85%) and risk allowance (86%) and short term trainings (45%). While only few (14%) reported having housing.

Supervision and feedback was assessed as part of the work environment and majority (88%) of graduates reported to have supervisory visit in preceding 12 months. Of those supervised, 87% rated the supervision as good and satisfactory, while 13% said it was poor.

AMTP graduates' rate of retention was assessed using data from 91 woreda health offices and interview with graduates. The 3-year retention rate calculated for AMTP graduates is 84%. On the question about career plans, only 20% of the AMTP graduates said they have a plan to change career and this proportion was consistent among the graduates under 30 years old, but all of the 30+ said they will continue midwifery work.

The mentorship programme stemmed from the first follow up assessment conducted by UNFPA among the first batch of AMTP graduates in 2012. It was felt that the graduates needed peer support soon after their return to their post in a health center, in order to fulfill all the tasks to be accomplished by midwives. The Ethiopian Midwives Association was asked to identify the mentors among senior midwives chosen from the regional branches of the Association, or those

working in health facilities, and to give them a one-day orientation prior to sending them in the field. The mentorship programme therefore did not start before the year 2 of the AMTP. Later a special training programme for mentors was organized by UNFPA and AMREF in the year 3 for the third batch. Not all the AMTP graduates therefore could benefit from a mentorship.

Overall findings of the graduates survey showed that half (49%) of the AMTP graduates interviewed said they were offered a mentorship in the preceding 24 months. However, only 6% (13 graduates) reported that the mentorship was from EMA. The rest benefited from mentorship programs implemented by FMOH and other partners. Most of the 13 participants who were reached with EMA mentorship reported that the mentor's technical capacity and mentoring skills is strength of the program. While most feel duration and frequency of mentoring as well as the learning resources (references and protocols) as gaps of the program.

### Lessons Learned

- Ownership and commitment of government, and strong partners support were very critical for the success of the AMTP
- Leadership of the woreda in recruitment of candidates and placement of the graduates has facilitated easily placement of graduates in communities which they knew.
- Enrolment of unemployed nurses to the training program helped to train large number of midwives in short time on the one hand and alleviate unemployment of young nurses
- Use of competency based curriculum and tools (log books and skill checklists); supportive supervision and review meetings were instrumental to ensure quality.
- The fund management structure was too complicated which created delays in fund transfer, leaving short time for HSC to utilize and liquidate funds.
- Experience of senior EMA midwives and mentoring tools used are appropriate, but to be effective, the EMA mentorship programme needs to be expanded, reach more midwives, and receive more funding.
- Development of graduate's career structure with the training program was a proactive approach.

### Conclusions

- AMTP program was a success producing large number (4471) midwives in three years. It has increased access to skilled birth attendance and institutional delivery, as well as access to other sexual and reproductive health services.
- AMTP graduates were found to be comfortable managing ANC, normal deliveries, new born care, PNC and FP therefore reducing number of unnecessary referrals. However there remains gaps in the management of obstetric complications, long term contraceptives, management of abortion and other gynaecological problems. This is the next priority in terms of performance
- The work environment is more supportive after the deployment of AMTP graduates, but still there lack enough space, basic equipment and supplies such as vacuum extractor, MVA and magnesium sulphate
- There were observations showing that the feedback mechanism on cases referred to hospital is not satisfactory. Not enough dialogue between health centers and hospitals
- There is high work load on the midwives most working more than 8 regular hours and have duty session every other day. This can be seen a success (more clients) but may also have a negative influence on retention.
- Half of the graduates had some sort of mentorship, and appreciated it. However EMA mentorship program had limited reach due to insufficient pool of mentors, and funds.
- AMTP graduates' retention rate is fair and majority have a plan to continue working as a midwife, indicating some level of job satisfaction.

- There is a serious gap on documentation of management of obstetric cases on medical records and facility registers

### Recommendations

To improve performance of Midwives in Ethiopia FMOH, EMA, Midwifery training institutions, UNFPA and other partners should consider the following points

- Respond to training needs. Provide support on request, often in the form of specific additional in-service training such as BEmONC, abortion care, long term family planning, PMTCT and other gynaecologic problems.
- Address gaps of midwives with more comprehensive and effective mentorship. The EMA mentorship programme needs to reach more midwives, spend more time with them and offer repeated visits.
- Improve the level and in-time payment of incentives such as the hardship allowance and risk allowances, the duty allowances.
- Promote teamwork, collaboration with and assistance from peers with more experience through for example call centres
- Work at improving the working environment, in terms of room space, water and sanitation, equipment and maintenance, drugs and supplies (magnesium sulphate).
- Strengthen referral feedbacks and dialogue between the health center and hospital.
- There needs to implement administrative mechanisms to ensure complete documentation on patient medical records and facility registers
- Retention can be improved by improving the conditions of life and work, reorganization of the shifts of duty, humanization of the workplace, promotion of teamwork, equal opportunities for access to promotion or higher studies.

## SECTION-1: INTRODUCTION, BACKGROUND AND OBJECTIVES OF THE AMT PROGRAMME

### 1.1. Background

Ethiopia has achieved remarkable progress in reducing maternal mortality in the past decade. According to the UN Joint Estimates of Maternal Mortality between 1990 and 2015, published in 2015 (Figure 1), the MMR of Ethiopia was 353 per 100,000 live births in 2015, or -72% of the ratio of 1990, therefore almost reached the MDG5.

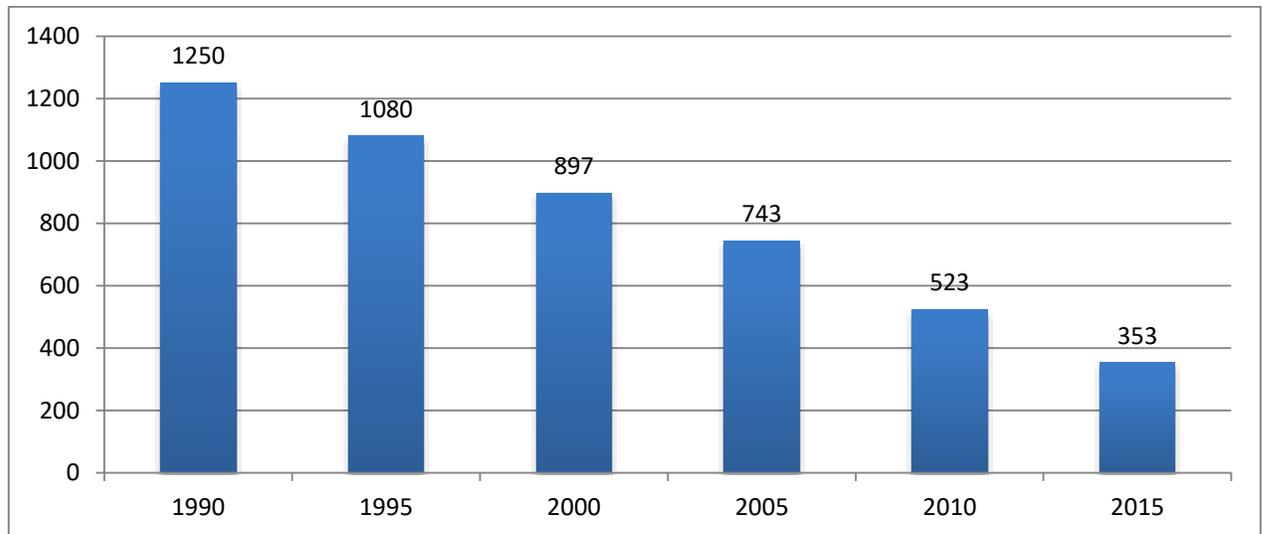


Fig 1: Trends in maternal mortality ratio (per 100 000 live births) in Ethiopia 1990-2015

However, there still a lot to be done to ensure further reduction in maternal and perinatal deaths In Ethiopia. According to the Mini Demographic and Health Survey 2014 Report, the vast majority of deliveries (85%) take place at home in the absence of trained personnel with midwifery skills. Coverage of postnatal care is also extremely low at 12%. The major cause of maternal deaths include: obstetric hemorrhage, sepsis, pregnancy related hypertensive disorders, abortion and obstructed labour. Prolonged and obstructed labour are particularly prevalent in Ethiopia in relation to the frequency of young age pregnancies. The challenge to provide the life-saving obstetric care among most women in Ethiopia was due to the shortage of midwives and doctors particularly in rural areas. According to the UN Emergency obstetric and newborn care (EmONC) has been said to help avert a large proportion—as much as 60%—of maternal deaths. Furthermore, globally, nearly 2 million infant deaths occur around the time of birth, many of which could be averted with good-quality intra-partum care (Lancet Series).

Human resources are the most important assets of any health system. For health institutions to function effectively and efficiently, a well-trained, motivated and well-functioning health workforce must be produced, deployed, maintained and appropriately utilized. Ethiopia, like other countries with limited resources, has been suffering from a human resource for health (HRH) crisis. The country has made a remarkable effort to address human resources for health crisis in the past decade, with a significant scale up of health workers accompanied with pre-service and in-service trainings. In view of reducing the high maternal and neonatal mortality, the country has given priority to the production of health workers focusing on MNH service providers such as midwives, emergency surgeons, anesthetists, and Health Extension Workers.

The FMOH has developed an HRH strategy for the period 2009- 2025 and the strategy indicates that 14,229 midwives will be required by the year 2025. However, the FMOH Midwifery Roadmap indicates that 18,000 to 20,000 midwives should be required by 2025.

In view of the interest raised by the scaling up of midwifery in Ethiopia, many studies have been undertaken in the past few years to better assess performance of midwives as well as other health workers (Yigzaw et al. 2015), to better understand job satisfaction and the determinants of retention (Jhpiego and MSH, 2015), to strengthen midwifery education, practice and regulation (Yigzaw et al. 2014), to assess the acceptability of male midwives (Yeroam 2015), to review the state of the Ethiopian midwifery (EMA 2012). These studies shed light on the challenges and successes of the Ethiopian midwives and their supporting environment, confirming much of the findings of the present assessment.

## **1.2. Accelerated Midwifery training Programme (AMTP)**

The FMOH and UNFPA, through funding from the Swedish International Development Agency, have supported the training of midwives. A total of 4,471 midwives were graduated through the Accelerated Midwifery Training Programme (AMTP). UNFPA also supported training of diploma and degree level midwives through the provision of teaching and learning materials and capacity building for midwifery tutors/instructors.

The Accelerated Midwifery Training Programme (AMTP) was meant to boost skilled attendants within three years' time for significant reduction of pregnancy-related risks and ensuring access to a core package of maternal and neonatal health services. Accordingly, the target of the initiative was to deploy a minimum of two midwives per health center. Another strategy that was used by the government was increasing the intake of training institutions on regular programme to attain the target set by Human Resource Development Strategy.

A concept paper was developed by FMOH to train 4676 midwives at grade IV enrolling nurses to 12 months midwifery training program at health science colleges. Regional health science colleges were identified as accelerated midwifery training settings.

The AMTP was implemented in 6 regions that had requested to be part of the programme in view of their acute shortages of midwives. The AMTP was designed to train 4,500 midwives in three years. It enrolled 4610 students in 15 Health Sciences Colleges (HSC) located in 6 regions (Oromiya, Amhara, Addis Ababa, Somali, Benishangul Gumuz and SNNP for Gambella).

Ultimately the AMTP managed to graduate 4,471 Midwives between 2012 and 2014. In 2012 (Year 1), 1558 students graduated (17% males). In 2013 (Year 2), 1625 students graduated, and in 2014 (year 3), 1186 students graduated. A first follow up assessment on midwife performance and training quality was conducted in 2013 for the first batch.

A secondary objective of the AMTP was to improve the capacity and training methods of the HSCs and create a tighter collaboration between the training institutions and the health facilities (hospitals and health centers) as well as the regional and zonal health bureaus.

Key informants said that a rapid assessment was conducted by the ministry to estimate the demand and capacity available to train the nurses as midwives. Then based on the needs assessment only Oromia, Amhara, Somali, Benishangul Gumuz and Gambella regions and Addis Ababa city administration expressed a gap that needs to use the accelerated training program. FMOH quantified the demand in each region and the training program was implemented in

public health science colleges in each region except Gambella region which uses Arbaminch health Science College.

The AMTP beneficiaries were young professionals, nurses with a 3 year study background, already recruited in the regions concerned by the programme. It was assumed that they knew most of the health principles and were already trained in most MCH services and activities. A new competency based curriculum was developed by FMOH in collaboration with Jhpiego, UNFPA and WHO for the AMTP. It was planned for 11 months of intensive training, with more focus on practical sessions. The teachers and trainers of the programme were those of the 15 Health Science Colleges (HSC) who had accepted to participate. Their teachers and instructors had received an additional refresher training on effective teaching skills and midwifery. The hospitals and health facilities selected to receive the trainees and participate in the programme had also received an orientation to respond to the specific needs of the training. The cost of the programme amounted to ETB 12,000 per student.

Trainee's recruitment criterion was set at the national level which includes level III nurses preferably female and young with some clinical practice. Recruitment was done by woredas (who will employ the graduates), which send the list to regions to screen candidates through entrance exam, organized by the RHBs with some regional variations. There was agreement from all stakeholders that the woreda Health offices were the best level for the recruitment of the candidates based on set criteria, and particularly for the deployment of the graduates soon after graduation. Budgets had to be planned and prepared for that at woreda level.

AMTP was coordinated at federal level through a midwifery team based at the FMOH HRD with technical and financial support from partners particularly UNFPA. RHBs were providing needed support to training institutions in each region including transfer of funds channeled through FMOH to HSC. Midwifery department of HSCs were responsible to coordinate and implement day to day activities of the training program.

There were bi annual comprehensive supportive supervisions at the training colleges by a team of experts from FMOH, RHBs, EMA, UNFPA and other partners that look in to quality of training, gaps and achievements of the program. There were annual review meetings that led by FMOH involving the training institutions, RHBs and partners. The supportive supervision and Annual review meetings were used to monitor training quality, identify and address challenges timely.

The training has boosted the number of midwives in the country. Figure - 2 below shows the trends of available midwives in Ethiopia.

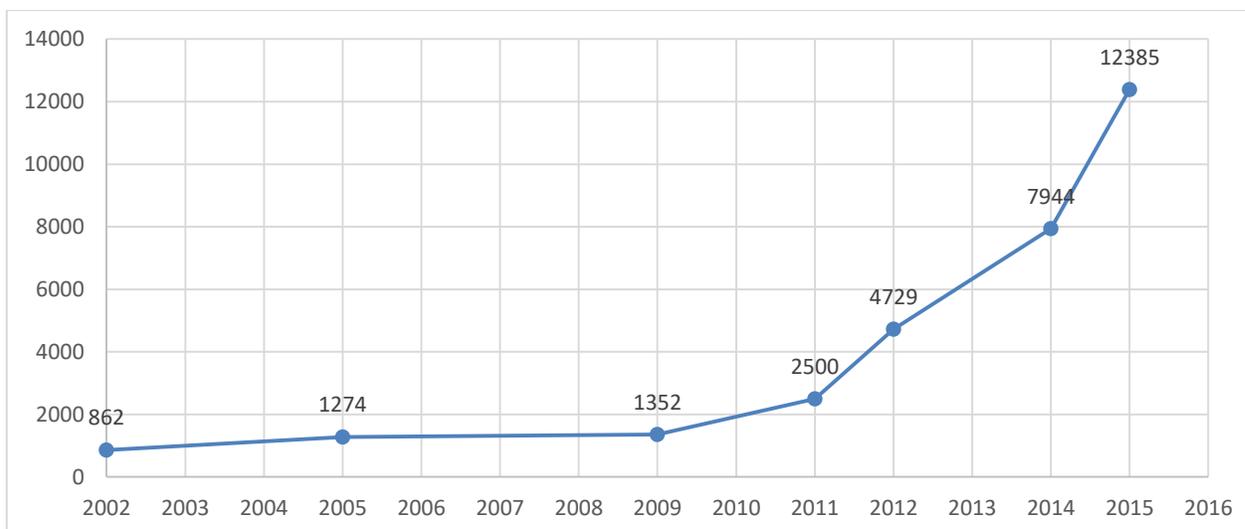


Fig -2: Number of midwives available in Ethiopia between 2002- 2015

In response to the difficulties observed during the assessment of the first batch of AMTP graduates about the first months at work, it was recommended by UNFPA to apply a mentorship process, meaning an accompaniment of the newly posted graduate by a more senior midwife to guide her and increase her confidence, particularly to manage the difficult cases and the unusual situations. While there were many other organizations doing this, the FMOH then outsourced the mentorship program to the Ethiopia Midwives Association. Details of the mentorship programme are found in section 3.5 on Mentorship).

## SECTION-2: OBJECTIVES OF THE ASSESSMENT and METHODS

### 2.1 Objectives of the Assessment

The purpose of this exercise is to assess the performance of AMTP graduates deployed to health facilities, and their contribution to increasing skilled attendance at birth.

The specific objectives of the assessment are:

- To assess the performance of graduates after training in terms of their contribution to maternal and neonatal health services including family planning.
- To identify challenges and successes of graduates
- To document lessons learnt that can be used for policy decision
- To assess the contribution of the mentorship program that has been provided by EMA to AMTP graduates in the health facilities.

### 2.2. Methods, data sources, instruments and analysis

The assessment was conducted in all the programme regions except Addis Ababa (Amhara, Oromia, Somali, Gambella and Benishangul Gumuz Regions). Addis Ababa was excluded from the assessment considering that graduates assigned in Addis Ababa work in urban facilities where there are many health care providers to work at MNCH care outlets and measuring performance of AMTP graduates can be biased.

The assessment was conducted in 100 woredas randomly selected from a list of all woredas in the programme regions, proportionally to AMTP graduates population per region. In each of the selected woreda, one health center with at least one AMTP graduate was identified and included in the study. A total of 100 health centers was included in the assessment. Details of the sample allocation per region are found in the Annex 3.

The study employed both qualitative and quantitative data collection approaches that include the following:

- **Desk review** of relevant documents of H4+ initiative, UNFPA, FMOH, training institution and midwifery association.
- **Key Informant interviews (KII)** was conducted with 85 stakeholders. One at FMOH Human Resource Directorate, three at UNFPA and one at the Ethiopian Midwives Association, four Regional Health Bureaus, 14 Woreda Health Offices, 24 heads of Health Centers, 24 AMTP graduates, 9 peers (senior midwives working with the AMTP graduates) and 5 senior midwives who work as mentors of EMA. The KII was done to explore views on performance of graduates, challenges and success as well to document lessons learned.
- **Review of HRH data at the Woreda Health Office:** Was done at 91 woreda health offices to assess availability of midwives, rate of retention and area of assignment.
- **Review of MNCH services Register:** the MNCH service registers of 96 health centers where AMTP graduates are deployed were reviewed. Register review was conducted to compare changes observed in the volume of MNCH and FP services with the deployment of AMTP graduates.
- **Last 5 Patients' pathway mapping:** The last 5 obstetric cases pathway mapping was conducted for obstetric cases managed by AMTP graduates in preceding 12 months to map pathways of clinical decision making process, intervention, and post intervention outcomes of obstetric cases. A total of 288 charts of patients with obstetric complication was reviewed in the 67 health centers randomly selected from the 100 health centers visited.
- **Clinical Walkthrough:** was conducted at 100 health centers through structured checklist to assess clinical services, availability of equipment's, supplies and drugs at labour and delivery wards.
- **Survey of AMTP graduates deployed in selected health facilities:** structured survey was conducted with 215 AMTP graduates deployed in the selected health facilities to assess competencies and performance.

An international multi-disciplinary team of researchers who have experience in quantitative and qualitative research as well as clinical experience on MNCH conducted the study. Data collectors were five midwives with masters degree and five public health professionals (MPH) with research experience. They were trained on the study objectives, methods, tools and data collection procedures by the principal investigator and UNFPA during four days. The field work took one month.

All interviews were conducted with informed verbal consent. Interview notes were taken and interviews were tape-recorded. Tape records of key informant interviews were transcribed and reviewed when thematic analysis and coding framework was developed. Qualitative data gathered through key informant interviews was coded and analysed using Atlas-ti 5.0. All quantitative data was cleaned, coded, entered and analysed using SPSS-PC.

Details of the methods, lists of facilities visited, list of stakeholders interviewed and questionnaires are found in Annex 3

### 2.3 Limitations and Challenges found in the field work and data collection

There was no list of all the AMTP graduates with details of their training place, year of training and place of deployment. Therefore the list of woredas was used as a sampling frame instead of the list of AMTP graduates. The assumption was that there will be at least two AMTP graduates per health center.

There were major limitations in the documentation data obtained during fieldwork, particularly the medical records of the complicated cases. Similarly facility registers were often incomplete and retrieving registers dating from three years back was impossible.

The other challenge was the difficulty of finding some key informants for interview even with repeated appointments. On the other hand, availability of telephone addresses of selected health facilities helped to communicate the field visit to study participants ahead of time and that facilitated fieldwork and shortened the data collection period.

There were very few key informants from Gambella because first because the proportion of AMTP graduates from that region was very small (3%),

As indicated earlier, graduates from the Addis Ababa city administration were not included in this assessment because their conditions of work, mostly in hospitals and urban centers, are very different from those of graduates posted in the regions.

## 2.4. Description of study participants

Key Informant Interviews (KII) were conducted with key stakeholders about the programme. There were different semi structured questionnaires applied to different types of stakeholders (see questionnaires in Annex 3).

The key stakeholders were at national level (FMoH, UNFPA, EMA), at regional level (MCH persons at RHBs), at Woreda level (WoHO), at facility level (facility heads) and finally some peers (senior midwives) and EMA mentors.

Table -1 below shows the stakeholders, both key stakeholders and AMTP graduates interviewed in each region by type. There was a total of 85 qualitative interviews.

Table -1: Stakeholders interviewed in each region by type

	National	Oromia	Amhara	Somali	BeniShangul	Gambella	Total
Key stakeholders	5						5
RHB			1	1	1	1	4
WoHO		5	4	3	2		14
Facility Heads		11	7	3	3		24
Peers		4	3	1	1		9
AMTP graduates		10	7	3	3	1	24
EMA Mentors		1	4				5

A total of 215 AMTP graduates were found at work in the 100 Health Centers visited and interviewed about their competencies and service delivery (see questionnaire in Annex 3).

Table 3 shows the characteristics of the 215 AMTP graduates interviewed. As indicated earlier, the sample was tailored to the number of midwives trained in each of the 5 regions involved in the assessment. Therefore almost one half of them were from Oromia and another one third from Amhara.

One fifth (21%) of the AMTP graduates interviewed were males. All the graduates were young, with only 5 (9%) over 30 years old. One half were very young (22 to 25 years, which is consistent with the recruitment criteria).

Two thirds of the graduates interviewed had been immediately posted in health centers within one month of graduation. Only 7% had to wait 6 months or more.

Sixteen percent of the graduates interviewed had been working for 4 years on the day of interview, since the first year of the programme, and 36% had been working for one year or less.

Finally 42% of the interviewees have not changed posting station after graduation, indicating a relative stability of postings. The other 58% have changed posting at least once, or more.

Table 2: Background information of study participants: AMTP graduates interviewed (N= 215)

	Frequency	Percent
Region	105	49
Oromia	74	34
Amhara	12	6
Somali	17	8
Benishangul Gumuz	7	3
Gambella		
Sex		
Male	45	21
Female	170	79
Age		
22-25 years	110	51
26-30 years	95	44
>30 years	10	5
Time that midwives graduated		
1-2 years back	59	27
3-4 years back	156	73
Time between graduation and assignment		
≤1 month	141	66
2-6 months	59	27
> 6 months	15	7
Duration of work in the health center		
≤ 1 year	77	36
2 years	59	27
3 years	45	21
4 years	34	16
Worked for more than one health Center		
No	90	42
Yes	125	58

## SECTION-3: FINDINGS

### 3.1. Contribution of the AMTP graduates to access and quality of MNCH care

Contribution of AMTP graduates to increasing access to skilled birth attendance and quality of care was assessed through review of facility registers to see changes with their deployment and key informant's interviews.

All the regional, woreda and health center level key informants, with very little variation in their statements, confirmed that the situation before the AMTP was characterized by a critical shortage of MNCH professionals, a high mortality, a high unattended morbidity, a low institutional delivery rate and a very limited quality of MNCH care. Since the AMTP is implemented, the great majority of health centers have two midwives (or three in the bigger ones), an dramatic increase in institutional deliveries, a wider range of MNCH services including long acting contraceptives, PMTCT, ANC, BEmONC, and newborn care, a much better recording and quality of registration. All this resulted in higher demand for MNCH services, less referrals to hospitals, more friendly care, and less mortality. The following quotes illustrate these findings:

*“Previously the health professionals were afraid of possible complication, they refer most delivery cases to hospitals. They were referring very simple cases to manage because of lack of sufficient knowledge and skills related to delivery care. But currently most mothers are delivering at health center level. (Moyale Health Center Head)*

*“Accelerated midwives but also all midwives are now trained in BEmONC so that they are currently providing a better MNCH service. Thus, so many problems related to maternal complication are being solved here and there is an improved service quality. Besides, as we can see from the feedback we get from our clients, they are satisfied with the service they get”. (Koladiba HC facility Head)*

*“Before there were only 2 or 3 deliveries per month here. Even there were 0 delivery per month. But now we have 40 to 65 deliveries per month. This is about 85% of institutional delivery” (Limu Health Centre Head)*

*“We provide women friendly care, we are approaching them as a family and we even give them our phone numbers to call and talk to us if they feel any discomfort” (one AMTP graduate from Wuchale)*

*“Currently no mother should give birth at home and there is what we call “home delivery free kebele” and I think our woreda is the first one to initiate this home delivery free program. Generally, regarding the maternal and infant mortality there is a considerable reduction as compared with the previous times, there may happen one or two deaths due to delay in reaching care and this is because some kebeles may be far away from the health center. Other than this kind of situations, there is no death happening after the mothers are reaching at the health facility.” (WoHO Ambasel)*

Health centers registers were reviewed to compare the volume of service provided in the 12 months prior to the posting of the AMTP graduates with the same during the 12 months after the posting of the AMTP graduates. The register review showed consistent findings with key informant interviews. Where the number of antenatal visits (both the first and the fourth) as

well as the number of deliveries (total and normal) increased significantly between the two periods (48% for normal deliveries) See Figure - 3.

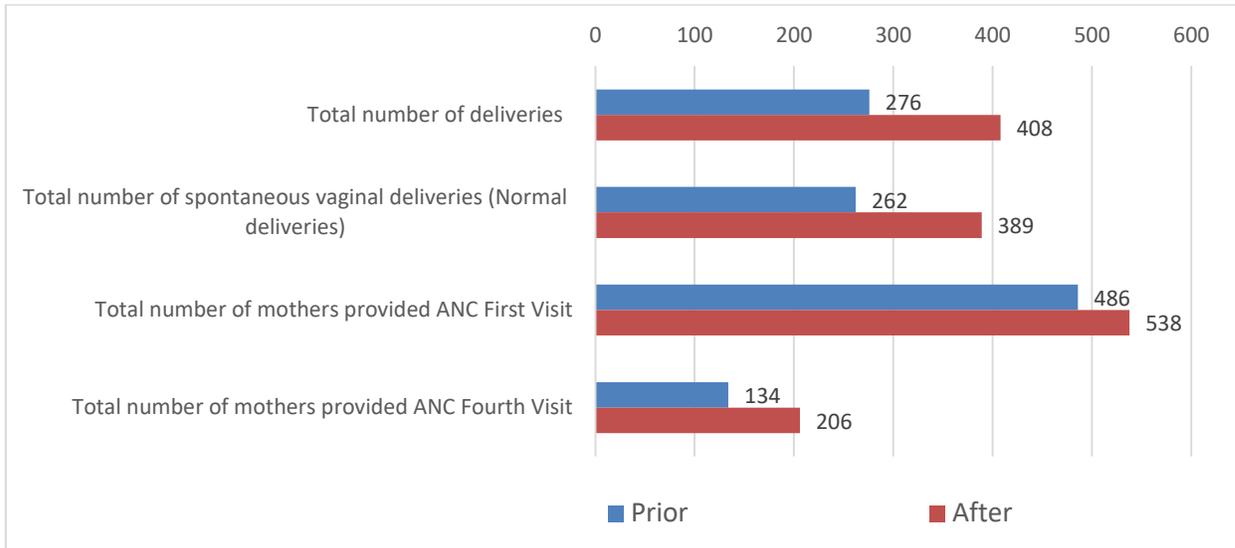


Fig - 3: Mean volume of service (cases served) at the health centers 12 months prior and 12 months after assignment of AMTP graduates findings of register review (N= 96 Health Centers)

There was variation in increment of mean number of deliveries with placement of AMTP graduates among the different regions. There was highest increment in Gambella (131%), the mean annual number of deliveries per health center increased from 32 prior to assignment of AMTP graduate to 75 deliveries per year per health center after AMTP placement. However, mean annual number of deliveries per health center is the lowest in Gambella (Fig-4).

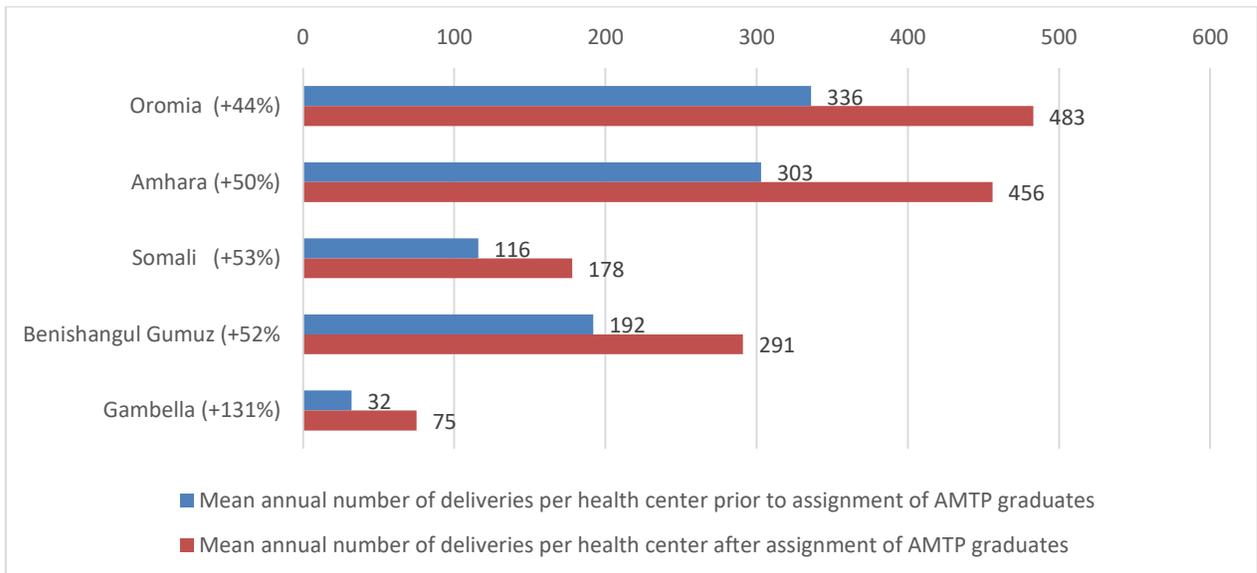


Fig 4: Mean annual number of deliveries per health centers 12 months prior and 12 months after assignment of AMTP graduates by region (N= 96 Health Centers)

However, the number of services for complicated cases did not increase significantly between the two periods (Fig-5).

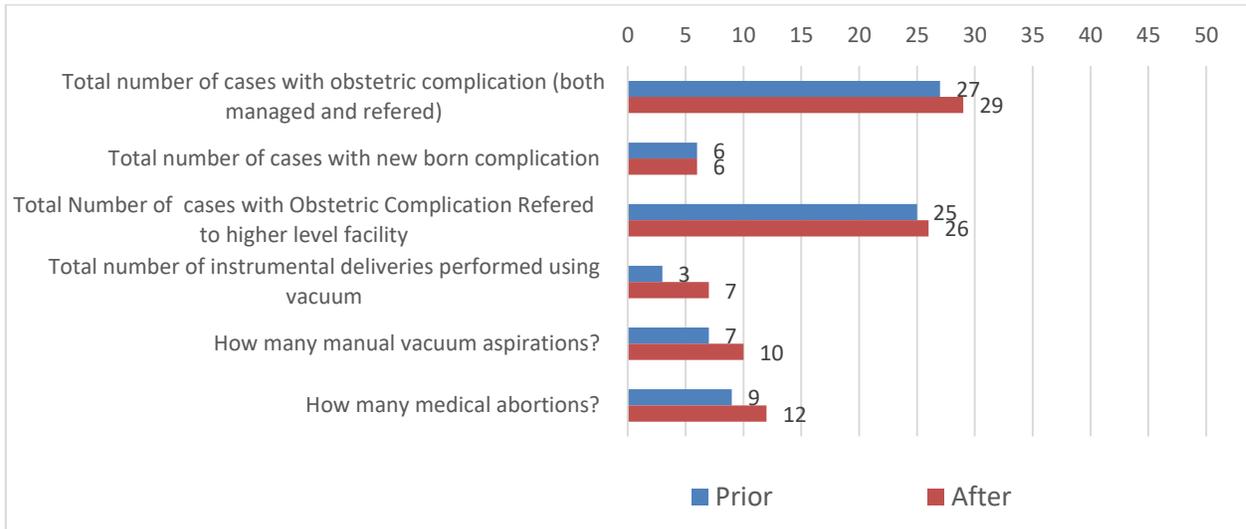


Fig - 5: Mean volume of service (cases served) at the health centers 12 months prior and 12 months after assignment of AMTP graduates. Findings of register review (N= 96 Health Centers)

Regarding family planning, the most important difference between the two periods was about the long acting contraceptive methods, injectables repeat, IUCD and implants (fig - 6).

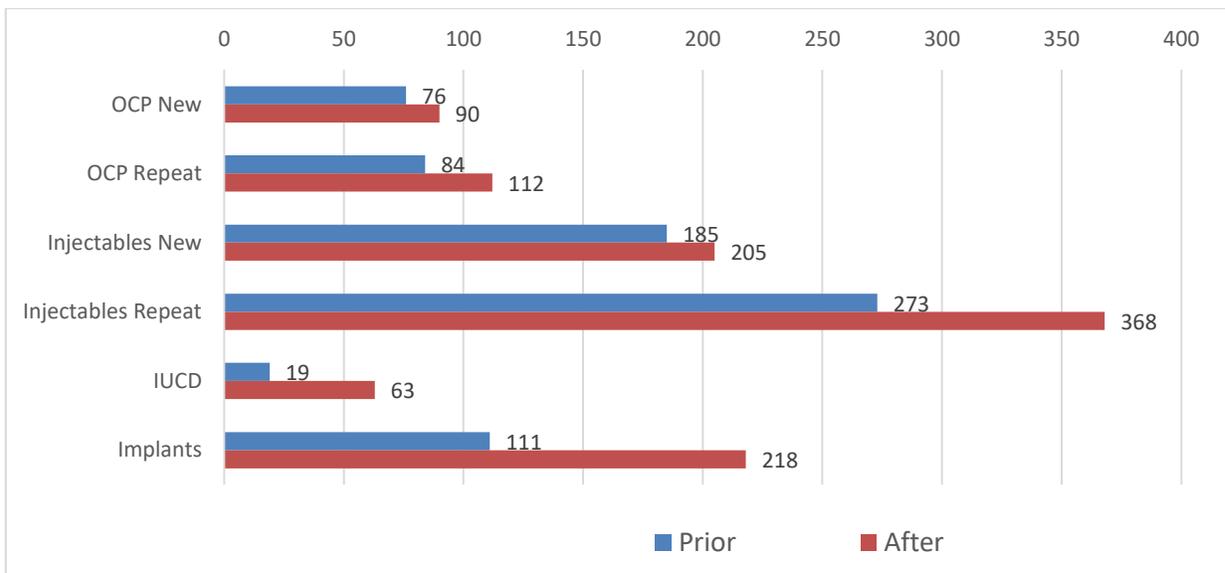


Fig -6: Mean volume of FP service at the health centers 12 months prior and 12 months after assignment of AMTP graduates. Findings of register review (N= 96 Health Centers)

The review of the facility registers shows reduction in mean number of maternal and perinatal deaths with the placement of AMTP graduates. From what is recorded on the facility registers it appears there was a mean of 0.33 maternal deaths per health center in the 12 months prior to the placement of the AMTP graduates, as opposed to 0.24 in the 12 months after the deployment of the AMTP graduates. Similarly, a mean of 2.6 perinatal deaths per health center were reported in the 12 months before as opposed to 2.2 in the 12 months after the deployment of the AMT graduates.

### 3.2. AMTP graduates Competency (self-assessment)

A series of questions were asked to AMTP graduates concerning their perceived competency in performing activities and services related to midwifery. Majority (90-97%) of AMTP graduates feel competent on skills related with ante natal care (Fig -7). Majority (93-96%) of AMTP graduates reported performing most ANC related functions at a daily or weekly basis (fig -8).

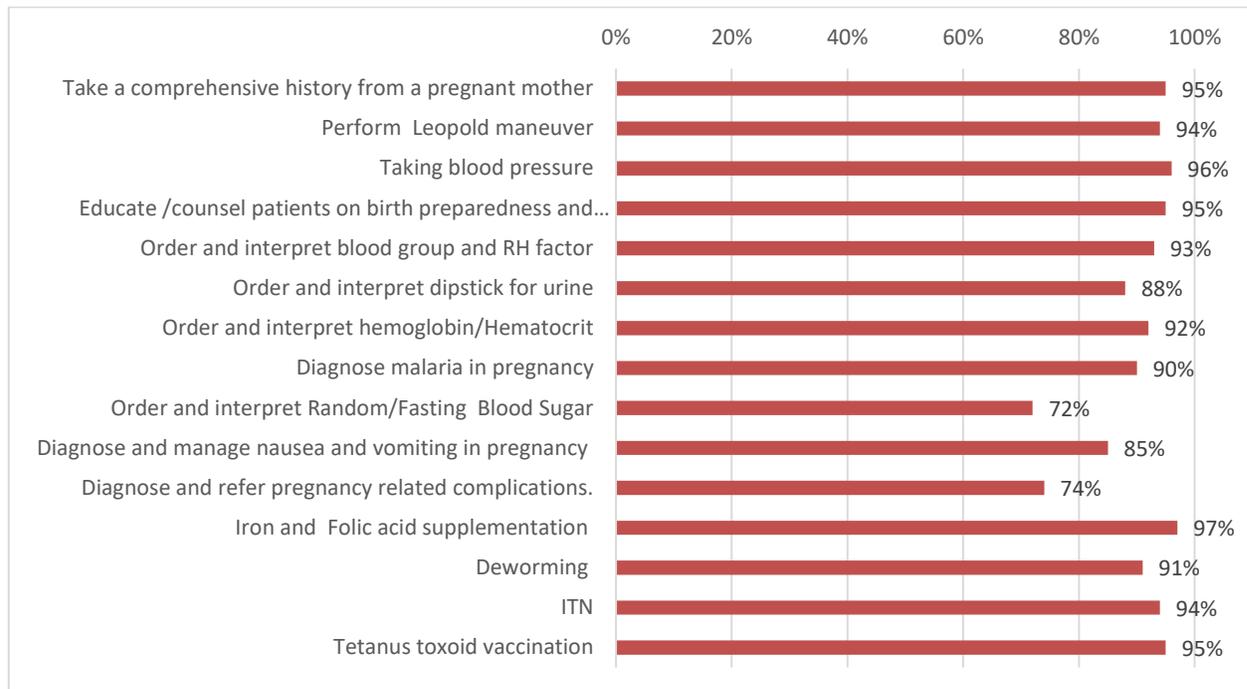


Fig - 7: AMTP graduates who feel competent in performing ANC activities and services (N=215)

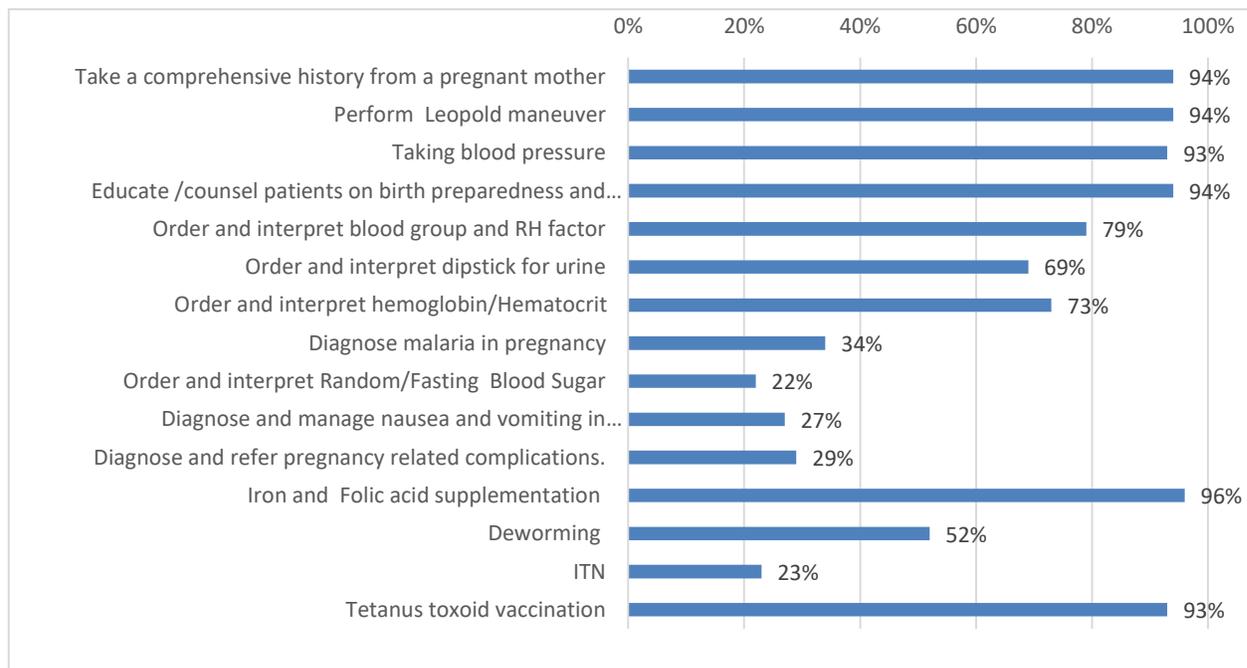


Fig - 8: AMTP graduates who reported performing ANC activities and services frequently (weekly or daily) (N=215)

While over 90% of the AMTP graduates rate themselves as competent in most basic emergency obstetric care and routine childbirth functions, there remains a gap in vacuum assisted delivery (Fig-9).

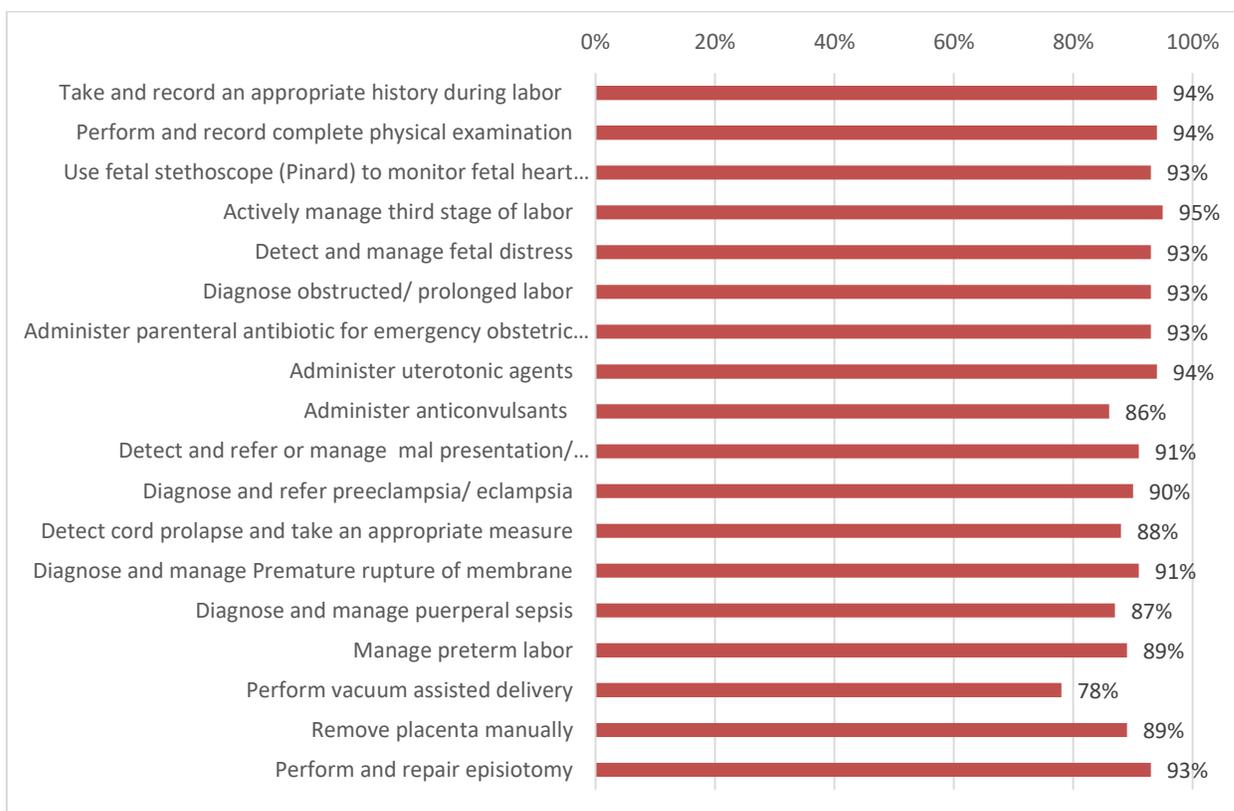


Fig 9: AMTP graduates who feel competent in performing Labor and delivery activities and services (N=215)

We have constructed an index of competence (self assessed) for performing 14 key live saving functions during labour and delivery. Fig 10 shows that on the average for the 5 regions, 68% of the graduates feel competent. Big differences appear when breaking down by region, with extremes of 25% for Somali and 94% for Benishangul Gumuz.

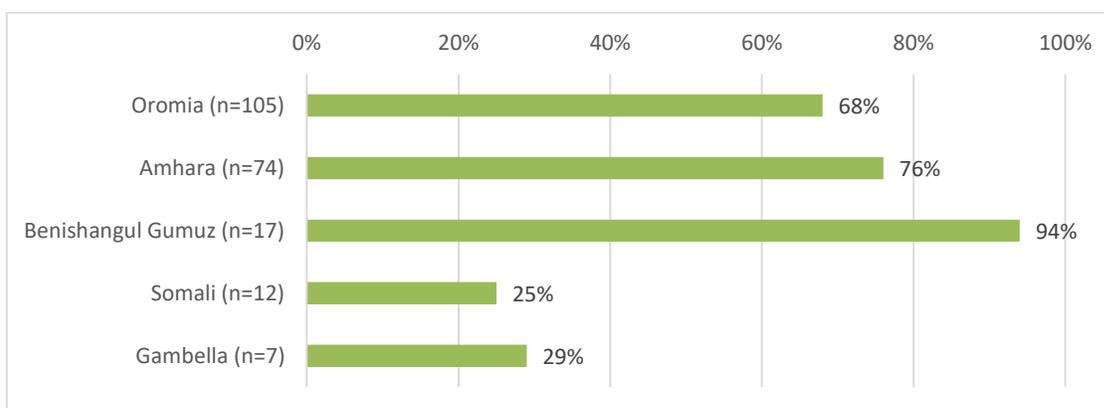


Fig 10: Proportion of AMTP graduates who feel competent to perform fourteen key obstetric functions during labor and delivery, by region (N=215)

The great majority of the graduates (over 90%) reported performing the routine functions of normal labour and delivery frequently (daily or weekly). The more advanced functions can only performed when cases occur, which is not frequent (figure -11).

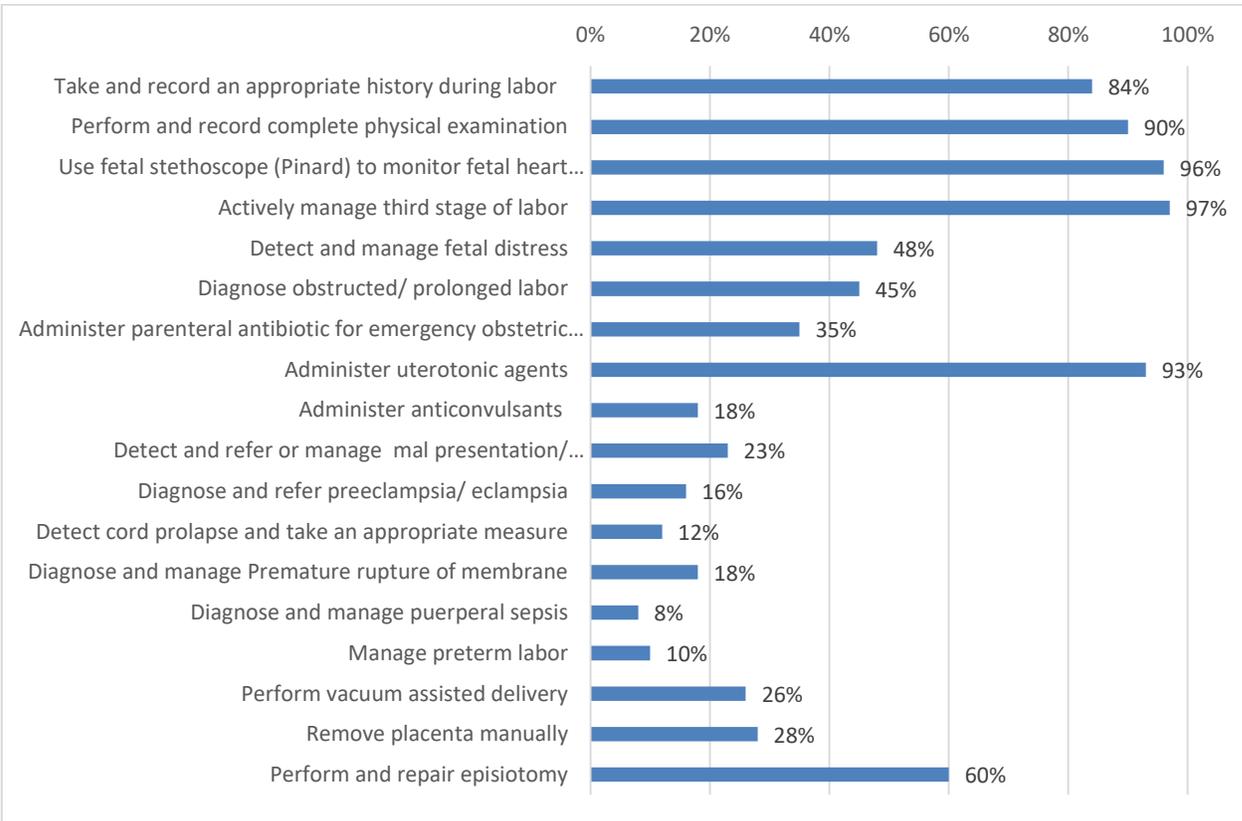


Fig 11: AMTP graduates who reported performing Labor and delivery activities and services frequently (weekly or daily) (N=215)

AMTP graduates feel competent on the essential functions related to post-partum and newborn care related activities (Fig -12 &13).

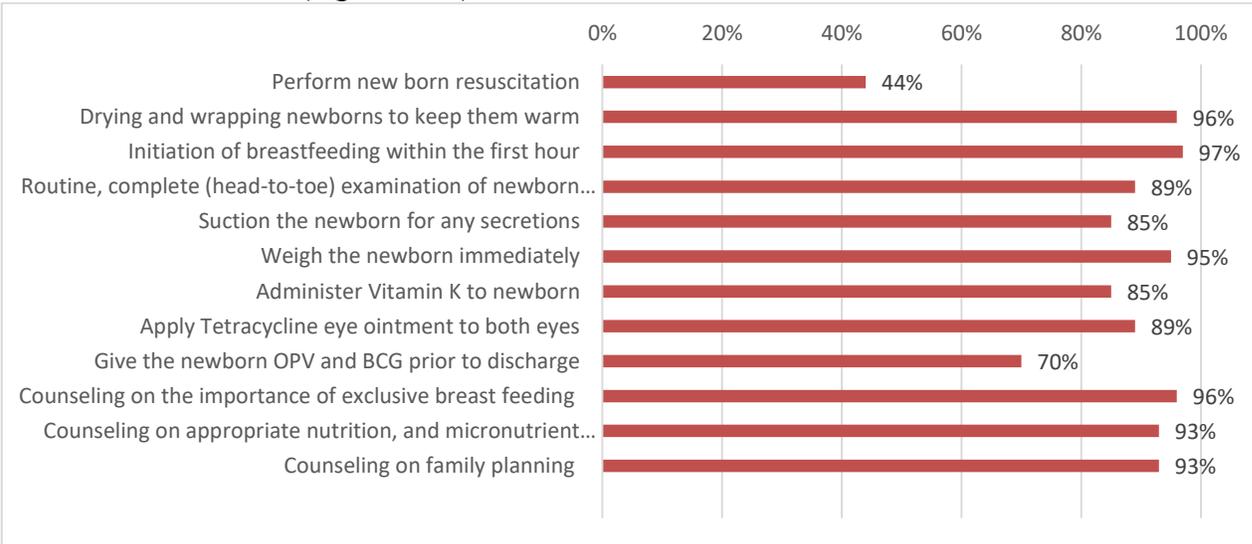


Fig 12: AMTP graduates who feel competent in performing newborn care and post-partum activities and services (N=215)

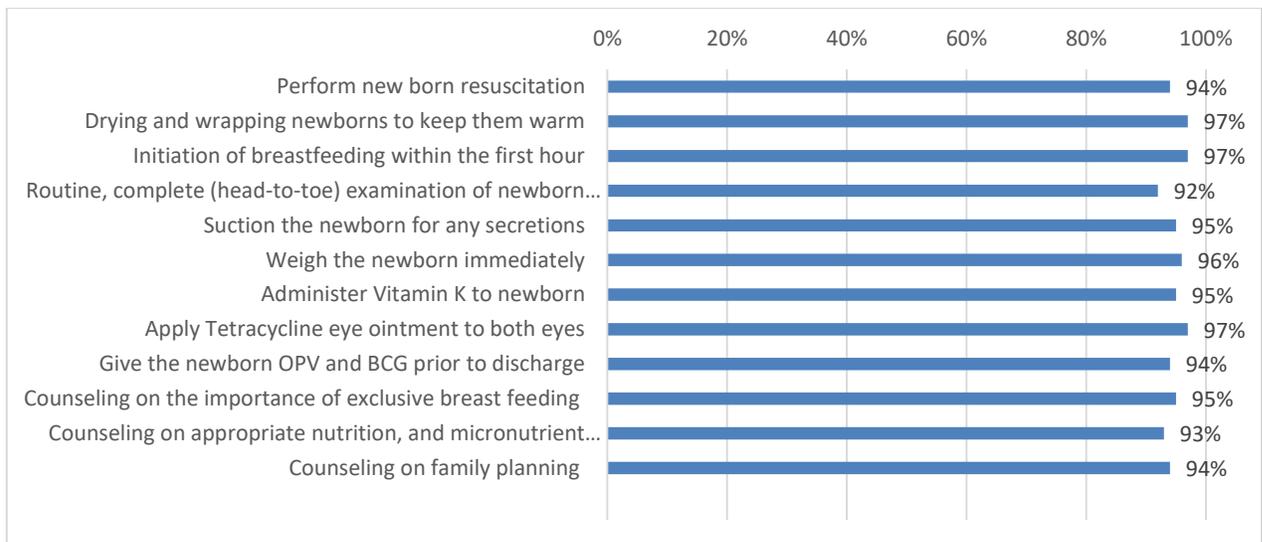


Fig 13: AMTP graduates who reported performing newborn care and post-partum activities and services frequently (weekly or daily) (N=215)

Majority (92%) of feel competent undertaking HIV counseling and testing. Most also feel competent in skills related with infant feeding counseling (86%) and providing ARV prophylaxis to the newborn (68%) However, serious gaps in self-rated competency appear in HIV testing for infants (Fig-14). The provision of ART usually does not make part of the midwives' tasks. Majority (86%) of graduates perform HIV counseling and testing for pregnant mothers routinely (Fig-15).

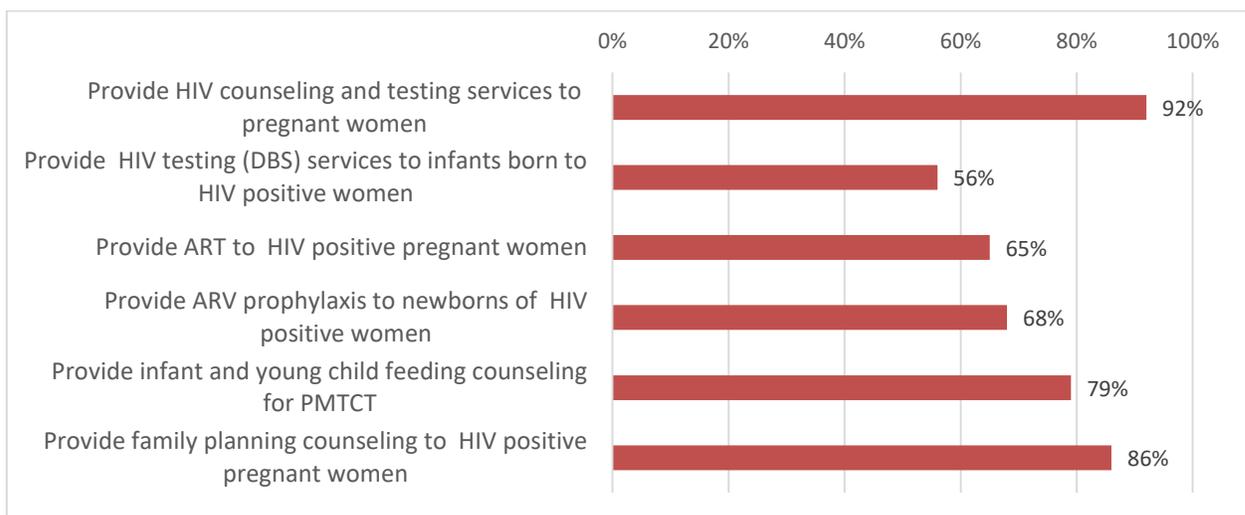


Fig 14: AMTP graduates who feel competent in performing PMTCT activities and services (N=215)

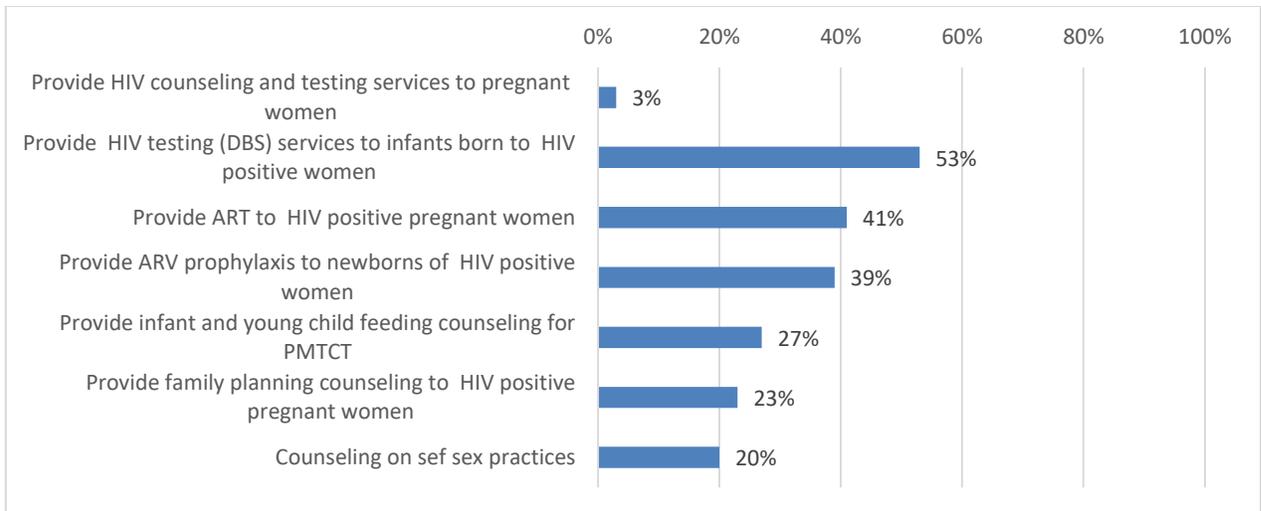


Fig 15: AMTP graduates who reported **never** performing PMTCT activities and services (N=215)

While over 90% of the AMTP graduates generally rated themselves as competent in most FP activities, there is a gap concerning IUD and implant insertion (long acting methods) and female condom (Fig-16). Similarly majority of the midwives reported doing most family planning activities in at least a weekly bases except the long acting contraceptive, Emergency contraception and female condom (Fig-17).

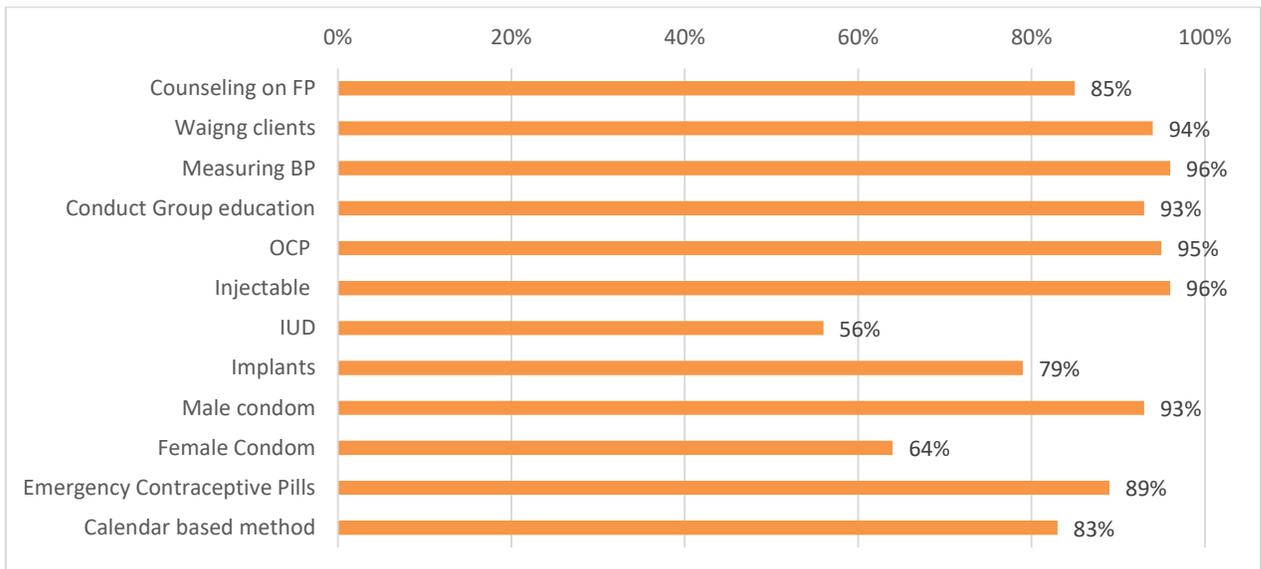


Fig 16: AMTP graduates who feel competent in performing family planning activities and services (N=215)

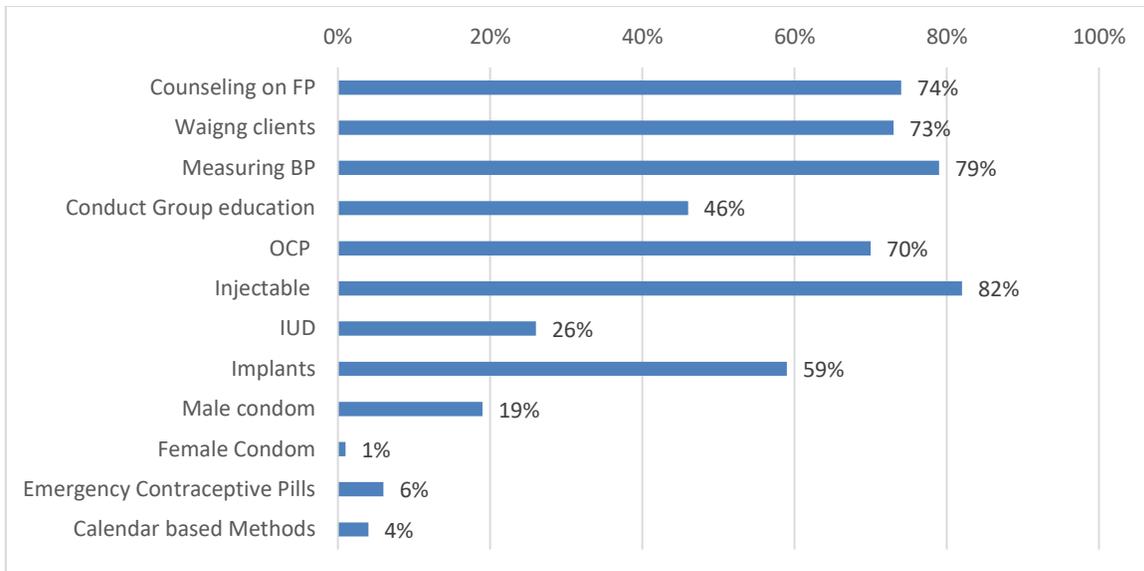


Fig 17: AMTP graduates who reported performing FP activities and services frequently (weekly or daily) (N=215)

Serious gaps appear in self-rated competency for performing medical abortion and MVA. Only 35-40% of AMTP graduates feel competent in performing MVA and medical abortion. Majority reported that they never performed MVA (66%) and medical abortion (35%) (Fig-18 & 19).

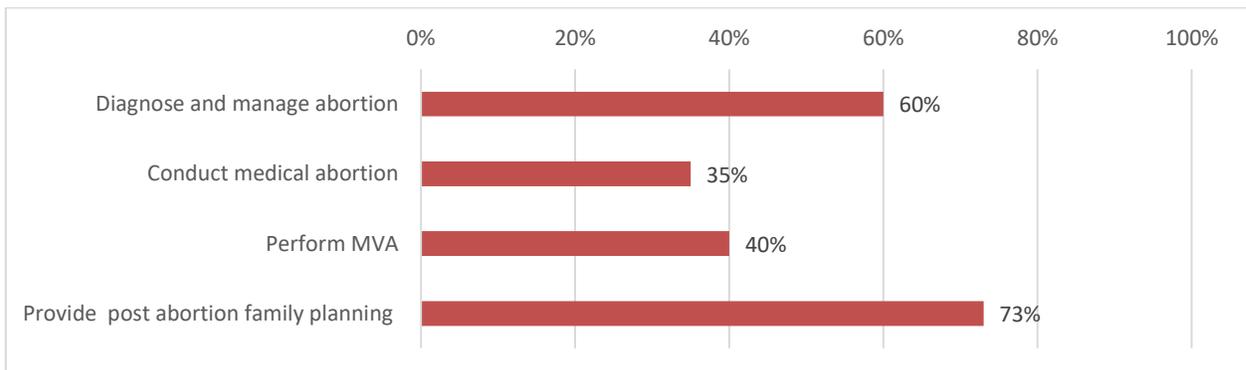


Fig 18: AMTP graduates who feel competent in performing abortion care activities and services (N=215)

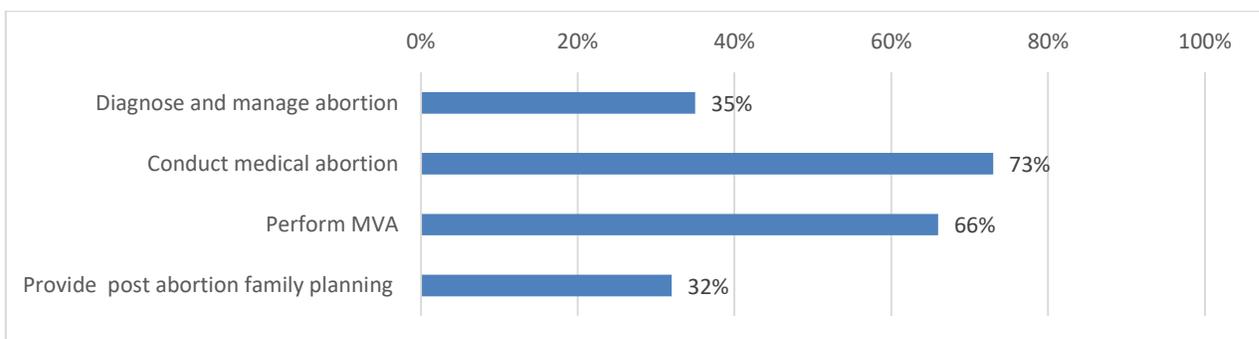


Fig 19: AMTP graduates who reported **never** performing abortion care activities and services (N=215)

Data disaggregation by region shows none of the graduates in Somali region feel competent to perform MVA (Fig - 20)

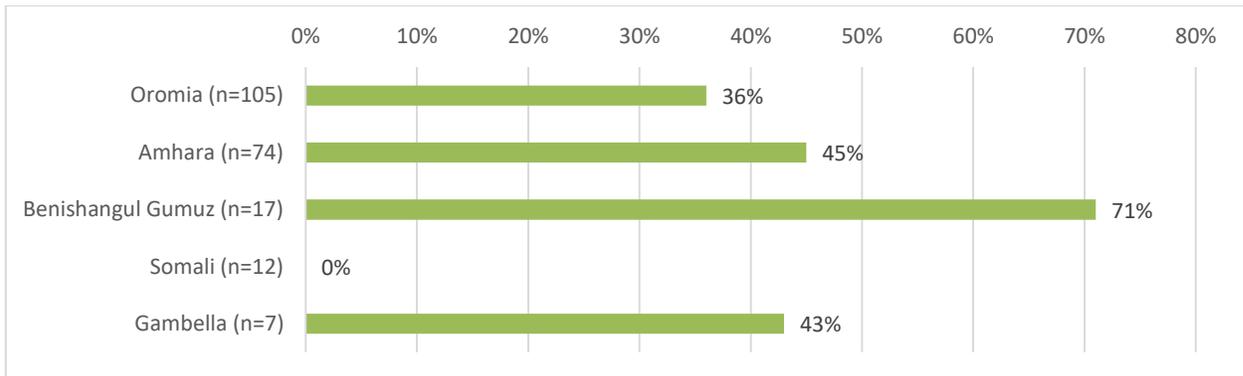


Fig 20: AMTP graduates who feel competent in performing MVA by region (N=215)

Additional statements came from the analysis of the key informant interviews: Most graduates feel competent to attend normal deliveries, provide newborn care, ante-natal and post natal care.

*“As a health officer and head of health center I regularly supervise them..... they are doing great. In areas where they feel gap they use flow charts and procedures posted in the ward to help them perform procedures. So I haven’t seen any skill problem on them”.* (Harshen Health Center head)

*“The number of referral cases to hospital is also decreased because they are managing most of the complications, For example they are performing neonatal resuscitation, manage PPH and make early referral. As a result there is a reduction in maternal and infant mortality in our facility. I can say that currently there is no maternal death in relation to delivery.”* (Tuliawliya Health Center Head)

However some reported gaps in detecting and managing obstetric complication such as applying vacuum extractors and managing cases of eclampsia and preeclampsia. Most also reported gaps in use of MVA and management of cases of abortion. Some also reported lack of skill in providing long-term contraceptives (IUCD and implants). Most expressed demand for training on BEmONC, abortion care, PMTCT and long term family planning.

AMTPG Afura Health Center said

*“We did not get training on long acting family planning services and we do not provide implanon and IUCD in this health center”.*

AMTPG in Agarfa health center said

*“I needed to have BEmONC training to safely practice procedures like applying vacuum, managing obstructed labor and sepsis. I do not give abortion service because I did not receive the training on abortion”.*

AMTPG at Kutaber Health center said

*“there are areas that I need additional training, for example I can’t administer MgSo4 and I just refer to hospital if I face the case, I can’t conduct vacuum assisted delivery and also I am not able to manage abortion cases since I don’t have any training so I just diagnose and make a referral. Besides, regarding family planning service I can’t*

*provide IUCD, I just counsel the client and if she chooses to get IUCD insertion I will refer her”.*

AMTPG Gursum woreda said

*“I don’t feel confident in handling preeclampsia/ eclampsia patients and abortion. I immediately call for an ambulance and refer whenever I encounter such cases. So it is better if I get additional training on them”.*

Some informants maintain that they have skills gaps due to the short training and insufficient hands on experience but others were very satisfied with the skills and blame the working environment (default of equipment, drugs, or support). Most respondents also said that the skills improved over time with experience and additional trainings particularly in BEmONC.

Many respondents talked about the need to improve registration and medical records, which may have not been taught properly. Most respondents said they do not receive feedback from hospitals when they refer patients. Only a few obtained feedback.

*“... There is gap in use of partograph and calculating gestational age. They have poor recording during delivery and on MNCH like ANC. For example most of the time they made mistake on calculating gestational age and the mother sometimes stay here up to two months in maternity waiting home ” (Inango Health Center Head)*

### 3.3. Performance of the AMTP Graduates

#### 3.3.1. AMTP Graduates area of assignment and workload

According to HRH related data taken from 91 woreda health offices 99% of AMTP graduates working in these woredas were assigned at health center and only 1% were assigned at hospital level. Similarly nearly all (99%) of AMTP graduates working in the 91 woredas were working at actual MNH service delivery outlets while only 1% were reported to work at program management (Table-3).

Table 3: Number of currently available midwives, by type of health facility and area of work (N= 91)

Area of assignment	AMTP graduates (%)	Other Midwives (%)	All midwives (%)
Type of Health Facility			
Health center	99	96	97
Hospital	1	4	3
Area of work			
MNH service delivery	99	98	98
Program Management	1	2	2

Similarly the interviewed 215 AMTP graduates were asked areas of MNCH care they have worked in preceding 12 months and all reported working at labor and delivery, nearly all (91-97%) have been working at ANC, PNC and FP. While 64% were also involved in child immunization and only 5% reported to engage in administrative work at some point in the past 12 months (fig-21).

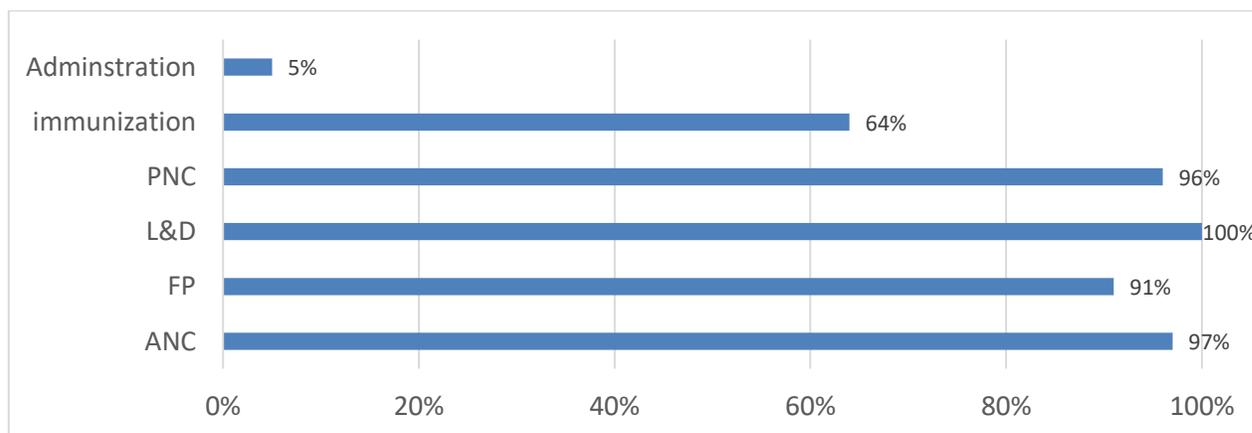


Fig 21: Areas of assignment for AMTP graduates in the past 12 Months (N=215) From AMTP graduates questionnaires

AMTP graduates were further asked to estimate amount of time they spend in various areas of work and on average almost one half (47%) of their time was spent in delivery room and post natal care, 31% in antenatal care, 16% in family planning, 5% in immunization and 1% in administrative areas (Fig-22).

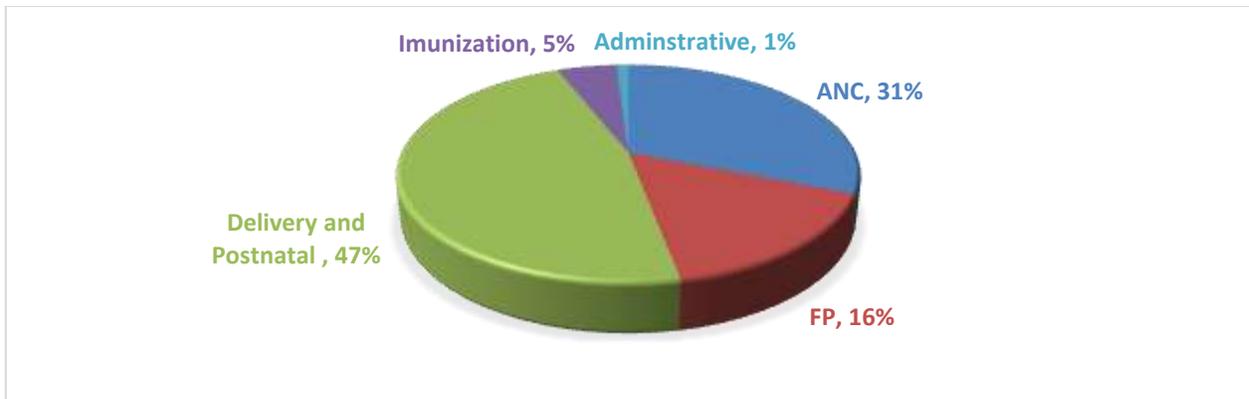


Fig 22: Proportion of time spent in MNCH services by AMTP graduates in past 12 months (N=215)

AMTP graduates were asked on the work load (minimum number of regular hours they work per day and duty sessions per week). The median number of hours worked in their workplace was 8, which fits with the legal work time. However 38% of the respondents said they work more than 8 hours a day. The median number of duty sessions (during lunchtime, night or weekends) was 4 per week, which is once every two days. The median number of hours spend in duty sessions was 52 per week. Similarly, majority of AMTP graduates participated in the key informant interviews reported high workload on the two midwives available per health center. One AMTP graduate at Tiyo Bilalo Health Center said

*“.....there is high work load .....I am expected to be here 24 hours.....from the day I was assigned in this health center I never took my annual leave”.*

An EMA mentor in Arsi Said

*“The main challenge was that the number of midwives and number of deliveries was not proportional. The case flow was very high and they were working almost 24 hours. Due to this reason they may not perform as required”.*

On average the AMTP graduates conduct 24 deliveries per month (range 0-150) and see a mean of 8 complicated cases per six months, more than one per month, which is not much.

AMTP graduates are supposed, as part of their job description, to strengthen their links with the community (women, families and leaders), in order to promote utilization of public health facilities and services. As part of this activity, they must establish links with the Health Extension Workers (HEW) and supervise them technically in their activities related to mother and newborn health. Of all graduates interviewed, 176 (82%) said that they supervise the HEWs. However looking at the regional disaggregation the Midwives in Somali (17%) and Gambella (57%) were less likely to supervise HEW than those in Benishangul (94%), Amhara (885) and Oromia (85%). Among the 176, 52% supervised them once a month and 44% twice a month or more, 80% said they have mechanisms for referral and feedback of referred cases with the HEWs, 78% said they have community-based activities, mostly group education.

### 3.3.2. Graduates Performance on Management of obstetric complications

In order to assess the competency of the AMTP graduates to deal with the complicated obstetric cases (that could represent up to 15% of all pregnancies according to AMDD), the evaluators (experienced senior midwives) were asked to pick up the files of the last five complicated cases, study these files, and establish the sequence of services performed against the FMOH management protocol. This section therefore explores the competence and the

quality of care provided by the AMTP graduates when dealing with complicated obstetric cases.

As indicated above, it was planned to collect 5 patients records from 60 health centers, for a total of 300 cases, but actually there were not always 5 patients records of adequate quality to collect in each of the health centers, so the investigators checked 67 health centers and ultimately collected 288 patient records. Table 4 below summarizes the characteristics of the 288 patients with obstetric complications.

The number of records was proportional to the size of the regions, 45% of them were from rural areas, and 96% within 2 hours walking time between home and health facility. Seventy nine percent of the patients were aged between 20 and 34 years, the lowest risk age group, 40% were primiparas, the highest risk group and 9% were grand multiparas, also a high risk group. No more than 4% were referred from other facilities, 68% had been seen at ANC and 55% had a ANC card, but only 8% had identified and recorded a danger sign.

Table 4: Characteristics of the 288 patients with obstetric complications whose medical records were collected in health centers for the “Last Five Patients” review. (N= 288)

Variable	Percent
Region	
Oromia	43
Amhara	33
Somali	11
Benishangul Gumuz	7
Gambella	7
Patient’s Residence /locality	
Rural	45
Urban	55
Live 2 hours travel from the health Facility	
Yes	96
No	4
Is the patient a referral from other Facility?	
Yes	4
No	96
Age	
<20 Years	11
20-34 Years	79
>/=35 years	10
Parity	
Primipara	40
Multipara	51
Grand multipara	9
Had ANC follow-up	
Yes	68
No	32
Danger sign identified or detected and recorded	
Yes	8
No	92

Of the 200 medical records of mothers with obstetric complication during labor and delivery reviewed, patient identification was properly recorded for the majority (79%) of cases. More than half (57%) of the cases have proper documentation of chief complaints and assessed for the cervical dilatation (60%). However the initial patient assessment, and physical examination at admission showed that only few were properly documented complete obstetric history (33%); taken vital signs (30%); checked for pallor (27%), fetal heart rate (48%) and fetal presentation (41%). Only 9% of cases had documented management plan including basic investigations (Fig 23).

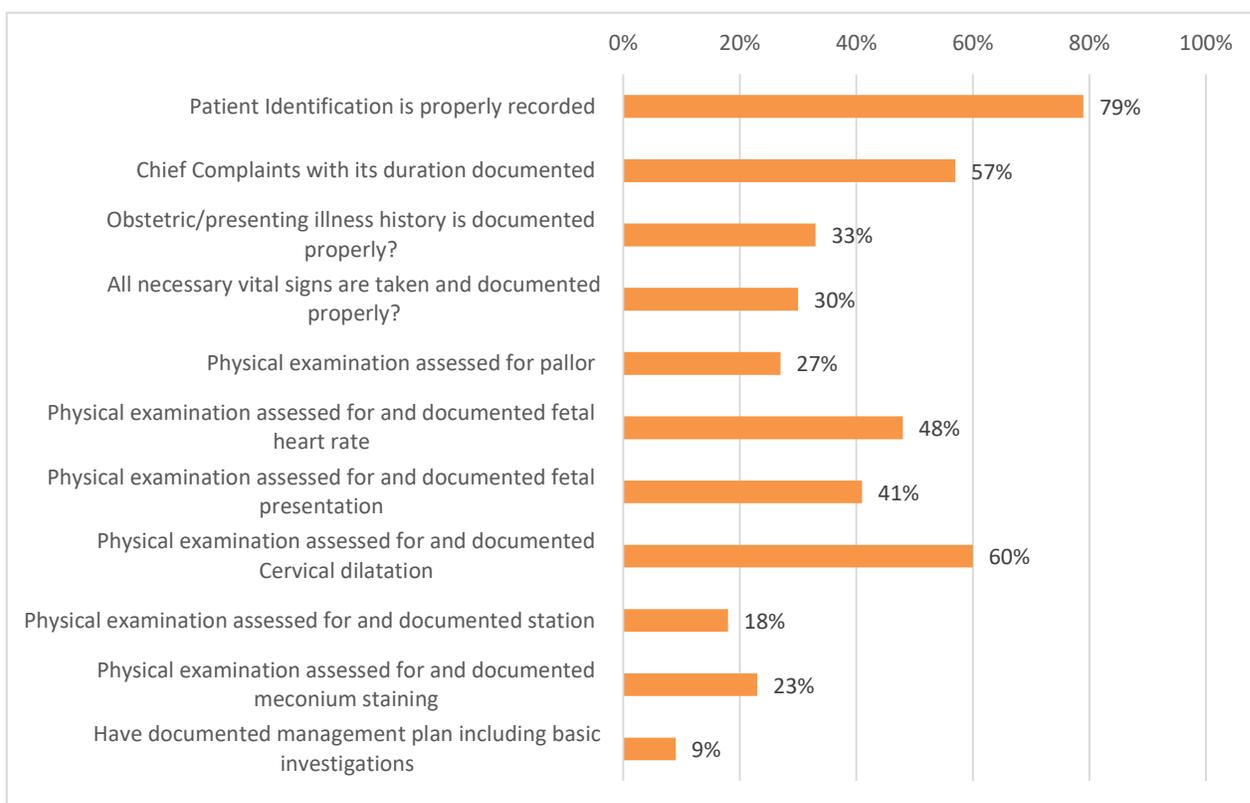


Fig 23: AMTP graduates performance of initial assessment/Patient evaluation at admission (N=200 cases of labor and delivery) findings of last 5 patient pathway mapping

Last five patient pathway mapping also examined the 200 medical records of women with obstetric complication and on labor and delivery follow-up evaluation and management. The follow-up evaluation and management of the cases were properly documented in 22 to 61 % of the cases on the average, depending on the functions. While according to clinical walk through, partograph was available in 92% of the health centers, partograph was attached in only 50% of the medical records of complicated labor and delivery cases. Furthermore, only 51% of 101 cases used the partograph properly according to the national protocol. The active management of the third stage of labour was performed and documented in 61% of the relevant cases. More than half had documented fetal heart rate (60%) and cervical dilatation (58%) on recommended intervals. About 33-51% had measurement of vital signs on proper intervals (Fig - 24).

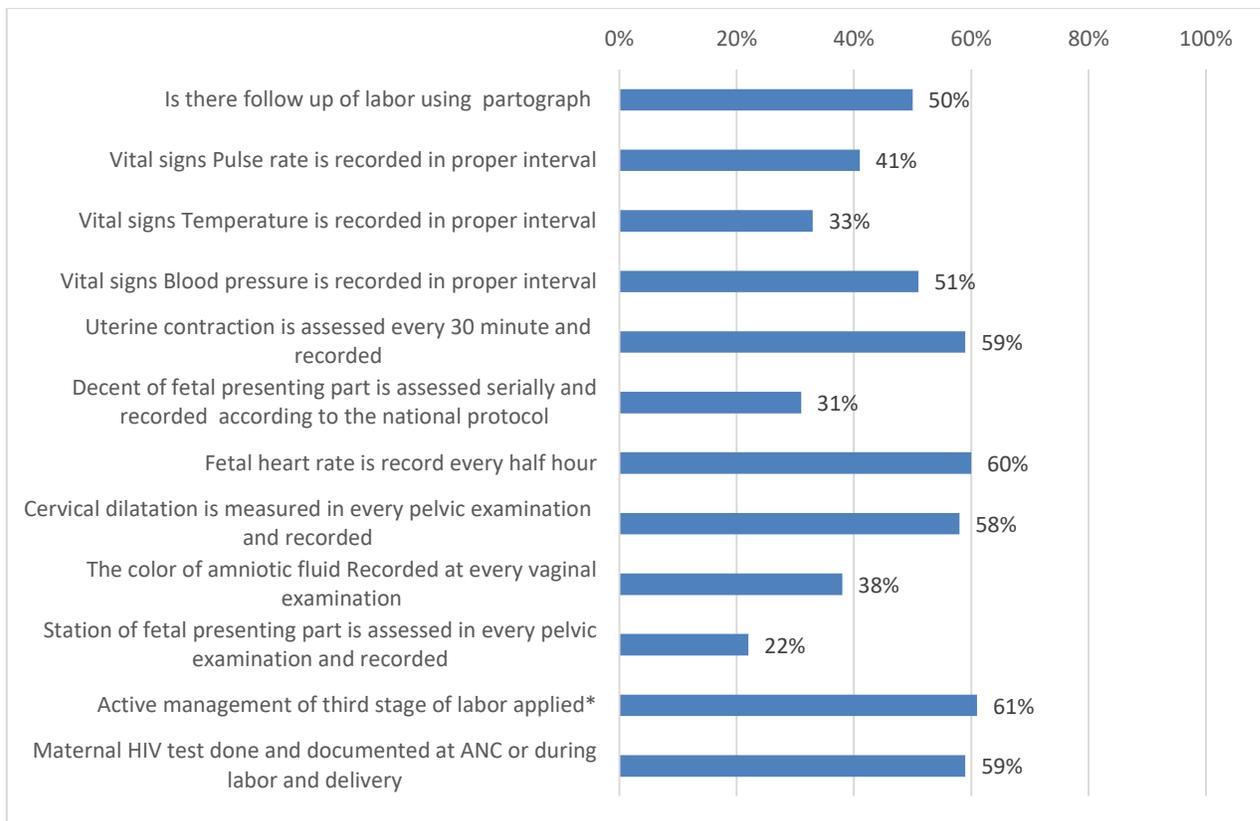


Fig 24: AMTP graduates performance of follow up Patient evaluation and Management (N=200 cases of labor and delivery and n\* = 90) findings of last 5 patient pathway mapping

Based on 288 medical records reviewed the most frequent intervention performed by AMTP graduates to complications was to refer (67%) which is consistent with findings from the qualitative data (fig - 25). Evaluators were asked to identify reasons for referral. Fifteen percent were for lack of skill to perform the required intervention, 7% were for lack of equipment or supplies. The majority (72%) were for following the national guidelines/protocol, and 6% for other reasons.

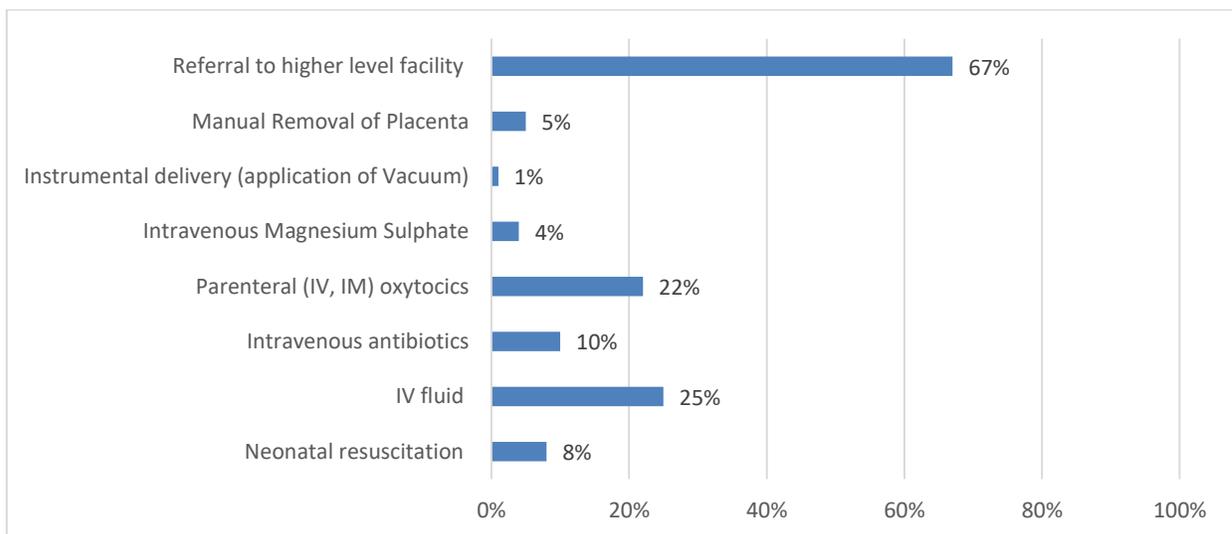


Fig 25: Interventions provided for cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping

The maternal outcomes of these 288 complicated cases were positive (treated, improved and discharged) in 25% of the cases, negative (death in the facility) in 1%, and unknown in the rest of the cases for lack of feedback from the referral hospitals. The perinatal outcomes for these cases were positive in 25%, negative in 7%, and undocumented in the rest of the cases.

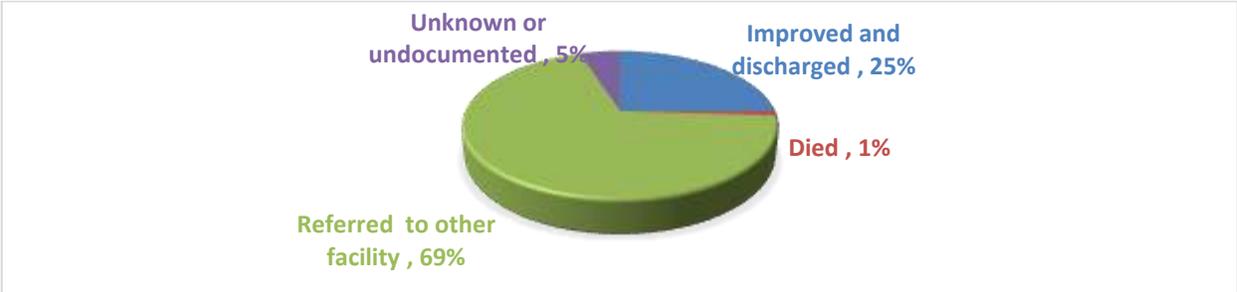


Fig 26: Maternal outcome of cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping



Fig 27: Perinatal outcome of cases with obstetric complication (N=288 cases) findings of last 5 patient pathway mapping

### 3.4. Work environment

The work environment was assessed through a clinical walkthrough, graduates survey and analysis of key informant interviews with graduates and health center heads. The work environment was assessed for availability of equipments and consumables; provision of incentives; supervisory support and feedback.

The Walkthrough method was employed in 100 health centers to examine if the environment could have been a strong deterrent of performance of midwifery services. The enumerators were given lists of items, staffing, buildings, beds, equipment, instruments, and drugs.

We selected a few key items that have the potential to hamper midwives performance in the labour and delivery ward (Figure 29). It shows that some essential equipment is missing (or not used which has functionally the same result), such as the Vacuum Extractor in 35% of the health Centers, MVA in 47%, suction machine in 82%, incubator in 84% of health centers. The most disturbing missing drug is magnesium sulphate, which is internationally recognized as life-saving in cases of pre-eclampsia and eclampsia, and still missing or not used in 70% of the health centers (Fig - 28)

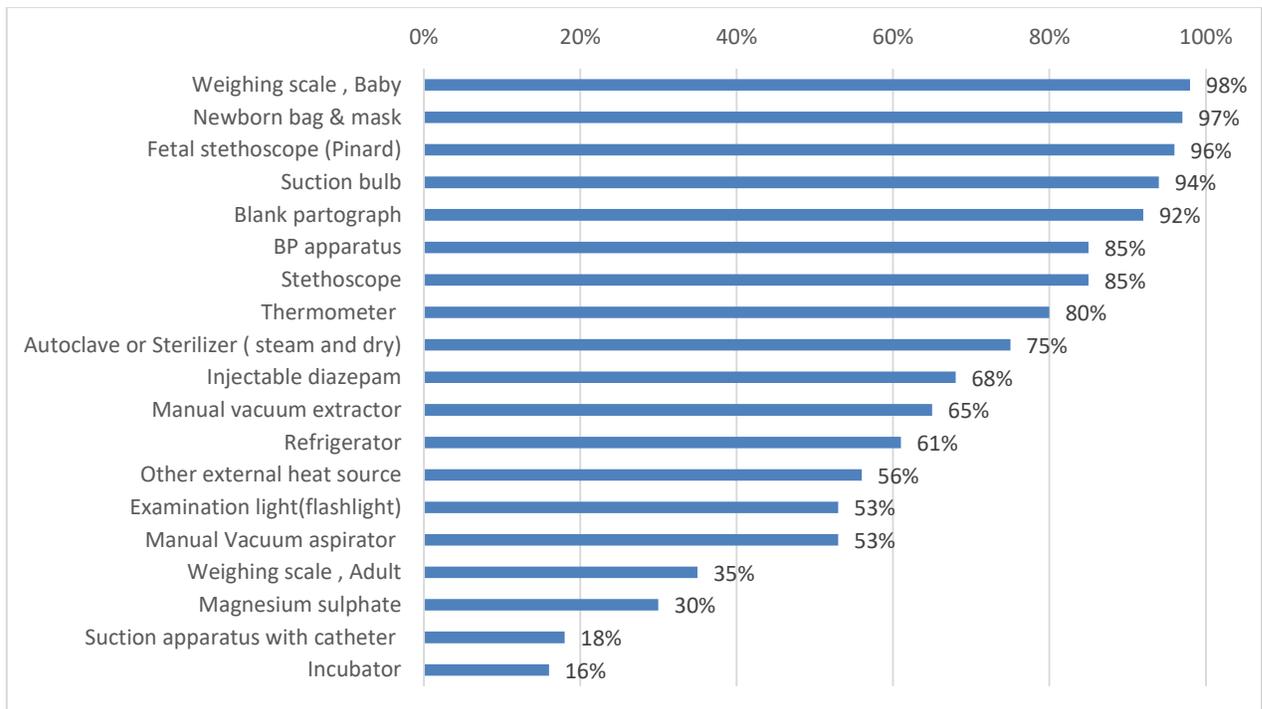


Fig 28. Obstetric and newborn care equipment available, functional and being used at the health centers (N=100). Findings of the clinical walkthrough.

Similarly some key informants reported shortage or lack of equipment and supplies hampering their performance, for example MVA, vacuum extractor, incubator, magnesium sulfate.

Bure Health Center Head said:

*“There is shortage of equipment like vacuum extractor, infant radiant, resuscitation materials and essential drugs like magnesium sulfate that affects the quality of care”.*

Head of Moyale health center added

*“Lack of equipment’s like autoclave is making it difficult to implement infection prevention...we don’t have MVA that is why they are not providing abortion care service we refer such case to the hospital ”*

AMTP graduate in Afura Health Center said

*“I have no problem of diagnosing and managing common obstetric complication but there is lack of equipment to apply vacuum extractor. We do not have any MVA to provide care for abortion. If we had all materials, I would have provided the services”.*

Some AMTP graduates said there is problem of space where more than one service is provided in a single room. One AMTP graduate at Tiyo Bilalo Health Center said

*“We are providing ANC, family planning and immunization in a single room at a time... At a time, ANC client sit here, family planning client and immunization client sit there .....most of the time we could not listen each other”.*

As part of the work environment graduates were asked if they receive adequate incentives. Normally the AMTP graduates, like other midwives posted in health centers, are entitled a number of incentives for remote posting, for duty sessions, for risk (such as contamination) and for facilitating further studies for career development. The 215 AMTP graduates surveyed were asked on incentives received since they joined their post and majority reported to receive duty (85%) and risk allowance (86%) and short term trainings (45%). While only few (14%) reported having housing.

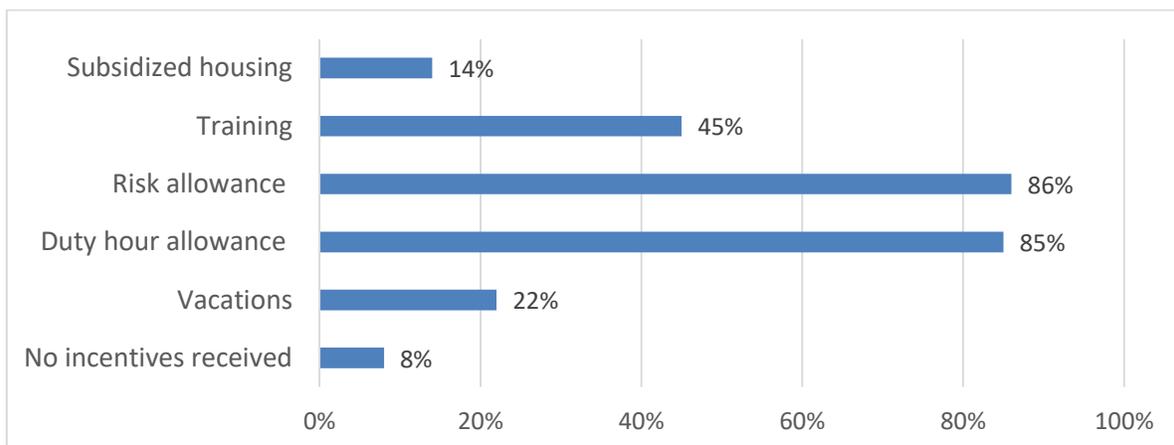


Fig-29: AMTP graduates report on incentives received (N=215)

Supervision and feedback was assessed as part of the work environment and majority (88%) of graduates reported to have supervisory visit in preceding 12 months. Of those who have been supervised, 4% said it was once per year, 11% twice, 35% quarterly and 38% said every month. And 87% rated the supervision as good and satisfactory, while 13% said it was poor. Most AMTP graduates participated in the key informant interviews reported that they don’t get feedback on cases referred to the hospitals.

Similarly findings from the qualitative data (from the KIIs) indicate that the majority of the health center heads and AMTP Graduates interviewed reported that they are being paid duty and risk allowances. Some reported access to short term trainings (such as BEmONC, PMTCT, Abortion care), and most receive supervisory visits and feedback on performance from woreda office and different partners. Career development path is already defined by the programme. A national key informant responded that:

*“.....a career path for AMTP graduates has been worked out with the program and graduates can join BSC midwifery training program after a two years’ service”.*

AMTP graduates rate of retention was assessed using data from 91 woreda health offices and interview with graduates. The 3-year retention rate calculated for AMTP graduates is 84%. Special studies may be undertaken to approach the retention rate of AMTP graduates within 5 years of their placement.

A question was asked to AMTP graduates about their career plans. This was an attempt to measure job satisfaction. Only 20% of the AMTP graduates said they have a plan to change career and this proportion was consistent among the graduates under 30 years old, but all of the 30+ said they will continue. When broken by sex, the proportion of males saying they have a plan to change career was 16% versus 21% for female. The graduates from Gambella and Somali had a higher proportion (29% and 25%) saying they have a plan to change career, in sharp contrast with those from Benishangul Gumuz with 6%. More in-depth questions might help explaining these differences.

In the key informant’s interviews, most interviewed stakeholders said AMTP graduates are motivated to help women and the turnover is not different from others. Some emphasized the need to open career development opportunity through BSc level training programs.

Limu woreda health office said

*“so far they are working good, are motivated and stable but in the long term there might be fatigue.... It is good if at least one midwife per year is given further education opportunity based on performance. It would help to motivate others’ performance”.*

### **3.5. Mentorship Program**

The mentorship programme stemmed from the first follow up assessment conducted by UNFPA among the first batch of AMTP graduates in 2012. It was felt that the graduates needed peer support soon after their return to their post in a health center, in order to fulfill all the tasks to be accomplished by midwives. The Ethiopian Midwives Association was asked to identify the mentors among senior midwives chosen from the regional branches of the Association, or those working in health facilities, and to give them a one-day orientation prior to sending them in the field. The mentorship programme therefore did not start before the year 2 of the AMTP. Later a special training programme for mentors was organized by UNFPA and AMREF in the year 3 for the third batch. Not all the AMTP graduates therefore could benefit from a mentorship.

The regional branches of the EMA offered their services to the Regional Health Bureaus (RHBs), and the programme was led by the RHB, who decided where, in which health centers, it should be implemented. The mentorship programme had no direct relation with the curriculum of the AMTP, and was essentially based on the job description of the midwives as published by the FMOH. It was offered to 400 (double check) new AMTP graduates (the “mentees”) and lasted one month only for each group.

One problem arose from the selection by the RHBs of the worst-off health centers (those with the least institutional deliveries, often those most isolated and far to reach). This choice created logistical problems for the mentors who faced constraints to reach the facilities. As a result of all these constraints, the mentorship sometimes turned into a sort of coaching from the viewpoint of the AMTP graduates.

Overall findings of the graduates survey showed that half (49%) of the AMTP graduates interviewed said they were offered a mentorship in the preceding 24 months. However, only 6% (13 graduates) reported that the mentorship was from EMA. The rest benefited from mentorship programs implemented by FMOH and other partners.

Though only few were reached with EMA mentorship program. Those AMTP graduates reached through EMA mentorship largely expressed satisfaction. One AMTP graduate from Bonga, Gambella said:

*“.....Yes, I had a mentor from EMA. He stayed here for long period and supported me most of the time at ANC and delivery. He coach me on midwifery skills when are cases and whenever no case he taught me on how to register. The way he made me to attend normal delivery and how I attended before was different. Before I used to follow deliveries with partograph selectively. After he guided me, I used parthograph every time and filling everything. On ANC before I had many limitation but after he mentored me I improved many things. So that quality of my work, customers’ satisfaction and my confidence increased. He was punctual, committed and every day he came and stayed here the whole day with us. It so nice program*

The results of the qualitative interviews in respect of the EMA-implemented mentorship programme indicate that not all stakeholders and graduates knew about the mentorship programme: Majority of key stakeholders (RHBs, Woreda Heath Offices, facility Heads, and peers) and AMTP graduates said that they have never heard of nor seen any EMA mentors in their workplace.

*“There is no such type of mentorship. There was a time when some midwives were selected from health centers, took training and show other midwives by using videos. From our health center there was one selected midwife to show these procedures at assigned health center for 10 days per month. But because their level is the same there were the problem of acceptance. Other than this nobody has come here.”* WoHO in Oromia

Among these 13 AMTP graduates who reported to receive EMA mentorship majority (10-12 of the 13 participants) reported that they have gained new knowledge; improved their clinical decision making skills and improved quality of care they provide. Nearly all (12 out of 13 graduates) rated the mentorship program as good or satisfactory.

Nearly all of the AMTP graduates reached with EMA mentorship program said the mentors checked their reports and service records (12/13); Observed their work (13/13); demonstrated skills (11/13) and provided feedback on their performance (12/13).

Out of the 13 AMTP graduates all said the mentor supported them on labor and delivery, 10 on ANC, 9 on FP and 8 on abortion care.

Out of the 13 AMTP graduates majority (8-9/13) reported technical capacity and mentoring skills of the mentors as strengthens of the program. On the other hand most (7-10/13) said duration and frequency of mentorship as well as resources and materials as insufficient.

Five EMA mentors were interviewed, four in Amhara and one in Oromia. All were members of the EMA and had a one day orientation prior to joining. All were well experienced especially in BEmONC. They reported that their mentorship support helped graduates to reduce unnecessary referrals by showing how to manage cases locally. They also worked a lot on

documenting cases, using the partographs correctly, and improving records. They promoted the use of checklists for managing specific cases. For example EMA Mentor in Arsi Zone said

*Mentorship builds confidence of midwives. It also helps them to know new ideas. This will help to provide quality services. At that time the community has heard about us, so number of deliveries has increased in large numbers. It would have been better if the mentor had spent the night with the midwife. Otherwise it is just giving only feedback on night work*

EMA mentor from BaharDar said

*“In my observation lack of motivation is the first thing that makes difficulty in improving the maternal and newborn health. for example, often the health workers refer cases to the hospital but when we look at the case it can be managed at the health center level. So, there might be a skill gap but beyond that, there is lack of motivation to take a responsibility. This is where mentorship is useful”*

In general several key informants found the mentorship programme insufficient in terms of duration, number of mentors, and funding. For example RHB Amhara said

*“In order to provide a better mentorship support as of other partner organizations, we need to hire mentors in a contract basis so that there will be an effective mentorship program.”*

EMA Mentor from BaharDar said

*“I don’t think it is enough to provide a mentorship support just only for one round visit for a health center because you may support or coach health workers in one health center and let’s say they become more skillful but there might also be a turnover then the health centers performance in providing the same quality of service will be under question. Thus, I recommend if there would be an ongoing assessment in one health center in order to keep the quality of service and effectiveness of the job”*

## SECTION-4: DISCUSSION

The AMTP was relevant, because it responded to a strong need and a national priority, and effective, since most of the planned targets were reached, in particular the number of AMTP graduates. This is a considerable achievement. Having reached the appropriate number of midwives posted in health centres of the regions, the next priority is to ensure the appropriate quality of services provided, as well as the retention of these midwives.

The effectiveness of midwives to take care of normal and complicated pregnancies and births partly depends on the quality of their pre-service and in-service training, and partly on their work environment. This assessment confirms that once the required numbers are reached, the quality of care and the outcomes vary according to the above mentioned factors.

An important finding of this assessment is the high self confidence of the graduates about their competence in delivering almost all midwifery-related services. The practice, however, depends mainly on the opportunity to see cases. Obviously a number of obstetric complications (eclampsia, complicated abortion, obstructed labour) do not happen frequently, with consequences on the maintenance of competences.

The assessment, through analysis of the health centers records, showed that while the number of normal deliveries and the number of ANC visits (4<sup>th</sup> visit) had increased by 48% and 47% respectively between the two 12-months periods before and after posting of AMTP graduates, interventions for complicated cases, both managed and referred, had practically not increased between the two periods. This was particularly true for manual vacuum aspiration, vacuum extraction and newborn complications. This finding can be interpreted as an increase in the demand for midwifery services for ANC and normal deliveries, triggered by the posting of new midwives at the health center, but the maintenance of prudent response to complicated cases, with referral to higher level before admission or very quickly after admission at the health center. Further study might be useful to see the role of experience, mentoring, positive environment on the decision to keep and manage the complications at the health center. Some qualitative interviews confirmed that the mentors were instrumental in giving confidence to the young graduates to keep and manage complicated cases at the health center.

It was difficult from the graduates questionnaire to relate their competence and their experience. The management of pre-eclampsia and eclampsia is a good example: While 90% of the graduates feel confident in their competence to manage these cases, only 16% said they commonly practice this intervention. The infrequent occurrence of these complications partly explains the discrepancy, but there might also be a role played by the unavailability of magnesium sulphate, the key drug for this condition. Thus the non-supportive working environment, when the drug is absent, can contribute to the loss of competence.

It is interesting to compare our findings with those of other studies conducted in the same context in Ethiopia. We review 4 studies:

1. A first follow up assessment on midwife performance and training quality was conducted in 2013 for the first batch. A representative sample of 84 (5%) new graduates, predominantly females (83.3%), from six regions (Oromiya, Amhara, Addis Ababa, Gambella, Somali, and Ben Shangul Gumuz) were followed up in order to assess the performance of the programme and their own performance in the health facilities. A 61% proportional increase in the use of institutional delivery was reported, and 76% of the midwives were using the partograph.

However, only 44 percent of the partographs were correctly and fully completed. Both the graduates and Heads of health centres reported that more training was needed in post abortion care and comprehensive abortion care, long term family planning and PMTCT. The report made recommendations to improve the quality of training, provide additional in-service training for gap areas, and set up a mentoring programme to help the new graduates adjust to their new tasks at deployment, and gain confidence. This was the basis of the EMA mentorship programme implemented for graduates of the second and third batches.

2. A competence assessment of midwifery students at the point of delivery was performed by Yigzaw et al. (Jhpiego) in 2014-2015 using the OSCE (Objective Structured Clinical Examination) to test the capacity of 484 students to perform 10 “midwifery stations” 1) assisting normal delivery, 2) active management of the third stage of labour, 3) vacuum-assisted delivery, 4) history taking in providing focused antenatal care, 5) manual vacuum aspiration, 6) newborn resuscitation, 7) partograph interpretation, 8) postpartum counselling, 9) applying medical eligibility criteria for family planning provision, and 10) integrated management of childhood illness (IMCI). So it was direct observation by senior instructors. Prior to graduation 32% of the students had managed 20 or more births and 6% had managed 40 births. The average competency score was 52%, with high extremes of 69% for Active Management of the Third Stage of Labour and low extremes of 32% for manual Vacuum Aspiration and 36% for Vacuum Extraction. Neonatal resuscitation was just in the middle with 52%. The findings are very close to those of the present assessment, even if the conditions of pre-service training and evaluation are not exactly the same.

3. To better understand job satisfaction and the determinants of retention Jhpiego and MSH in 2014 conducted a study of 1354 health professionals working in 227 health facilities, including 177 midwives. Dissatisfaction with salaries and compensations appeared as the most important factor affecting retention. The study identified 3 priority areas to address in their recommendations: Improve salary and benefits, increase opportunities for career development, and improve work environment

4. Finally, Yigzaw et al. in 2014 used task analysis to generate evidence for strengthening midwifery education, practice, and regulation, applying a self administered questionnaire to 138 recently qualified midwives. The majority of respondents recognized the importance of midwifery tasks (89%), felt they were capable (91.8%), reported doing them frequently (63.9%), and learned them during preservice education (56.3%). They identified competence gaps in tasks related to obstetric complications, gynecology, public health, professional duties, and prevention of mother to child transmission of HIV.

Overall, there is a striking coherence of findings among these four studies and ours, the gaps in competence, performance, and factors affecting retention (job satisfaction) being almost the same.

The assessment of the AMTP focused, as expected, on the core of midwifery which is labour and delivery. It shows that competence and practice have improved among the graduates, which should have an impact on the outcomes. However, looking at the lists of competencies published by the International Confederation of Midwives, there is a large range of other reproductive health-related activities that midwives are expected to implement. The assessment has also looked at a number of these other activities, particularly family planning, abortion, PMTCT. The graduates acknowledged some gaps in the provision of long acting contraceptives, practice of the manual vacuum aspiration, counseling and managing HIV positive women, and management of other gynecological problems. These gaps can relatively

easily be corrected by short in-service training sessions. But it is recommended to better address them during pre-service education.

## **SECTION - 5: CHALLENGES, LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1: Challenges of AMTP graduates**

AMTP graduates are successful in improving access to skilled birth attendance and other MNH care services. They have most essential midwifery skills and work environment is largely supportive. However there are challenges that need to be addressed

- Findings from all the different methods used (self- assessment, key informant interviews and last 5 patients pathway mapping) showed most AMTP graduates have gaps in use of vacuum extractors and MVA; providing long term contraceptive methods and newborn resuscitation.
- The work environment is more supportive after the deployment of AMTP graduates, but still there lack enough space, basic equipment and supplies such as vacuum extractor, MVA and magnesium sulphate
- There were observations showing that the feedback mechanism on cases referred to hospital is not satisfactory. Not enough dialogue between health centers and hospitals
- There is high work load on the midwives most working more than 8 regular hours and have duty session every other day. This can be seen a success (more clients) but may also have a negative influence on retention.
- There is a serious gap on documentation of management of obstetric cases on medical records and facility registers

### **5.2: Lessons Learned**

- Ownership and commitment of government, and strong partners support were very critical for the success of the AMTP
- Leadership of the woreda in recruitment of candidates and placement of the graduates has facilitated easily placement of graduates in communities which they knew.
- Enrolment of unemployed nurses to the training program helped to train large number of midwives in short time on the one hand and alleviate unemployment of young nurses
- Use of competency based curriculum and tools (log books and skill checklists); supportive supervision and review meetings were instrumental to ensure quality.
- The fund management structure was too complicated which created delays in fund transfer, leaving short time for HSC to utilize and liquidate funds.
- Experience of senior EMA midwives and mentoring tools used are appropriate, but to be effective, the EMA mentorship programme needs to be expanded, reach more midwives, and receive more funding.
- Development of graduate's career structure with the training program was a proactive approach.

### 5.3. Conclusions

- AMTP program was a success producing large number (4471) midwives in three years. It has increased access to skilled birth attendance and institutional delivery, as well as access to other sexual and reproductive health services.
- AMTP graduates were found to be comfortable managing ANC, normal deliveries, newborn care, PNC and FP therefore reducing number of unnecessary referrals. However there remains gaps in the management of obstetric complications, long term contraceptives, management of abortion and other gynaecological problems. This is the next priority in terms of performance
- The work environment is more supportive after the deployment of AMTP graduates, but still there lack enough space, basic equipment and supplies such as vacuum extractor, MVA and magnesium sulphate
- There were observations showing that the feedback mechanism on cases referred to hospital is not satisfactory. Not enough dialogue between health centers and hospitals
- There is high work load on the midwives most working more than 8 regular hours and have duty session every other day. This can be seen a success (more clients) but may also have a negative influence on retention.
- Half of the graduates had some sort of mentorship, and appreciated it. However EMA mentorship program had limited reach due to insufficient pool of mentors, and funds.
- AMTP graduates' retention rate is fair and majority have a plan to continue working as a midwife, indicating some level of job satisfaction.
- There is a serious gap on documentation of management of obstetric cases on medical records and facility registers

### 5.4. Recommendations

To improve performance of midwives in Ethiopia FMOH, EMA, midwifery training institutions, UNFPA and other partners should consider the following points

- Respond to training needs. Provide support on request, often in the form of specific additional in-service training such as BEmONC, abortion care, long term family planning, PMTCT and other gynaecologic problems
- Strengthen midwives pre-service education particularly skill training on management of obstetric complications such as PPH & obstructed labor; abortion care (MVA & Medical abortion) and long term contraceptive methods
- Address gaps of midwives with more comprehensive and effective mentorship. The EMA mentorship programme needs to reach more midwives, spend more time with them and offer repeated visits.
- Improve the level and in-time payment of incentives such as the hardship allowance and risk allowances, the duty allowances.
- Promote teamwork, collaboration with and assistance from peers with more experience through for example call centres
- Work at improving the working environment, in terms of room space, water and sanitation, equipment and maintenance, drugs and supplies (magnesium sulphate).
- Strengthen referral feedbacks and dialogue between the health center and hospital.
- There needs to implement administrative mechanisms to ensure complete documentation on patient medical records and facility registers, e.g. include documentation as part of

periodic performance evaluation, and make documentation part of the supervision and mentoring procedures

- Retention is the product of job satisfaction and quality of life. 20% of the graduates said they have a plan to change career. Retention can be improved by improving the conditions of life and work, reorganization of the shifts of duty, humanization of the workplace, promotion of teamwork, equal opportunities for access to promotion or higher studies.

## **ANNEXES**

Annex 1: Selective Bibliography

Annex 2: List of health centers and Woreda involved in the assessment

Annex 3: List of Training Institutions involved in the AMTP

Annex 4: Case studies

Annex 5: Chronology of the assessment

Annex 6: Questionnaires

Annex 7: Terms of reference

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## ANNEX 2 - LIST OF WOREDA AND HEALTH CENTERS INVOLVED IN THE ASSESSMENT

SN	Region	Zone	Woreda	Health Center
1	Amhara	South wolo	Kutaber	Kutaber
2	Amhara	South wolo	Ambasel	Wuchale
3	Amhara	North Gondar	Dabat	Dara
4	Amhara	N/Wolo	Kobo	Robit
5	Amhara	S/Gondar	Dera	Hamusit
6	Amhara	S/Gondar	Farta	Gasay
7	Amhara	N/Wolo	Gidan	Muja
8	Amhara	N/Wolo	Wadla	Kon
9	Amhara	S/Gondar	Lay gaint	Nifas mewcha
10	Amhara	Awi	Banja	Kessa
11	Amhara	W/Gojam	Mechekel	Amanuel
12	Amhara	W/Gojam	Finoteselam Zonya	Mankusa
13	Amhara	W/Gojam	Bure	Alefa
14	Amhara	E/Gojam	Debremarkos	Wusta
15	Amhara	Awi	Fegita lakoma	Adiskidan
16	Amhara	E/Gojam	Enemay	Bichena
17	Amhara	W/Gojam	Bahirdar zuria	Yinase
18	Amhara	W/Gojam	Quarit	Quarit
19	Amhara	E/Gojam	Enarj	Shifere
20	Amhara	N/Wolo	Meket	Filakit
21	Amhara	S/Gondar	Debretabor	Debretabor
22	Amhara	N/Gondar	Gondar zuria	Lemba
23	Amhara	N/Gondar	Dembiya	Koladiba
24	Amhara	N/Gondar	Wogera	Ambagiorgis
25	Amhara	S/wolo	Legambo	Tuluawizya
26	Amhara	N/Shoa	Efratana gidim	Bargibe
27	Amhara	N/Shoa	Ankober	Gorobela
28	Amhara	N/Shoa	Basonawerana	Keyit
29	Amhara	Oromia special zone	Artumafursi	Chefarobit
30	Amhara	N/Shoa	Kewot	Tere
31	Amhara	S/wolo	Tehuledere	Sulula
32	Benishangul Gumuz	Assosa	Mange	Mange
33	Benishangul Gumuz	Metekel	Pawe	Felege selam
34	Benishangul Gumuz	Assosa	Sharkole	Sharkole
35	Benishangul Gumuz	Assosa	Assosa	Assosa
36	Benishangul Gumuz	Assosa	Homosha	Homosha
37	Benishangul Gumuz	Assosa	Bambasi	Bambasi
38	Benishangul Gumuz	Metekel	Dabate	Dabate
39	Gambella	Agnuha	Gambella	Bonga
40	Gambella	Agnewah	Itang	Itang
41	Gambella	Agnuha	Gambella	Abol
42	Gambella	Mezengir	Godere	Meti

43	Gambella	Agnuha	Abobo	Abobo
44	Gambella	Agnuha	Abobo	Abobo mender 08
45	Gambella	Gambella	Gambella	Gambella
46	Oromia	Guji	Adola	Maleka
47	Oromia	Bale	Dinsho	Dinsho
48	Oromia	W/Arsi	Adaba	Adaba
49	Oromia	Guji	Wadara	Wadara
50	Oromia	Borena	Miyo	Hidi
51	Oromia	Borena	Moyale	Afura
52	Oromia	Borena	Yabelo	Dada yabelo
53	Oromia	Arsi	Hitosa	Iteya
54	Oromia	Arsi	Digalu and Tijo	Digalu
55	Oromia	Arsi	Shashemene	Harabote
56	Oromia	Guji	Bore	Bore
57	Oromia	Borena	Dine	Dubluk
58	Oromia	Bale	Goba	Misra
59	Oromia	Bale	Gasera	Dembel
60	Oromia	Bale	Agarfa	Ali
61	Oromia	W/Arsi	Kofele	Kofele
62	Oromia	W/Arsi	Arsi nagele	Kelo
63	Oromia	Arsi	Tiyo	Bilalu
64	Oromia	Arsi	Limu and Bilbilo	Lemmo
65	Oromia	Borena	Bore	Horo Girbichu
66	Oromia	Jimma	Gomma	Limmu sgaye
67	Oromia	Ilu Ababora	Bure	Bure
68	Oromia	S/W Shoa	Amaya	Gino
69	Oromia	Jimma	Kersa	Serbo
70	Oromia	Jimma	Sokoru	Sokoru
71	Oromia	S/W Shoa	Woliso	Korke
72	Oromia	Ilu Ababora	Ale	Gore
73	Oromia	S/W Shoa	Tulubolo	Tulubolo
74	Oromia	W/Wollega	Boji Dirmeji	Billa
75	Oromia	W/Wollega	Lalo/Asabi	Inango
76	Oromia	E/Wollega	Diga	Fododo
77	Oromia	E/Wollega	Wayu Tuka	Boneya Molo
78	Oromia	Ilu Ababora	Halu	Uka
79	Oromia	E/Hararge	Babile	Babile
80	Oromia	E/Hararge	Awaday	Awaday
81	Oromia	E/Hararge	Kersa	Kersa
82	Oromia	E/Shoa	Mojo	Hachaltu gudina
83	Oromia	E/Shoa	Adaee	Denkaka
84	Oromia	E/Shoa	Wolanchiti	Wolanchiti
85	Oromia	E/Hararge	Meta	Chelenko
86	Oromia	E/Shoa	Fentale	Metahu

87	Oromia	E/Shoa	Adama	Shewa Alemtena
88	Oromia	W/Kerarsae	Hirna	Dabaso
89	Oromia	N/Shoa	Girar Jarso	Eyeta danisa
90	Oromia	Oromia special zone	Sululta	Chancho
91	Somali	Siti	Erer	Erer
92	Somali	Cherer	Degehabur	obole
93	Somali	Siti	Babile	Babile
94	Somali	Fafan	Harshen	Harshen
95	Somali	Fafan	Gursum	Bombas
96	Somali	Fafan	Jigjiga	Ayardaya
97	Somali	Siti	Shinile	Shinile
98	Somali	Fafan	Kebrybeya	Kebrybeya
99	Somali	Siti	Mieso	Muli
100	Somali	Fafan	Awbarre	Awbarre

### **ANNEX 3 - LIST OF TRAINING INSTITUTIONS INVOLVED IN THE AMTP**

Arbaminch Health Science College  
Filche Health Science College  
Bahardar Health Science College  
Debretabor Health Science College  
Dessie Health Science College  
Goba Health Science College  
Debrabran Health Science College  
Jijiga Health Science College  
Metu Health Science College  
Menelik II School of Nursing  
Nekemte Health Science College  
Pawe Nursing School  
Shashemene Health Science College  
Negele Health Science College

## ANNEX 4 - CASE STUDIES

### CASE STUDY N° 1

Region Amhara

Woreda Farta

Name of health center Gasay

Work experience as accelerated midwife (in years): 4 years

Area of assignment: ANC, Labor and Delivery and PNC

*M: Describe your experience in enrollment to accelerated midwifery training program*

P: Honestly speaking, I didn't want to be a midwife. I joined the accelerated midwifery training just because I couldn't find a job in nursing and I spent one year without having a job after I graduated in nursing. The enrollment process to the accelerated midwifery training program was based on GPA and there was also entrance exam. Then I enrolled to the program fulfilling the criteria.

When we joined the program they told us that, "After you complete the accelerated midwifery training, you will have an advanced diploma certificate". But after we already start learning, they said, "you will not be going to have the advanced diploma, instead you will be graduated level 4 (diploma certificate)." We were fighting to have the advanced diploma, because we spent 3 years when we were learning the nursing course and also we have one year in accelerated midwifery program so we deserve to have advanced diploma certificate. But no one gave us attention and we finished our training since we have no any other option

*M: Describe your experience on deployment and assignment to service delivery area*

P: after we finished the training we took COC exam and two weeks later the regional health bureau assigned us to different health facilities. I was first assigned in a health center located in rural area and I provided services in labor and delivery, ANC and PNC service delivery outlets. But, since it was my first time I was not confident enough to provide the service and also I couldn't have a chance to consult someone when I face difficult cases. Plus there was no any training which can help me to update myself, for your surprise, I haven't took any training staying in there for one year.

*M: Describe your performance and contribution to increased demand and access to ANC, Labor and delivery and PNC services*

P: There are 12 health posts in our catchment and we organize conference in each kebeles according to our schedule. The conference has a great impact in increasing service utilization because different topics are discussed during the conference for example, about the importance of ANC follow up, institutional delivery and also about other maternal and neonatal health care services.

Previously there were unnecessary referrals made to the hospital, but now I have developed my skills through trainings and through experience and I can say that I am able to manage most of the complications which can be managed at the health center level as a result, there is reduction in the number of referrals made to the hospital.

*M: Discuss some of challenges you faced while working as accelerated midwifery and measures you used to overcome these challenges?*

P: there are challenges related to equipment and drug supplies for example, there is radiant warmer but it's not functional so we are referring hypothermic cases to the hospital, which could have been managed here, we have informed the respective person but still the equipment is not maintained. There is lack of MgSo4 and we are using diazepam instead. Regarding our carrier development, we don't have any educational opportunity.

## Case Study 2

- Region -Benishangul Gumz
- Woreda -Asosa
- Place of residence- Urban
- Religion-Muslim
- Educational Status-High school
- Participant sex -Female
- Age: 21 Parity: Gravida -2 Para -0
- Service delivery outlet client recruited -ANC

**Chief Complaint:** Pushing down and pain for more than 10 hours

### History

No known medical and surgical illness in the past, she is married and is house wife.

This is an 18 years old gravida 2 para 0 mother with unknown LMN claiming to be at term with antenatal care at this health center for the past three months. Her last pregnancy ended in spontaneous abortion at 2 months for which she did not receive treatment. Pregnancy was uneventful. She had blood and urine test during antenatal care with no abnormality on both tests. She had progressively increasing pushing down pain for last 10 hours. She felt fetal movement with no decrement...

### Physical examination and Clinical data

GA: In labour pain but not in distress

Vital sign: Pulse:76/minute, BP:120/80, RR:22/minute

HEENT, chest, cvs,:NAD

Abdominal exam: Term sized gravid uterus, longitudinal lie, Cephalic presentation

FHB: 166/minute, Contraction: 4/10minutes/40''

PV: Cervix fully dilated, presentation vertex, station+1, Amniotic clear

Assessment: Second stage of labour

Plan: Admit to labour ward and attend delivery

### Intervention done

Spontaneous live delivery of live male baby. Placenta was not delivered 30 minutes after the birth of baby. Controlled cord traction attempted and the cord was torn. Manual removal of placenta performed and removed. Bleeding continued after removal of placenta and patient bled more than 1.2 liters of bright red blood. Double IV secured, hemoglobin and blood group and cross match was sent to laboratory and bladder catheterized. Ergometrine 0.5mgIM given and 20IU oxytocin in 100ml of dextrose in saline run at 20 drops/minute.

Uterus massaged per abdomen and after some time, the uterus contracted and bleeding stopped.

At the same time neonate was taken to newborn corner dried and resuscitated with bag and mask. After 5 minutes of resuscitation, the neonate recovered spontaneous respiration and color improved.

### Outcomes

Alive male neonate, 3.2kg weight with Apgar score of 2 and 6 in the first and fifth minutes.

### Discharge summary

Case of PPH and Birth Asphyxia

Subjective: Mother has no complaint, Baby is well and sucking. Bleeding stopped.

Objective/S:PR: 82/minute, BP:100/60mmg, RR:18/minute, no fever

PV: No active bleeding

Assessment: Good postpartum course

Plan: Discharge with appointment

## ANNEX 5 - CHRONOLOGY OF THE ASSESSMENT

Activity	Responsible	Due date
Finalize work plan, protocol, and survey tools; organize logistics for field work	UNFPA & consultants	March 23, 2016
Conduct Team planning meetings with UNFPA & FMOH		March 24, 2016
Recruitment, training of data collectors and field testing of tools and arrange field logistics	consultants	April 6-9, 2016
Fieldwork including travel days	Fieldworkers	April 10 - May 10, 2016
Develop data analysis framework Transcribe the tape-records of Key informant interviews Survey data entry	consultants	May 10 - 17, 2016
Data analysis and synthesis of drafting report	consultants	May 17-27, 2016
Debriefing of UNFPA team –submission of draft report submitted UNFPA feedback solicited	consultants	May 27, 2016
Conduct a stakeholders workshop to get comments	consultants & UNFPA	May 31, 2016
Accommodate feedback and finalize report	consultants	June 1- 7 , 2016
Consultants submit final report and data set to UNFPA	consultants	June 10, 2016

## ANNEX 6: DATA COLLECTION TOOLS

- Facility Register review checklist
- Woreda HRH data review checklist
- AMTP Graduates Interview questionnaire
- AMTP Graduates Key Informant Interview guide
- Key Stakeholder Key Informant Interview guide
- Woreda-Facility Key Informant Interview guide
- EMA mentors Key Informant Interview guide
- Last 5 Patients Pathway Mapping tool
- Clinical Walkthrough tool

## ANNEX 7 - TERMS OF REFERENCE

### Introduction

The Federal Government of Ethiopia has committed itself to the achievement of the newly adopted Sustainable Development Goals. Of particular challenge to the Federal Ministry of Health and related Ministries is the achievement of Goal 3 on health pertaining to the reduction of maternal and infant mortality, universal coverage to health and quality of health care.

The Ethiopia Demographic and Health Survey data of 2011 indicates that maternal mortality ratio has stagnated at 676 per 100,000 live births. The UN estimates in the published '*Trends in maternal mortality estimates 1990 to 2013*<sup>1</sup>', from Maternal Mortality Estimation Inter-agency Group that includes World Health Organisation (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), The World Bank Group, and The United Nations Population Division (UNPD) indicates that Ethiopia has a maternal mortality ration of 420 per 100,000 live births. Available data also indicates that more than 50% of all maternal deaths occurs in only six countries (India, Nigeria, Pakistan, Afghanistan Ethiopia, and the Democratic Republic of the Congo).

In Ethiopia the vast majority of deliveries (85%) take place at home in the absence of trained personnel with midwifery skills. Coverage of postnatal care is also extremely low at 12% (Min Demographic and Health Survey 2014). The major cause of maternal deaths include: obstetric hemorrhage, sepsis, pregnancy related hypertensive disorders, abortion and obstructed labor. The challenge to provide the life-saving obstetric care among the most deprived women in Ethiopia was due to the shortage of midwives and doctors particularly in rural areas.

Ethiopia needs a pool of highly trained health workers especially midwives, anesthetists and doctors in order to address the challenges above and provide a team approach to provision on emergency obstetric care. The country has made tremendous progress in training human resources for health and has trained 9,457 midwives, 153 integrated emergency surgical officers in 2014 and 3,505 doctors (2013) to provide emergency obstetric emergency care. The FMOH has developed an HRH strategy for the period 2009- 2025<sup>2</sup> and the strategy Indicates that 14,229 midwives will be required by the year 2025. However, the FMOH Midwifery Roadmap indicates that 18,000-20,000 midwives will be required by 2025.

Federal Ministry of Health is strengthening the health system and training of health workers is a priority to reduce maternal and neonatal mortality in Ethiopia through creating an environment that can be supportive reproductive, maternal, newborn, child and adolescent health (RMNCAH). UNFPA through funding from the Swedish International Development Agency has been supporting training of Midwives and anaesthetists to provide emergency obstetric care. 4,471 midwives were trained through the Accelerated Midwives Training Programme (AMTP). UNFPA also supported training of diploma and degree level midwives through the provision of teaching and learning materials and capacity building for midwifery tutors/instructors.

Programme Description

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<sup>1</sup> WHO. Trends in maternal mortality 1990-2013. Available at <http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2013/en>

<sup>2</sup> Federal Ministry of Health. Human Resources for Health. Strategic Plan. 2015-2025

The Accelerated Midwifery Training Programme was meant to boost skilled attendants within three years' time for significant reduction of pregnancy-related risks and ensuring access to a core package of maternal and neonatal health services. Accordingly, the target of the initiative was to deploy a minimum of two midwives per health centre. Another strategy that was used by the government was increasing the intake capacity of training institutions on regular programme to attain the target set by Human Resource Development Strategy. The Programme was designed to train 4,500 midwives in three years but managed to train 4,471 (99%)

#### Purpose

The purpose of this study is to assess the performance of midwifery graduates after graduation and deployment to health facilities and their contribution to increasing skilled attendance at birth. The Assessment will also look at the quality of care as well as adherence to RMNCAH guidelines, standards and protocols. A set of questionnaires will be applied

#### Objectives

- To assess the performance of graduates after training in terms of their contribution to maternal and neonatal health services including family planning.
- To identify challenges and successes of graduates
- To document lessons learnt and best practices that can be used for policy decision

#### THE SCOPE OF THE WORK

The specific tasks of the consultant are, but not limited to :

- Prepare a detailed methodology which is subject to be verified and approved by UNFPA and other H4+ members.
- Prepare the data collection tools and guides that address the information requirements. This includes questionnaires for key informant interviews and focus group discussion guides, observational tools such as checklists
- Analyze data collected.
- Compile a draft report and submit to UNFPA and other H4+ partners for input
- Present the draft report at a consultative meeting where all implementing partners, donors and other stakeholders will give additional comments and validate the document.
- Finalize the document based on inputs from the consultative meeting and submit the final report to UNFPA.

#### Expected Outcomes /Deliverables

The consultant is expected to submit both an electronic version and two hard copies of the final report to UNFPA Country Office.

#### TIMEFRAME

The assignment is expected to commence on 14<sup>th</sup> December 2015 and the maximum duration of the consultation is 60 working days broken down as follows:

Day 1 to 2	2 Days	Literature Review
Day 3 to 7	5 Days	Develop instruments for data collection
Day 8	1 Day	Discuss data collection tools with UNFPA for input
Day 9	1Day	Incorporate comments into data collection tool
Day 10-11	2 Days	Train data collectors on the use of data collection tools
Day 12-13	2 Days	Print Data collection tools and prepare for field visit
Day 14-24	10 Days	Data collection in the field
Day 25-35	10 days	Data analysis
Day 36- 52	16 days	Writing report

Day 53	1 Day	Submit report for comments
Day 54- 55	2 Days	Incorporate comments into the report
Day 56	1 Day	Conduct a stakeholders workshop to get comments
Day 57-59	2 Days	Finalise report
Day 60	1 Day	Submit report to UNFPA

*External consultant could spend 11 plus 24 = total 35 days in-country, to respect ceiling*

#### RESPONSIBILITIES OF UNFPA

- Hire the consultant
- Guide the consultant during the assignment.
- Hire vehicles for the field visit
- Provide comprehensive comments on draft document.

#### QUALIFICATIONS AND SKILLS

- A post graduate degree in public health, or experience of at least five years in monitoring and evaluation.
- A good knowledge of the health systems of Ethiopia;
- Must have taken part at least 3 times in the process of evaluating a project
- Excellent analytical skills for synthesis and preparation of assessments/evaluation reports;
- Fluency in English and
- Good IT skills for word processing and data analysis.