EVALUATION OF UNICEF PROGRAMME ON PERINATAL CARE FOR THE PERIOD 2010 – 2013

PROJECT EVALUATION REPORT

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This report is the product of a summative evaluation of the programme on perinatal care, implemented between 2010-2013 within the framework of Delivering as One Project Ensuring Access to Affordable Health Services for Women of Reproductive Age and Newborns in the Affected Areas of the Kyrgyz Republic. The external evaluation has been commissioned by UNICEF Kyrgyzstan Country Office and was a joint and participatory process involving key stakeholders working within the MCH sector.

The findings and recommendations of the evaluation will support stakeholders including policy makers and development partners to support further progress in enhancing maternal and newborn survival and thus contribute to the A Promise Renewed Initiative, pledged by the Government of the Kyrgyz Republic in 2012.

The evaluation report has been prepared by international consultants Mrs. Tamar Gotsadze, MD, PHD and Mrs. Chiara Zanetti, MD, MPH.

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKNOWLEDGMENT</td>
<td>5</td>
</tr>
<tr>
<td>ABBRIVIATIONS</td>
<td>6</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>21</td>
</tr>
<tr>
<td>1.1 COUNTRY SITUATION</td>
<td>22</td>
</tr>
<tr>
<td>1.2 MAIN CHALLENGES OF MCH SECTOR</td>
<td>22</td>
</tr>
<tr>
<td>CHAPTER 2: PROJECT OVERVIEW</td>
<td>25</td>
</tr>
<tr>
<td>2.1 PROJECT OBJECTIVES:</td>
<td>26</td>
</tr>
<tr>
<td>2.2 EXPECTED PROJECT RESULTS, ACTIVITIES AND KEY INDICATORS:</td>
<td>26</td>
</tr>
<tr>
<td>2.3 PROJECT PARTNERS:</td>
<td>27</td>
</tr>
<tr>
<td>2.4 PROJECT BENEFICIARIES:</td>
<td>27</td>
</tr>
<tr>
<td>2.5 PROJECT DURATION</td>
<td>27</td>
</tr>
<tr>
<td>CHAPTER 3: EVALUATION PURPOSE, OBJECTIVES AND METHODOLOGY</td>
<td>29</td>
</tr>
<tr>
<td>3.1 EVALUATION OBJECTIVES:</td>
<td>30</td>
</tr>
<tr>
<td>3.2 SCOPE OF THE EVALUATION</td>
<td>30</td>
</tr>
<tr>
<td>3.3 EVALUATION PROCESS</td>
<td>30</td>
</tr>
<tr>
<td>3.4 EVALUATION METHODOLOGY AND DATA SOURCES</td>
<td>31</td>
</tr>
<tr>
<td>3.5 EVALUATION LIMITATIONS</td>
<td>31</td>
</tr>
<tr>
<td>3.6 PARTICIPATORY APPROACH</td>
<td>31</td>
</tr>
<tr>
<td>3.7 ETHICAL ISSUES</td>
<td>31</td>
</tr>
<tr>
<td>CHAPTER 4: EVALUATION FINDINGS</td>
<td>33</td>
</tr>
<tr>
<td>4.1 RELEVANCE</td>
<td>34</td>
</tr>
<tr>
<td>4.2 EFFICIENCY</td>
<td>37</td>
</tr>
<tr>
<td>4.3 EFFECTIVENESS</td>
<td>41</td>
</tr>
<tr>
<td>4.4 SUSTAINABILITY</td>
<td>52</td>
</tr>
<tr>
<td>4.5 HUMAN RIGHTS BASED APPROACH (HRBA):</td>
<td>53</td>
</tr>
<tr>
<td>4.6 CONCLUSIONS</td>
<td>54</td>
</tr>
<tr>
<td>CHAPTER 5: LESSONS LEARNED</td>
<td>57</td>
</tr>
<tr>
<td>CHAPTER 6: RECOMMENDATIONS</td>
<td>61</td>
</tr>
<tr>
<td>6.1 GENERAL RECOMMENDATIONS FOR UNICEF</td>
<td>62</td>
</tr>
<tr>
<td>6.2 SPECIFIC RECOMMENDATIONS</td>
<td>62</td>
</tr>
<tr>
<td>ANNEXES</td>
<td></td>
</tr>
<tr>
<td>ANNEX 1: LIST OF DOCUMENTS REVIEWED</td>
<td>71</td>
</tr>
<tr>
<td>ANNEX 2: LIST OF KEY INFORMANTS</td>
<td>72</td>
</tr>
<tr>
<td>ANNEX 3: EVALUATION FRAMEWORK</td>
<td>74</td>
</tr>
<tr>
<td>ANNEX 4: SEMI-STRUCTURED INTERVIEW QUESTIONNAIRE GUIDE</td>
<td>76</td>
</tr>
<tr>
<td>ANNEX 5: FGD GUIDES</td>
<td>83</td>
</tr>
<tr>
<td>ANNEX 5.1 FGD GUIDE FOR PREGNANT AND WOMEN IN POSTPARTUM PERIOD</td>
<td>83</td>
</tr>
<tr>
<td>ANNEX 5.2 FGD GUIDE FOR PREGNANT AND WOMEN IN POSTPARTUM PERIOD</td>
<td>84</td>
</tr>
<tr>
<td>ANNEX 5.3 FGD GUIDE FOR SERVICE PROVIDERS</td>
<td>86</td>
</tr>
<tr>
<td>ANNEX 5.4 FGD GUIDE FOR BENEFICIARIES AT PHC LEVEL</td>
<td>87</td>
</tr>
<tr>
<td>ANNEX 5.5 FGD GUIDE FOR NATIONAL TRAINERS</td>
<td>89</td>
</tr>
<tr>
<td>ANNEX 5.6 FGD GUIDE FOR NATIONAL ASSESSORS</td>
<td>90</td>
</tr>
<tr>
<td>ANNEX 6: WHO ASSESSMENT CHECKLIST</td>
<td>92</td>
</tr>
</tbody>
</table>
ANNEX 6.1  INDICATORS ON IMPLEMENTATION OF EFFECTIVE PERINATAL TECHNOLOGIES  92
ANNEX 6.2  FORM FOR ASSESSMENT OF MATERNITY WARDS  92
ANNEX 6.3  FORM FOR ASSESSMENT OF LABOR MANAGEMENT PRACTICE AND CARE
            AFTER THE MOTHER AND THE NEWBORN  93
ANNEX 6.4 OBSERVATION AT THE POSTNATAL DEPARTMENT  96

ANNEX 7: CRITERION BASED AUDIT TOOL  97
ANNEX 7.1 NORMAL DELIVERY  97
ANNEX 7.2 COMPLICATED DELIVERY  98
ANNEX 7.3 NEWBORN RESCUSITATION  101
ANNEX 7.4 NEWBORN SEPSIS  102

ANNEX 8: EVALUATION TEAM COMPOSITION AND DIVISION OF RESPONSIBILITIES  104

ANNEX 9: TERMS OF REFERENCE  106
AKNOWLEDGMENT

This report is the product of a summative evaluation of the Dao Project Ensuring Access to Affordable Health Services for Women of Reproductive Age and Newborns in the Affected Areas of the Kyrgyzstan Republic. The external evaluation has been commissioned by UNICEF Kyrgyzstan Country Office and was a joint and participatory process involving key stakeholders working within the MCH sector. Three experts from MOH joined the team of external evaluators. Sincere thanks to Mrs. Batma Dolbaeva, Docent in Obstetrics-Gynecology at Kyrgyz-Russian Slavic University and Mrs. Janar Botbaeva, Assistant at the Pediatrics Department at Kyrgyz Medical University for Post-Graduate Studies. The evaluation was carried in December 2013 - January 2014.

The authors are grateful to all those people who took time from their busy schedule to interact with the evaluation team, provided information and answered pertinent questions that laid the groundwork for this report.

The evaluation team extends sincere thanks to Mrs. Eshkhodjaeva Anara, Head of Department for organization of medical assistance and medicines policy, Main Specialists of Department for organization of medical assistance and medicines policy – Mrs. Boobekova Aigul and Mrs. Boronbaeva Elnura for the guidance and information provided.

The Evaluation Team would also like to convey thanks to all stakeholders: Hospital Directors, maternity department Managers, Medical Staff of facilities visited for their effort and encouragement, their input in the process of evaluation and the valuable information provided.

Our sincere gratitude goes to UNICEF for making available funds for this evaluation as well as technical and organizational support provided throughout the evaluation process.

We would also like to thank the many other stakeholders who have expressed interest in the independent evaluation and provided support in many ways. May the evaluation respond to its central purpose, which is to serve as a useful input into the improvement of perinatal care services in the Republic of Kyrgyzstan.

Tamar Gotsadze, MD., PhD
Chiara Zanetti, MD., MPH
### ABBRIVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALOS</td>
<td>Average Length of Stay</td>
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<tr>
<td>ANC</td>
<td>Antenatal Care</td>
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<tr>
<td>ARV</td>
<td>Antiretroviral Treatment</td>
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<tr>
<td>CBA</td>
<td>Criterion Based Audit</td>
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<tr>
<td>CPAP</td>
<td>Continuous Positive Airway Pressure machine</td>
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<tr>
<td>CPC</td>
<td>Country Programme Cooperation</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee</td>
</tr>
<tr>
<td>DaO</td>
<td>Delivering as One</td>
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<tr>
<td>EBMD</td>
<td>Evidence Based Medicine Department</td>
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<td>EmOC</td>
<td>Emergency Obstetric Care</td>
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<td>EMTCS</td>
<td>Emergency Transportation and Consultation System</td>
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<tr>
<td>ENC</td>
<td>Effective Neonatal Care</td>
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<td>ENM</td>
<td>Early Neonatal Mortality</td>
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<td>EPC</td>
<td>Effective Perinatal Care</td>
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<td>ET</td>
<td>Evaluation Team</td>
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<td>FAP</td>
<td>Feldsher-Midwifery Post</td>
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<td>FDG</td>
<td>Focused Group Discussion</td>
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<td>FGP</td>
<td>Family Group Practitioners</td>
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<td>FMC</td>
<td>Family Medicine Centre</td>
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<td>GoK</td>
<td>Government of Kyrgyzstan</td>
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<tr>
<td>GPC</td>
<td>Group Practice Centers</td>
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<tr>
<td>HBB</td>
<td>Help Babies Breath</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus Infection/Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>KAON</td>
<td>Kyrgyz Association of Obstetricians, Gynecologists and Neonatologists</td>
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<tr>
<td>KSCMTI</td>
<td>Kyrgyz State Continuous Medical Training Institute</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MCH</td>
<td>Mother and Child Health</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MHIF</td>
<td>Medical Health Insurance Fund</td>
</tr>
<tr>
<td>MICS</td>
<td>Multiple Indicator Cluster Survey</td>
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<td>MMR</td>
<td>Maternal Mortality Rate</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MTR</td>
<td>Mid Term Review</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NMR</td>
<td>Neonatal Mortality</td>
</tr>
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<td>NPCP</td>
<td>National Perinatal Care Programme</td>
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<td>NR</td>
<td>Neonatal Resuscitation</td>
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<tr>
<td>Ob/Gyn</td>
<td>Obstetrician and Gynecologist</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
</tbody>
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PC      Perinatal Care
PHC     Primary Health Care
PMTCT   Prevention of HIV transmission from Mother to Child
QoC     Quality of Care
SDA     Swiss Development Agency
SSI     Semi Structured Interviews
SWAP    Sector Wide Approach
TOT     Training of Trainers
UN      United Nations
UNFPA   United Nations Population Fund
UNICEF  United Nation Children’s Fund
USAID   US Agency for International Development
VCT     Voluntary Counseling and Testing
VHC     Village Health Council
WHO     World Health Organization
ZO      Zonal Office
EXECUTIVE SUMMARY

COUNTRY CONTEXT

Kyrgyzstan is a former Soviet country in mountainous Central Asian region. The country has a population of over five million, of which ethnic Kyrgyz make up the majority (71%); while Uzbeks (14%) and Russians (8%) are the largest minorities. The population is heavily concentrated in rural areas of the country, and only one-third of the people are living in cities. In terms of vulnerability, children from rural and remote areas are more prone to poverty, ill health, and abandonment. Nearly half of the children in Kyrgyzstan live in poverty.1 In 2010, the Southern part of the country was affected by civic unrest that resulted in displacement of over 300,000 people.

Since 2012, Kyrgyzstan is on-track to achieve Millennium Development Goal (MDG) 4 on Reducing Child Mortality2 as infant and under-five mortality rates have steadily decreased. According to 2012 data, under-five mortality rate is at 27 and infant mortality at 24 per 1,000 live births. Neonatal deaths comprise 52% of all under-5 deaths at the rate of 14 per 1,000 live births.3 Though 97% of pregnant women receive antenatal care and give birth under attendance of skilled health care professional, high maternal mortality rates (MMR) have been observed in Kyrgyzstan for many years.

In 2010, MMR was at 49.7 per 100,000 live births indicating that reaching the target of MDG 5 seems very unlikely.4 Therefore, the country has focused on maternal mortality as part of the MDG Acceleration Framework. In addition, looking beyond the MDGs and 2015, the Government of the Kyrgyz Republic has pledged A Promise Renewed initiative, a global movement to accelerate efforts to improve maternal, newborn and child survival, and has committed to work towards a new target - decreasing under five mortality rate to 20 or fewer deaths per 1,000 live births by 2035.

The maternal and newborn health care system in the country is developed with adequate services in terms of the quantity. However, the quality of care is a serious concern. Analysis of mortality cases in the country show that the majority of neonatal deaths occur in the first seven days of infants’ life, and of these the largest share during the first 24 hours after childbirth meaning that the majority of neonatal death takes place under supervision of the health professionals5. In addition, high MMR ratio with high institutional delivery rate indicates lack of quality in perinatal care.

The health care system is severely constrained by antiquated infrastructure and lack of funds for development. The majority of hospitals are old and most do not have central heating, running water or sewage systems. There are shortage of drugs, medical equipment and skilled health care personnel. Staffing crisis due to migration and low pay hinders the development further.6 Particularly emergency medical services and infectious control are underdeveloped.7

Despite growing poverty rates in recent years, Kyrgyzstan has made progress in the health sector. In 2012, National Health Care Programme Den Sooluk was developed following the previous programmes Manas (1996-2005) and Manas Taalimi (2006-2010). The programme is being implemented using a Sector-wide Approach (SWAP) mechanism that ensures programme integration and leverage funding in the health sector. As the lead agency in the Mother and Child Health (MCH) cluster in the SWAP, UNICEF has successfully been advocating for comprehensive approach to perinatal care. In 2008, the National Perinatal Care Improvement Programme of the Kyrgyz Republic for 2008-2017 was developed in accordance with Manas Taalimi and the National Reproductive Health Strategy by 2015 with the goal to reduce maternal, perinatal/neonatal and infant mortality in the country in line with MDG targets and improve the quality of care by introducing a multilevel structure of referral in perinatal care.

PROJECT DESCRIPTION

During 2009-2013 three major UNICEF projects have contributed to improvement of perinatal care. In 2009-2010 UNICEF implemented a project Reforming Perinatal Care System in Kyrgyzstan that aimed to reduce perinatal mortality by creating an enabling environment for the implementation of National Perinatal Care Improvement Programme for 2008-2017 mentioned above, enhancing expertise on perinatal health professionals.

6 Assessment of Quality of Maternal and Neonatal Services at Hospital and Primary Health Care Levels, UNICEF and UNFPA, 2012.
7 Rapid Assessment in FGP5s and FAP3s with Maternity Beds in Target Oblasts, MoH, UNICEF, 2013.
care on the national level, supporting establishment of Baby Friendly Hospitals as well as by improving monitoring through national newborn register. Building on these activities, a project on “Ensuring Access to Affordable Health Services in the Affected Areas of the Country for Women of Reproductive Age and Newborns” was initiated by UNICEF during 2010-2013. The project was part of Kyrgyzstan’s One UN Programme funded through the Expanded Delivering as One (DaO) funding window and implemented jointly with UNFPA and in some extend with WHO (only in the first project year, 2010), in Batken and Osh provinces.

In addition to projects described above, in the period of 2010-2011, the “Post emergency and early recovery project” funds were use that supported the pilot sites with emergency obstetrics kits and newborn resuscitation equipment, better access to water (clean and hot water) and improvement of sanitary conditions in pilot maternity facilities through rehabilitation of the sewage system. After the civic conflict in June 2010, the “Equity projects” (2012-2015) were initiated in Osh, Batken and Jalal-Abad provinces. As the previous UNICEF projects have enhanced perinatal care on the secondary hospital level, the ongoing Equity project operates mainly on the primary health care level.

Overall objective of the project is to reduce perinatal mortality in the Kyrgyz Republic. Specific objectives are to enhance equitable access to health care services of the poor and vulnerable groups by improving the quality of maternal and newborn care and monitoring data in selected maternity hospitals. Project Expected results are: i) Continuous Quality Improvement process demonstrated, institutionalized in maternity hospitals; ii) Enhanced capacity of medical experts on the national level; iii) Improved quality of antenatal and perinatal care through critical lifesaving equipment, infrastructure; iv) Improved practical skills of medical workers for antenatal and neonatal care in target primary health care clinics and 20 selected maternity hospitals (introduction of Making Pregnancy Safer, Effective Perinatal Care, neonatal resuscitation, Baby Friendly Hospital Initiative); v) Effective registration and monitoring system in place including analysis of critical cases (i.e. pregnancy registration, Newborn Register, The Near Miss Cases Review); vi) Adequate referral and remote consultation system in place; and vii) Improved accessibility and utilization of maternal and newborn services especially in rural and remote areas through increased level of awareness among the population.

Main Project partners are MoH including Mother and Child Health Department, National Center of Mother and Child Health, National Health Promotion Center, Kyrgyz Medical Academy, Postgraduate University, UNFPA, WHO, GIZ, University Murcia in Spain, Kyrgyz Association of Obstetricians, Gynecologists and Neonatologists (KAON), Kyrgyz Association of Perinatologists, Kyrgyz Midwives Association, Hospital Association of Kyrgyzstan.

**PURPOSE, OBJECTIVES, METHOD AND SCOPE OF EVALUATION**

The UNICEF commissioned the summative evaluation of DaO project as UNICEF Country Programme (2012-2016) is reaching the midpoint. The main purpose of the evaluation was to document and increase the knowledge of results, good practices and lessons learnt in perinatal care with specific recommendations. It also specifies UNICEF’s contribution to enhancing maternal and child health care system, quality of care and maternal and child survival in the country as well as determines whether UNICEF pilot projects have been effective and should be scaled up countrywide. In addition to UNICEF Country Office, other UN Agencies and development partners as well as the Ministry of Health will benefit from the evaluation in planning, implementing and coordinating perinatal care.

The evaluation focused on assessing the project’s current and potential contribution to the improvement of MCH health indicators in Kyrgyzstan. Each evaluation criterion was analyzed from the perspective of assessing the implications of project activities’ on: i) final beneficiaries - women and children; ii) service providers - health care professionals whose capacity has been built (including doctors, midwives, and health facility managers); iii) sub-national decision-making level - Regional health authorities and (local governments; and iv) national decision-making level - national health authorities and key stakeholders (Ministry of Health and Department heads, Education institutions, Health Statistics Department, International Development and Implementing Partners, etc.).

The evaluation examined the relevance, effectiveness, efficiency and sustainability of the UNICEF’s contribution for which the OECD DAC* evaluation approach has been applied. To translate the questions for the evaluation and the contextual issues, the Evaluation Framework (EF) was developed which structures the issues and questions as indicators that enabled to measure or assess them during the evaluation. Furthermore the EF also identifies the sources of information and the methods the evaluation team applied, the range of documents reviewed and key informants interviewed for each question.

The evaluation methodology comprised a mix of site visits and observations, face-to-face semi structured interviews, focus group discussions, criterion-based

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8 The DAC Principles for the Evaluation of Development Assistance, OECD (1991)
audit of medical records, desk-based research and review of existing reports, documents and available secondary data and considered ethical issues. The six major sources of data were used during the Evaluation: **people** - Individuals were consulted through individual (semi-structured) interviews and focus groups; **Site visits**: Data collected during the visits to sampled project supported sites; **Documents**: All project and thematic area related documents (primary and secondary data sources) were reviewed; **Observations**: Qualitative data collected during observation of service delivery at the visited facilities were carried out; **Criterion based audit**: data was collected through clinical audit of the patient medical cards. **Quantitative analysis**: The ET utilized quantitative analysis to examine changes in selected but comparable indicators from available data (quantitative facility statistics, monitoring data, researches and studies, etc.).

For key informants interviews the topic guides were developed based on the Evaluation Framework to help ensure systematic coverage of questions and issues. The Focus Group Discussions (FGDs) were carried out for a) physicians, b) midwives and nurses, and d) beneficiaries in all facilities visited. In total the team carried out 15 FDG in two Project target areas (Osh and Batken). For each FDG the guides were designed.

The evaluation was a joint and participatory process involving the team of three MoH experts, accompanied the evaluation team during the field visits. For the validation of the preliminary findings and recommendations the team met key MOH and UNICEF staff. All stakeholders agreed on the main findings of the evaluation as well as noted provided recommendations for further consideration. The evaluation team incorporated stakeholder's comments for final formulation of the evaluation findings and recommendations. Specifically, relevant stakeholders were given the opportunity to comment on the draft evaluation report and the final evaluation report reflects these comments and acknowledged any substantive disagreements.

### EVALUATION FINDINGS

#### RELEVANCE

The Relevance of UNICEF project to national priorities was evaluated based on following two criteria: i) Relevance of project-specific objectives to the priorities declared in the national policy documents; and ii) Relevance of project-specific objectives to the priority health problems of the population as evidenced by the available epidemiological data. Based on the analysis it is obvious that the relevance of the project is high through clear alignment with national reform and national perinatal care policies and strategies as well as with the UNICEF country cooperation programme and has a great potential for improving health of mothers, children and vulnerable groups with particular focus on decreasing high levels of maternal and child mortality.

The current UNICEF’s assistance through two main projects under consideration (DaO and Equity Projects), contributes to the achievement of objectives of National Perinatal Care Project and aims to strengthen the capacity of maternity hospitals with the weakest capacity of medical workers, infrastructure, compliance to standards and with the highest rate of delivery. Apart from these two sources of funding an Emergency and Early Recovery Project Funds were used (due to the late release of DaO funds in 2011) in support of DaO planned activities. More specifically UNICEF’s part of DaO project supports three out of five key objective set by the government in the National Perinatal Care Programme for 2008-2017. The project approach proved relevant in practice, though the rationale and workings of it were not made sufficiently explicit in the project document. The project was not built around an explicit and shared theory of change on the whole.

#### EFFICIENCY

In terms of efficiency the governance and management mechanisms set up proved to work well. So did the coordination system. Efficiency was ensured by adequate resource allocation, selection of most efficient funding modalities, especially for training and monitoring and supervision components, timely implementation of the planned activities and budget adjustments for meeting additional training, equipment and monitoring needs.

While the trainings supported by the project prove to be efficient and contributed to improved service quality, efficiency is largely undermined by the lack of enabling environment (availability of equipment, medicines, heating and running water, etc.) in some facilities to practice new skills and deploy new knowledge in the daily work and high turnover of trained staff due to the migration and retirement. The main limitation in efficiency concerns the focus on activities and their immediate outputs in project planning and monitoring.

**Training funding modality proved to efficient.** In the first years of project implementation UNICEF contracted Kyrgyz Association of Obstetricians, Gynecologists and Neonatologists (KAON) for the organization and delivery of trainings to the medical personnel in project-targeted oblasts. While the given approach was beneficial for the empowerment of the professional association, the project staff observed the lack of ownership on part of the health facility manage-
ment. Thus starting from 2013, the organization and funding modality of training has been changed. The latter resulted in decrease of training costs per person per day by 54% as well as raising ownership and interest of hospital management in training of medical personnel and provision of support for effective implementation of evidence based approaches.

**Efficiency of investments in infrastructure and medical equipment is acknowledged.** 19% of funds were devoted for provision of critical life saving medical equipment and improvement of infrastructure. While the needs observed in targeted health facilities are rather more than UNICEF's allocation of funds, but investments in equipment and infrastructure administered under the project proved its efficiency. In 2010 UNICEF conducted inventory of all non-functional medical equipment in DAO pilot maternities and based on the results, procured missing spare parts, installed them and conducting short training for med. personnel. This approach was acknowledged by MoH and other Development Partners as a best practice and applied in their respective sites. Investment decisions were based on careful assessment of needs in selected facilities. The priority was given to funding investments that maximized the impact on improvement of services for mother and children. Specifically, CPAPs donated by UNICEF helped the facility to increase premature and sick newborn survival in Intensive Care Unit (ICU) by 64%; Funding of oxygen stations improved oxygen supply to the main maternity departments, thus ensuring continuous oxygen supply for women and children in need and contributed to the increase of survival rates; Investments in water supply systems ensured improvement of infection control in health facilities; Investments in fences and doors of the patient rooms contributed to the energy efficiency and maintenance of adequate temperature regime, vitally important for newborn survival and good health.

**Investments in regular monitoring and supervision resulted in better service quality.** 12% of the UNICEF's share of the project budget was allocated to extensive monitoring and supervision purposes. With the regular monitoring the project managed to timely identify problems and their causes and suggested to health facilities possible solutions to problems as well as provide technical support and/or investments in infrastructure and equipment. To maximize the monitoring efforts by avoiding potential conflict of interest and considerable amount of organizational time and human resources, UNICEF engaged national and local experts and promoted involvement of the key specialists from different maternities in monitoring of health facilities. While regular monitoring visits were a powerful tool to trace the changes in the quality of service delivery and recommendation discussed with the facility administration, its efficiency could have been maximized by building facility based capacity in self-monitoring, using same monitoring tools and tracking progress against set targets. The monitoring reports reviewed by the ET lacked a comparison of changes between recent and current monitoring visits as well as recommendations provided were not tied to measurable indicators and timelines.

Apart from monitoring, the project promoted periodic supervision missions to the target health facilities, which implied experts' visits to the health facilities for 10-14 days and provision of on-job training to the health personnel. As in case of monitoring, efficiency of supervision activities could have been maximized if the measurable and time-bound indicators of change were set and measured before and after the supervision/mentoring mission with the facility administration and health personnel individually and compared later during the follow-up supervision mission.

The achievements attained by the project would have not been possible without strong project implementation team. Ensuring regional representation in project targeted location through UNICEF's Zonal office alongside with involvement of the national consultant, at the one hand ensured effective communication and cooperation with the MOH, oblast and municipal administrations and on the other hand enhanced linkages between national and local level professionals and facilitated knowledge and experience sharing.

**EFFECTIVENESS**

To date UNICEF's part of DaO project activities were focused on hospitals in the most vulnerable rayons. The coherence and complementarity of two projects (DaO and Equity) produced the following results:

**The project supported the strengthening of national and sub-national capacities**

National clinical guidelines developed and practiced, which constitutes significant progress compared to the past;

**National and Regional Training Capacity is built.** Moreover, the capacity of National Trainers is widely deployed in monitoring and supervision visits to the facilities in project-targeted regions.

**Quality of Service has been addressed at the national level.** The MoH introduced the Service Quality and Pharmaceutical Policy Department in the organizational structure of the Ministry of Health in 2013. To fill the gap until there is a fully operational dedicated structure of continuous quality improvement, the
UNICEF financed regular monitoring of the perinatal service quality through the project by involving international, national and local specialists in respective service areas. The findings of the quality monitoring missions and follow-up actions are discussed with the management and staff of assessed facilities.

**Accreditation of medical facilities introduced.** The mandatory accreditation of medical facilities has been introduced in Kyrgyzstan. The accreditation assessment tools reflect all EPC elements. Two facilities visited completed the accreditation process recently.

**The project supported institutionalization of Newborn Registers.** In order to improve quality and completeness of data collection on maternal, newborn and children under one year of age, as well as to monitor effectiveness of PC Program in the republic, an individualized database “Register of Newborns, Maternal and Infant Mortality” has been launched, which would allow policy makers to make evidence based decisions.

**Maternal and Infant Mortality Commissions established at national and sub-national levels but mostly serve as a punitive structure.** A deceitful steps have been put forward for introduction of the maternal and infant mortality commissions at national and oblast levels, that reviews each mortality case as well as mortality notification system by the government. The national commission recently completed the confidential enquiry of maternal death for the years 2011 and 2012 and the results were presented and discussed with the head doctors of all hospitals in the country. While the mortality audit system seems to function, its punitive nature undermines the purpose and effectiveness of this structure.

**Statistical Forms reflecting PC indicators desires perfection.** Substantial improvement of the monthly statistical forms has been observed, however there is a considerable space for further improvement of data collection and analysis by integration of the quantitative PC service quality indicators with adequate disaggregation. The latter will enable policy makers to routinely collect wider range of data and plan informed strategic interventions in the system.

**Financing of the PC services requires improvement.** In order to improve PC in the country and provide equal access to women and children to quality services, the government fully finances services through case based financing at in-patient care and per capita funding for antenatal and postnatal care services. While this demonstrates government ownership and attempt to ensure financial accessibility to quality perinatal services, according to the MHIF representative interviewed, PC service case rates do not correspond to the actual costs of services and requires revision.

Building MHIF staff capacity in application of EPC guidelines and protocols for claims management resulted in decrease of financial penalties of providers. Providers interviewed highlighted lack of knowledge and awareness of MHIF staff in new protocols and referral algorithms resulting in issuance of financial penalties during by-annual case reviews. UNICEF was instrumental in addressing this issue in 2013 in Osh Oblast. The first signs of improved case revisions and claims adjudication have been observed in Osh Inter-territorial Hospital, where financial penalties introduced to the maternity department decreased by 70% compared to previous year.

**The DaO project supported integration of PMTCT into EPC – The integration of PMTCT into EPC strategy was piloted in Osh Oblast with UNICEF’s support.** The given approach already shows positive results. Number of pregnant women tested at PHC level during pregnancy is increasing, judged by the decreasing trend in number of rapid tests administered at maternities during delivery. It is notable that in all maternities visited ART medicines and tests were readily available for women and children.

**Medical and Administrative Practices, alongside with service quality improvement and rational use of resources are evident, but room for improvements yet remain**

The Managers are satisfied with introduction of EPC that helped to change administrative practices. According to hospital managers interviewed, institutionalization of EPC helped to understand the different approach of service organization and has been applied to other departments as well; helped to decrease expenditure on medicines and allocation of more funds to the consumables and infection control materials and supplies; decrease of complications consequently shortened the average length of stay and lowered expenditures on treating complicated cases and staff salaries. In summary introduction of EPC helped the hospital to save money that could have been used for improvement of infrastructure purchase of medical equipment and ensure adequate supply of basic lifesaving medicines and supplies for maternity department.

**There is a proven evidence of functional regionalization system, however criteria for the referral and transportation system are deficient.** The data collected from each level of perinatal services demonstrates increase in number of deliveries and referrals to the tertiary and secondary level maternities. Operationalization of referral system resulted in
decrease of Early Neonatal Mortality (ENM) and Neonatal Mortality (NMR) at first and tertiary level maternities. While these data shows a positive trend it has to be treated with caution. Key informants from the secondary and tertiary level maternities perceive that women are referred to these facilities without strong justification for referral. The rapid increase and uncontrolled referrals results in overutilization of high technology maternity beds and negatively affects the service quality.

Inadequate operation of emergency transportation system for high risks women and newborns was named as an important obstacle to programme effectiveness. Mostly there is only one professional emergency ambulance vehicle fully or partially equipped with necessary equipment and oxygen or an old soviet style ambulance car without heating and necessary equipment. Patients mostly use private vehicles for transportation.

Improved teamwork and organization of workplace is evident. This aspect of the EPC approach has been highly appreciated by staff at all levels who understood the importance of the coordinated action and EPC trainings and protocols equipped them with the means to deploy teamwork in the practice. Another contributing factor for improved teamwork being named is improved organization of workplace and availability of emergency kits for mothers and newborns, however the emergency kits are not always complete and/or contain medicines not included in national protocol.

The support of the project in capacity building of health personnel at all levels of perinatal care system is highly appreciated and acknowledged. The project supported three main training courses: Effective Perinatal Care (EPC), Neonatal Resuscitation (NR) and Effective Neonatal Care (ENC). Over the course of the project 88 % staff (1472) of 25 perinatal institutions representing all levels of perinatal system were trained. Personnel interviewed expressed the need for regular on-job trainings, through more frequent supervision visits for further enhancing knowledge and skills.

Insufficient and/or inappropriate distribution of human resources, migration of trained personnel to other countries, alongside with inflow of poorly trained young professionals emphasizes the importance of refreshment trainings and continuous professional development needs.

Internal training courses are organized for young specialists in most of the facilities visited. In order to fill the knowledge gap, heads of the maternity wards initiated internal training courses, where more experienced and senior staff regularly provides trainings to the young professionals.

Results of the new approaches to delivery management are further undermined by demoralization of personnel with widely practiced punitive administrative measures. Administrative sanctions and financial penalties is a common practice in the sector practiced by supervising / controlling institutions as well as by facility management.

Financial motivations introduced and practiced in the health care system hardly serve the purpose and informal payments underline different behaviors. The monthly bonus pay introduced by the MOH and paid by MHIF, allocates funds to the facilities based on the criteria that do not contribute to the improvement of the service quality.

UNICEF supported equipment improved maternal and newborn survival. While UNICEF supported equipment, emergency kits and other supplies proved to be effective, availability of functional basic medical equipment, medicines and consumables requires improvement. Although most of the facilities targeted under the project received substantial support from UNICEF and other partners, if equipment needs are not addressed it will undermine achievement of desired outcomes and impact. Difficulties in equipment maintenance and repair have been named as another impeding factor by most of the facility heads interviewed. When funds for equipment maintenance and repair are made available, the country experiences shortage of qualified medical engineers and spare parts.

While effective and efficient use of medicines was named as one of the benefits of the EPC programme and allowing facilities to improve continuous supply of medicines and consumables, shortages and stock-outs still remains to be evident. There are cases where facilities experience stock out of medicines and consumables for 2-3 month. A combination of different factors appears to impede continuous supply effecting quality of care and shifting financial burden to the patients.

Poor diagnostics and laboratory capabilities are another bottleneck for the quality service provision. As an example, as Viral Load testing for HIV positive women is not performed in the oblast Aids Center, according to the guidelines C-sections are performed thus eventually contributing to the increase of the C-section rates. The quality of the laboratory test is often question by the physicians.

Service Quality improved, though still remains insufficient

Partner deliveries and Vertical deliveries alongside with rooming in and exclusive breastfeeding
are widely practiced. The ET observed two cases when after C-section the first skin-to-skin contact was performed with the partner. Mothers are encouraged to take care of their babies. The “Mother Checklist” is institutionalized, when mother has to record regularly temperature, stool, regurgitation, feeding etc. on a checklist. While this initiative is highly valued, the lack of mother’s awareness on the importance of the checklist as well as poor monitoring of these vital signs from medical personnel undermines the effectiveness of the initiative.

Introduction of EPC ensued decrease of complications and share of unjustified C-sections. Substantial decrease (27%) in the cases of hemorrhage, complications (4%) during and after delivery and medically unjustified C-sections (23%) is recorded in selected health facilities. While the positive trend in number of complications is evident, MMR demonstrates an increasing trend mostly explained by delays in referrals of high-risk group women.

Introduction of Neonatal Resuscitation Training (NR) resulted in decreasing trend of Early Neonatal Mortality (ENM). While ENM is reducing (18%), increase (15%) is observed in Neonatal Mortality Rate (NMR) mostly due to the substantial increase of stillbirth cases (93%) out of which more than a half is prior to labor. The latter indicates the poorly recognized, untreated or inadequately treated maternal conditions including hypertensive disorders and infections during antenatal period.

Decrease of number of sick newborns is another observed result of project effectiveness, mainly due to the less cases of asphyxia, birth trauma and hypothermia since introduction of EPC. Specifically, improved management of deliveries, prevention of the distress syndrome with Dexamethasone, dry open management of umbilical cord, rooming in, breastfeeding has been noted as factors contributing to decrease of newborn complications and increase of survival.

Decrease of ALOS – decrease of average length of stay is another indication of the benefits of EPC programme introduced at each level of perinatal care. The review of the statistical data of facilities visited, revealed decrease of ALOS for delivery wards on average from 5 days to 3.5 days.

Changes in service organization and quality assurance practices are evident but still deficient. Facility Service Quality Commissions established and functioning though need to be strengthened. The commission performs monitoring of the service quality on a quarterly basis and prepares reports on the findings. Based on the revealed weaknesses, identifies areas for improvement and assigns responsible staff member and the latter provides periodic training, explanations to the staff as well as monitors progress. While initiation of the clinical audits is definite positive move towards continuous quality improvement, the commission and the management lack knowledge and tools to plan corrective measures, rather utilize punitive measures to penalize the PHC facility by not paying the monthly bonus. The given approach will shortly undermine the benefits of the continuous quality assurance if adequate measures are not put in place.

Local protocols/algorithms developed and approved, though quality and compliance requires improvement. Based on the national protocols facilities developed and approved local protocols and algorithms customized to their facility using internal intellectual potential, however, direct observations and criterion based audits of the medical cards performed during the evaluation, revealed poor quality of the local protocols, serious deviations form the national guidelines, as well as in certain cases non-compliance with guidelines.

While weaknesses in service quality are noted, the evaluation also documented improvements of some quality aspects in service delivery at maternity.

**SUSTAINABILITY**

UNICEF planted seeds for Perinatal Care sustainability in Kyrgyzstan. UNICEF has become a leader and reliable partner in the MCH sector and PC in particular. Several informants have stated that the agency has “planted the seeds of MCH/PC which will result in sustainment of PC in the country”. The Project was able to develop capacities at the enabling environment, organizational and individual levels. Project components have mostly worked through Government systems and sub-national service providers as well as through selected Professional Associations.

Government demonstrates a stewardship role in improvement of maternal and child health services. The key challenges of the MCH system is addressed and targeted within number of national policy documents. More specifically, the Kyrgyz poverty reduction strategy; Den Sooluk National Health Reform Programme, National Perinatal Care Programme, National Reproductive Health Programme, National HIV/AIDS programme and etc. are the examples of government’s dedication and ownership towards achievement of the MDG 4 and MDG 5. Apart from these policy documents, the MOH has approved national evidence based guidelines for effective perinatal care, neonatal resuscitation, effective neonatal care, PMTCT, effective antenatal care, nutrition, IMCI etc.

Country demonstrates ownership for Free maternity services delivery - The free of charge service provision for perinatal services is another demonstration of government’s ownership and dedication for
improvement of the MCH services.

UNICEF supported strengthening of Government’s institutional capacity in service quality assurance. The project facilitated strengthening of MoH capacity in continuous quality assurance through provision of service quality monitoring tools and building critical mass of national experts.

Integration of PC training materials in the post-diploma education curriculum is a step forward for sustainability - High advocacy of UNICEF facilitated integration of the new technologies of the perinatal care into the post-diploma education curriculum. While integration of PC training materials into the post-diploma education curriculum is a step towards sustainability, in isolation from undergraduate/pre-service education reform, will be shorthanded to secure production of knowledgeable and skilled medical work force. In addition, building the training capacity of trainers within the education institutions as well as at clinical/practical training facilities also requires being addressed. Furthermore, introduction of the health workforce planning based on the estimation of health workforce production, development, deployment and retention strategies deserves a due attention. In the absence of such plan, there is a potential devastation risk of the capacity produced lately and shortages of qualified perinatal services in most difficult to reach areas in the country.

DaO project supported building national and sub-national training capacity - The Master trainers trained through DaO by the WHO and utilized by UNICEF and UNFPA in their training activities, ensures availability of the pool of national and local master trainers. Moreover, UNICEF supported building national and oblast level training capacity through training of trainers, provision of training equipment and materials to training facilities.

Health facility accreditation system incorporates new technologies of perinatal care. It is notable, that accreditation criteria and indicators for maternity hospitals and wards are mostly based on the new clinical guidelines and protocols, which consequently will ensure continuous improvement of perinatal services in the health care institutions of Kyrgyzstan.

Institutionalization of “Confidential Inquiry to Maternal Death” is another demonstration of Government’s ownership. Within the DaO project as a result of the advocacy efforts and technical assistance from WHO and UNICEF, the MOH completed first “Confidential Inquiry to Maternal Death” in December 2013, covering the period of 2011-2012 and resulted in prioritization MoH’s efforts in strengthening emergency obstetric care capacity in the country.

While there is a demonstrated ownership at the central level, sub-national level of government still has to show substantial degree of political commitment towards improved maternal and child mortality reduction. While national-level commitment to maternal and child mortality reduction is growing, it is equally important for sub-national levels of government (oblasts and municipal government) to show substantial degrees of political commitment particularly oriented towards organization and funding of emergency transportation and consultation services.

Absence of the strategic vision for organization of Emergency Transportation and Consultation Services alongside with the lack of creative solutions to ensure uninterrupted supply and availability of blood products in maternity facilities will undermine country’s efforts and potential achievements in meeting MDG 4 and MDG 5.

The lack of strong managerial capacity in the country is another factor that hinders potential achievements in improving maternal and child survival and health status in Kyrgyzstan. Whereas introduction of the new evidence based perinatal care technologies already shows initial positive results, maximization of its potential and sustainment is hindered by poor managerial capacity at facilities. If the government in the nearest future does not address building health facility managerial capacity, it is unlikely that government targets for reduction of maternal and child mortality could be attained.

Continued efforts and further nation wide expansion of PC model introduced in south regions of the country is required to ensure long lasting results. Although the reform of the perinatal care is piloted in other oblasts and selected districts of the country, the MOH realizes the need for applying universal PC model, piloted by UNICEF in Osh and Batken oblasts. Only partial coverage of the country will not be able to demonstrate accomplishment of the MDG targets in a relatively short period of time.

**RECOMMENDATIONS**

This section provides key recommendations based on the findings of the evaluation, priority issues affecting effectiveness of perinatal care and health status of children and women in the country, and suggests possible strategic interventions for the Government and its development partners.

**GENERAL RECOMMENDATIONS:**

Continued support to GOK’s Perinatal Care Strategy Implementation - In MCH sector, UNICEF is recognized as one of the leading agencies. This confirms its legitimacy and the capacity to continue work in MCH
area and EPC in particular. Ensure continuous support to the GoK's perinatal care programme implementation in line of recommendations provided below.

**Strengthen inter-agency collaboration** - Continue and further improve inter-agency collaboration where all partners, building on their comparative advantage, will have a role to play in supporting the MoH in the implementation and update of programmes in the area of perinatal health, including further investment in strengthening the main health system components, and policies to reduce inequities in access to care, as well as in the quality of services provided, all of which will further improve the health status of mothers and children in Kyrgyzstan.

**Enhance advocacy** - The new challenges identified, in the section below, will require promotion of greater linkage and partnership through strengthening of the UNICEF Country Office (CO) technical capacity in the health policy advice. When selecting final set of interventions for the new project phase, attention has to be paid to CO capacity. Some recommended actions might demand specific technical expertise, which require additional resourcing. Moreover supporting research and analysis of the MCH sector performance will be instrumental for effective advocacy. Building on “what's already working” will help to influence the government policy decisions.

**Improve project design** - Comprehensive Project design, addressing all health system blocks, with clear distribution of functions (activities and geographical and or thematic areas between key UN agencies), coordination mechanism between UN and other developing partners, as well as well formulated Results framework with annual targets, should be given a priority.

**SPECIFIC RECOMMENDATIONS:**

Though UNICEF is well positioned to influence the PC policy in the country, success of the perinatal services will very much depend on going beyond the perinatal care sector and targeting other health sector policy areas. While bellow outlined recommendations are not explicitly targeted for UNICEF assistance, evaluation team considered listing the most important system building blocks requiring intervention on the national level in order to ensure that UNICEF interventions are sustained and ensures access to quality PC services to the population.

**STEWARDSHIP**

The National Perinatal Care Program is good demonstration of government's dedication and attempt to meet MDG 4 and MDG 5 targets. While the programme is well formulated and is results oriented, the MoH fails to regularly assess the progress in achieving the set objectives. It is highly recommended that regular assessment of programme implementation is practices that enable timely identification of problems and evidence based decision making for corrective actions.

Introduction of the “Confidential Enquiry of Maternal Death” serves as another strong examples of government’s ownership. Recently released analysis sheds the light on main problems and provides recommendations to the policy makers for further action. Thus the MoH has to institutionalize this practice and ensure uninterrupted and adequate funding for this purpose. Analysis also revealed necessity for improved management of emergency obstetric cases. Therefore, development and approval of emergency obstetric care guidelines and protocols alongside with training of health personnel requires urgent attention if the country wants to rapidly decrease MMR. Alongside with the new EmOC guidelines, the evaluation revealed a need in expertise and revision of the facility based EPC protocols in line with the nationally approved ones.

Furthermore, under the leadership of the MoH the system of “Near Miss Cases” investigation has to be promoted at national, sub-national and facility levels through insurance of adequate funding.

**HUMAN RESOURCE DEVELOPMENT**

The Government of Kyrgyzstan acknowledged the lack of human resources needed to deliver essential quality perinatal services for a number of reasons, poor quality of pre-service education, migration of health workers within and across countries, poor mix of skills and geographical demographic imbalances. The formulation of policies and plans in pursuit of human resources for PC services requires sound information and evidence. The need for comprehensive, reliable and timely information on human resources, including numbers, demographics, skills, services being provided and factors influencing recruitment and retention has been identified in Kyrgyzstan. Based on this information the priority should be given to the development of the health workforce plan including the plan for the development of the PC workforce. The latter should address production, deployment and continuous professional development of health personnel. While such strategy is needed for entire health sector, initially the government can
develop it only for the MCH sector. Apart from PC human resource plan, the government is advised to streamline the pre-service and post diploma education systems alongside with the refinement of licensing and certification of the medical professionals. There is a need for enhancement of the continuous medical education by integration of the new perinatal technologies into the training curricula, training of master trainers, selection of clinical bases, as well as development of the mentoring capacity in EPC.

Another important area for immediate intervention is formation of Emergency Transportation and Consultation (EMTCS) System as well as definition of staffing levels and training of EMTC teams in EmOC.

Mandatory Health Insurance Fund, the single payer in the country, will also require being equipped with modern knowledge of perinatal technologies in order to perform effective adjudication of provider claims in perinatal care.

**INFRASTRUCTURE, EQUIPMENT AND MEDICINES**

In line with the regionalization of the perinatal care services, the MoH initiated development of the PC master plan for selected oblasts and districts, which guides investments decision for these geographic areas. As the health facility infrastructure and medical furniture and equipment are outdated, the MoH is advised to expand the master planning exercise countrywide, development of facility investment plan and ensure its periodic revision due to the possible future local and international investments. Alongside with the latter, development of the EMTCS system design, investments plan and its realization should be given a high priority.

In order to ensure access to essential and life saving medicines at PC facilities, it is recommended that MoH periodically reviews the list of essential and lifesaving medicines and through its regulatory function ensures continuous availability and supply of the pharmaceutical market with these medicines.

Another area deserving immediate MoH attention is design of alternative blood supply system to ensure uninterrupted supply of blood products at the perinatal care facilities. The current system, when the patient’s relatives have to travel to the Blood Bank located in the oblast center and pay out of pocket, could be redesigned in a way, when relatives pay at the facility (in worst case scenario if the GoK can ensure funding) and the Blood Bank ensures delivery of blood products directly to the facility and maintaining the cold change regimen during transportation.

**FUNDING OF PERINATAL CARE AND STAFF REIMBURSEMENT MODALITIES**

The GoK’s commitment for free perinatal care services are challenged by inadequate service case rates and weight resulting in underfinancing of health providers. Deficient reimbursement became more problematic with the introduction of the regionalization of perinatal services where the same case rates are applied for perinatal services regardless of the level of service provider. The situation is further complicated with absence of standardized claims management methodology, mostly based on previous service provision practices and poor understanding and knowledge of claims managers in new perinatal service provision technologies and referral guidelines, thus resulting in introduction of financial penalties to the health providers. Filling these gaps is a high priority for the MoH. There is an urgent need to revisit the case rates and case weights in line with the regionalization of perinatal services as well as development of standardized claims adjudication methodology based on newly introduced service protocols.

The current performance pay system implemented in the health care system is shorthanded and requires revision of the performance indicators. It is believed that the WB financed project will assist the government in introduction of new pay for performance system that potentially could be applied in those facilities, which are targeted by UNICEF, and falls in the group of pilot facilities under the WB financed project.

**CONTINUOUS SERVICE QUALITY IMPROVEMENT**

Assurance of the population access to quality PC service is important for attainment of the MDGs. The MoH already established the QoC and Pharmaceutical Policy Department at the MoH. Apart from this, the QoC committees are operational at the health facility level though with limited national guidance. Whereas availability of these structures demonstrates government’s ownership of the service quality improvement, much remains to be done to ensure well functioning service quality assurance system in the country. More specifically, the MoH needs to develop the QoC strategy, QoC audit processes and tools as
well as implementation plan and budget. Enhancement of external and internal MCH service quality audit system in the country will have the following benefits: a) it will enhance ownership at facility, district, oblast and national levels, b) created PC service quality audit capacity will improve evidence based managerial decision making at facility and local levels, as well as evidence based policy development on a national level; c) it will require less financial resources; d) the benchmarking of service providers will increase the competition and motivate them to better perform; and finally all the above will ensure improved access to quality PC services.

HEALTH INFORMATION SYSTEM

Sound and reliable information is a foundation of decision making across all health system building blocks. It is essential for health system policy formulation and implementation, governance and regulation, human resource development, health education and training, service delivery and financing and health research. The health information system serve multiple users and a wide array of purposes that can be summarized as the generation of information to enable decision makers at all levels of the health care system to identify problems and needs, make evidence based decisions and allocate scarce resources optimally.

The MOH was successful in introduction of the Newborn Register and institutionalization of reporting nationwide. Apart from Newborn Register there is a need for routine reporting on key quantitative service quality indicators. MOH is advised to integrate some of these indicators, currently being monitored by the project, into the routine reporting forms. Moreover, in order to ensure accuracy of MCH data collection, the MOH is recommended to build the capacity of the Data Quality Audit (DQA) at national and local levels. The project can be instrumental assisting the government in this endeavor.

Building MCH/PC analytical as well as evidence based policy and managerial decisions making capacity at national and local levels is another area requiring government attention. Based on the evaluation findings the MOH and the health facility management lack the capacity of data analysis, which leaves the latter shorthanded for the evidence based policy formulation and decision-making. Present Health Statistical Reports is informative; recording changes of selected indicators over the years, but does not contain analysis, which attempts to explain reasons behind reported changes. The MOH is recommended to build the national and local capacity for MCH/PC data analysis with the assistance from international partners. This will help the sector to plan further interventions based on the evidence, leverage additional resources for the sector as well as allocate scarce resources optimally.
CHAPTER 1: INTRODUCTION
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1.1 COUNTRY SITUATION

Kyrgyzstan remains the second poorest country in the Central and Eastern Europe and the Commonwealth of Independent States region. Despite significant decreases in poverty between 2003 and 2008 —overall poverty declined from 64 to 31.7 per cent and extreme poverty from 28 to 6.1 per cent —one in five children is still poor, and three quarters of child poverty occurs in rural areas. Recent declines in poverty levels resulted largely from massive migration from poverty-stricken rural areas to cities and to the Russian Federation and Kazakhstan. In 2008, Kyrgyzstan was the fourth most remittance-dependent country in the world.9

The effects of the global economic crisis in 2009 (including sharp reductions in exports, and a 15 per cent fall in remittances), as well as the instability of 2010, will have lasting impacts on vulnerable groups, including women and children. In June 2010, violent civic unrest in southern Kyrgyzstan resulted in at least 415 deaths and large-scale property destruction10. Approximately 400,000 children were affected. Many fled their homes, while others suffered psychological damage and interruption of schooling. By mid-2010 the budget deficit had risen above 10 per cent, and national debt was growing. These major economic and financial challenges were likely to reduce social spending and delay important reforms in key sectors.

1.2 MAIN CHALLENGES OF MCH SECTOR MORTALITY RATES AND LEADING CAUSES OF MORTALITY

Since the adoption of the Millennium Declaration at the United Nations Summit in 2000, the Kyrgyz Republic has been making steadfast efforts to achieve the Millennium Development Goals (MDGs). Even though substantial progress has been made in reducing extreme poverty, improving child health and water supply, a high rate of maternal mortality remains as a major concern.

The maternal mortality rate in the Kyrgyz Republic for the last decade virtually never dropped below 50 deaths per 100,000 live births, a rate that is much higher than the national indicator set for 2015 (15.7 per 100,000). According to the latest data, Kyrgyzstan has the highest maternal mortality rate in Eastern Europe and Central Asia and the average annual rate of reduction in maternal mortality there from 1990 to 2010 has reached only 0.2 percent, while the global average is at 3.1 percent11. According to Republic Medical Information Center (RMIC), MMR in 2012 was 50.3 per 100,000 life birth (LB) (63/100,000 LB in 1990). National Statistical Committee (NSC) reported a MMR of was 54.8/100,000 LB in 2011 (62.9/100,000 LB in 1990)12.

There is a disparity in MMR among regions (oblasts), being higher in mountainous and poorly socio-economically developed regions (Jalal-Abad, Narin and Issyk-Kol). MMR is higher in rural areas (1.9 times) than in urban ones13.

Mortality among under-fives is showing stronger downward trends. From 1990 to 2012 USMR has declined by 62%, and the annual rate of reduction (1990-2012) is 4.4%.14 In its ongoing monitoring the Ministry of Health reported an annual 7 per cent reduction to 28.9 per 1000 live births in 200915, and links this to the implementation of efficient perinatal services —rational delivery management, better promotion of and practice of breastfeeding, a better-functioning heating network, and timely neonatal resuscitation16. The UNICEF figures, which are consistently higher than the Ministry’s figures, report 38 deaths per 1000 live births in 2008, half of the number in 1990, but still off target for 25 deaths per 1000 live births in 201517.

There are also key equity concerns in provision of healthcare for births. While 96.3 per cent of mothers in the richest quintile are supported by skilled healthcare workers in their deliveries, for the poorest quintile, only 60.1 per cent received skilled care18. The results of the 2006 MICS show that the infant mortality rate in rural areas is 1.4 times higher than that in urban areas.

The reasons for high levels of maternal mortality are diverse. The most common proximate causes recorded are hypertensive disorders in pregnancy (40.0 %), hemorrhage (21.5 %) and septic complications. Many women of childbearing age suffer from anemia and poor nutrition. Osh province has particularly high rates of deliveries complicated by anemia 67.1 % in

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9 International Monetary Fund
11 MDG Acceleration Framework, Kyrgyzstan, 2013
12 The Kyrgyz Republic. Third report on progress towards achieving the Millennium Development Goals’UN Kyrgyzstan 2013.
13 The Kyrgyz Republic. Third report on progress towards achieving the Millennium Development Goals’UN Kyrgyzstan 2013.
15 Situation assessment of children in the Kyrgyz Republic. UNICEF 2011
16 Ministry of Health, Manas Taalimi Indicators, 2009
17 UNICEF, Progress for Children - Achieving the MDGs with Equity, Number 9, September 2010
18 GTZ, Review of the situation on mother and newborn health care in the Kyrgyz Republic for the period of 2008-2009, 2009
2008 and 71.2% in 2009.

Many mothers register their pregnancy late. Many internal migrants without residence registration are not registered with healthcare professionals in their new home areas. One third of women who died in childbirth in 2009 had not received antenatal care from healthcare professionals19.

The most common underlying causes of neonatal mortality are birth asphyxia, prematurity, congenital malformations and infections20.

**NUTRITION**

Under-nutrition is an important public health problem. Stunting, low birth weight, and vitamin and mineral deficiencies are major barriers to the country achieving its MDGs. Results of the 2006 MICS survey showed that the nutritional status of Kyrgyz children remains poor. In 1996, 14% of children under 5 were stunted, compared to almost 25% of children less than 3 years in 2006. The prevalence of stunting was higher among children in rural areas (15.7%) than in urban areas (10.8%). Children of educated mothers and richer families were less likely to be stunted. The prevalence of wasting is only 4% nationwide, but substantially higher in Jalalabad (9.2%) and IssykKul (7.8%) provinces.

In 2006 over 5.3% of children born in the country were of low birth weight. In Naryn province the figure was 10.3%, and low birth weight is more common in the richest quintiles21.

Malnutrition is an underlying cause of 60% of deaths among children under five in Kyrgyzstan. Only 31.5% of infants are exclusively breastfed and only 37.5% of infants are adequately fed. Meanwhile, figures for vitamin A supplements taken by women in the first eight weeks after giving birth were particularly low in Naryn Province (19.6%) and among Uzbek families (36.3% (2006))22.

The 2006 MICS survey recorded particularly poor iodine content in salt in Osh Province, where only 56.8% of salt tested contained more than 15 parts per million of salt. There are also equity concerns, with only 68.5% of salt consumed by the poorest quintile containing adequate iodine levels, compared with 89.9% of that consumed by the richest quintile. Approximately 70% of children suffer from iodine deficiency, and 32.9% from vitamin A deficiency23.

HIV/AIDS

HIV and AIDS is another area of concern. Newly registered cases have increased by 25% annually over the last decade, making it unlikely that the country will meet the target for Millennium Development Goal 624. Rates of drug dependency and HIV infection are high in the city of Osh, which is located along major drug-trafficking routes.25 In recent years, around 300 young children were infected with HIV in medical facilities in Osh and Jalalabad. Women and children diagnosed with HIV suffer wide-ranging stigma and discrimination.

ANTIQUE PERINATAL INFRASTRUCTURE

The healthcare system in the country is developed, with an infrastructure of facilities providing maternal and child health (MCH) care services, at national, regional, district and local level. The system includes maternity hospitals and departments, and a network of rural health points (known by their Russian acronym – FAPs). The healthcare system is severely constrained by antiquated infrastructure and a lack of funds for development. A study carried out in 2009 revealed that two thirds of hospitals in the country were built more than 25 years ago. Most do not have central heating, running hot water and sewage systems. Cold water is available in half of district hospitals and maternity wards, and none are supplied with running hot water. Throughout the healthcare system, and particularly in rural and remote areas, there are shortages of drugs, medical equipment and skilled healthcare personnel, particularly in facilities providing services to women of reproductive age and children26 27.

ACCESS BARRIERS TO QUALITY EMERGENCY SERVICES

Ministry of Health.
27 Rapid assessment in FGPS and FAPS with maternity beds in target Oblasts. 2013 UNICEF
The access to good-quality emergency and primary hospital care services for pregnant women is insufficient. One of the reasons is a shortage of qualified personnel and specialized care at these two healthcare levels, resulting in low-quality treatment. At these levels the maternal mortality is 1.5–2 times higher than at the secondary care level and the main causes of deaths were the emergency obstetric conditions.

The majority of pregnant women die during labor outside the regional maternal hospitals or perinatal centers due to the lack of well-timed delivery of emergency care or poor quality of this care. It should be noted, that there is a problem of insufficient medical infrastructure and equipment. Other problems include a lack of criteria for the well-timed referral of patients to appropriate specialists and obstetric facilities.

Some primary health care facilities in remote areas have hospital beds designed for deliveries but often lack appropriate equipment and qualified personnel, making it impossible to ensure the safety of both women in childbirth and newborns. Rural areas also suffer from shortages of ambulances and fuel. The particular problems of these remote areas are evident in maternal mortality figures – over 2005–2010, the highest rates are seen in the remote mountainous districts of Toguz Toro and Chatkal (Jalalabad province), Tong (Issyk Kul province), Manas (Talas province) and Naryn and Aktalaa (Naryn province). Meanwhile, districts and cities in the Chuy and Fergana Valleys consistently show much lower maternal mortality rates.

**HUMAN RESOURCES**

Another factor behind high mortality rates is a significant staffing crisis in the healthcare system. Reasons include low pay and a lack of incentives to work particularly in rural areas. This leads to internal migration and a significant outflow of trained health care specialists to Russia and Kazakhstan, where salaries are much higher. In 2008, the highest outflow was from Osh and Jalalabad provinces.

There is a catastrophic shortfall of medical personnel, especially gynecologists servicing rural areas. 40% of all gynecologists and obstetricians are concentrated in Bishkek and Osh, and a lack of qualified practitioners to oversee pregnancies, particularly when complications arise. According to preliminary data from the Ministry of Health, there were only two obstetrician-gynecologists in the Batken province in 2009. The last decade has witnessed a consistent drop in the number of practicing pediatricians (from 4.4 per 10,000 population in 1998 to 1.0 in 2008) and neonatologists (from 0.6 to 0.3) in the country.

It is noted that medical staff at the primary care level are often low qualified and therefore do not know how to follow-up pregnancies and not capable to recognize the complications at earlier stage. Moreover, there is lack of well-qualified obstetrician/gynecologists knowing the safe management of childbirth.

The factors most responsible for maternal mortality are preventable. Their continued prevalence is a result of insufficient education of the population about the main signs of threats to pregnancy. The population, especially in rural areas, remains unaware of family planning methods, reproductive health, and safe contraception. In 2002, rural health committees were established to help educate the population on issues, including reproductive health. These initiatives are especially important given societal taboos; existing stereotypes and traditions mean that there is little discussion of the problems of sex and reproductive health among family members or friends. There is also a shortage of specialized literature on how to lead healthy lifestyles, raising children, and family planning. This means that there are still a large number of abortions, and one-tenth of registered maternal mortality cases are caused by abortions.

**AWARENESS, KNOWLEDGE AND PRACTICE**

54% of women with children under the age of 5 are aware of 4 or more symptoms of complications during pregnancy. It should be noted that significantly higher level of awareness were found among women in Batken oblast, compared to those in Osh and Jalalabad oblasts (77% versus 39% and 34% respectively). 5 problem zones were identified: Chong-Alai (zone 2), KaraSu (zone 4) and Ozgon (zone 7), BazarKorgon (zone 8), Suzak.

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29 In 2009, the average salary for healthcare workers was 63.4% of the average wage in the economy. [Roman Mogilevskiy, Public Social Expenditures in Kyrgyzstan: Trends and Challenges, Presentation made at the Roundtable ‘Investing in Children – a Key to the Achievement of the Millennium Development, 20 November 2010]. The Government is aware of this issue and pledged to more than double the salaries of healthcare workers as of 1 May. [RFE/RK, Kyrgyz PM: Teachers, Medical Personnel To Get Raises, 18 January 2011, at http://www.rferl.org/content/kyrgyzstan_pm_promises_teacher_raises/2281383.html]
34 Study of knowledge and awareness among the population of Batken, Osh, and Dzhalalabad oblast of the danger signs of childhood illness and complications in pregnancy and knowledge of rights to social benefits. July 2012. UNICEF
CHAPTER 2: PROJECT OVERVIEW
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During 2009-2013 three major UNICEF projects have contributed to improvement of perinatal care. In 2009-2010 UNICEF implemented a project Reforming Perinatal Care System in Kyrgyzstan that aimed to reduce perinatal mortality by creating an enabling environment for the implementation of National Perinatal Care Improvement Programme for 2008-2017 mentioned above, enhancing expertise on perinatal care on the national level, supporting establishment of Baby Friendly Hospitals as well as by improving monitoring through national newborn register. Building on these activities, a project on “Ensuring Access to Affordable Health Services in the Affected Areas of the Country for Women of Reproductive Age and Newborns” was initiated by UNICEF during 2010-2013. The project was part of Kyrgyzstan’s One UN Programme funded through the Expanded Delivering as One (DaO) funding window and implemented jointly with UNFPA and in some extend, with WHO in Batken and Osh provinces.

In addition to projects described above, in the period of 2010-2011, the “Post emergency and early recovery project” funds were use that supported the pilot sites with emergency obstetrics kits and newborn resuscitation equipment, better access to water (clean and hot water) and improvement of sanitary conditions in pilot maternity facilities through rehabilitation of the sewage system. After the civic conflict in June 2010, the “Equity projects” (2012-2015) were initiated in Osh, Batken and Jalal-Abad provinces after the. As the previous UNICEF projects have enhanced perinatal care on the secondary hospital level, the ongoing Equity project operates mainly on the primary health care level.

2.1 PROJECT OBJECTIVES:

Overall objective of the project is to reduce perinatal mortality in the Kyrgyz Republic

Specific objectives are to enhance equitable access to health care services of the poor and vulnerable groups by improving the quality of maternal and newborn care and monitoring data in selected maternity hospitals.

2.2 EXPECTED PROJECT RESULTS, ACTIVITIES AND KEY INDICATORS:

Expected results are:
- Continuous Quality Improvement process demonstrated, institutionalized in maternity hospitals
- Enhanced capacity of medical experts on the national level
- Improved quality of antenatal and perinatal care through critical lifesaving equipment, infrastructure
- Improved practical skills of medical workers for antenatal and neonatal care in target primary health care clinics and 20 selected maternity hospitals (introduction of Making Pregnancy Safer, Effective Perinatal Care, neonatal resuscitation, Baby Friendly Hospital Initiative)
- Effective registration and monitoring system in place including analysis of critical cases (i.e. pregnancy registration, Newborn Register, The Near Miss Cases Review)
- Adequate referral and remote consultation system in place
- Improved accessibility and utilization of maternal and newborn services especially in rural and remote areas through increased level of awareness among the population

Main Project Activities:
- Advocacy for Quality Improvement, organization of local and national round tables, workshops, clinical conferences
- Trainings for Trainers (ToT) on antenatal care, perinatal care, newborn resuscitation
- Trainings for medical workers on antenatal and perinatal care, newborn resuscitation
- Regular monitoring and supervisory visits in health facilities
- Support for the newborn registration system
- Establishment and support for birth preparedness schools
- Procurement of medical supplies, improvement of infrastructure
- Development and printing of communication materials

Key indicators:
- Percentage of the hospitals trained on resuscitation of newborns and equipped with Ambu bags and mannequins for trainings
- At least 60% of maternities certified as Baby
Friendly Hospitals based on the WHO/UNICEF criteria

- Percentage of medical staff trained on Effective Perinatal Care technologies
- Percentage of health facilities introduced with electronic registration system
- Number of established birth preparedness schools in primary health care facilities
- Percentage of health providers trained on antenatal care

In addition to project described above, the Equity project (2012-2015) was initiated in Osh, Batken and Jalal-Abad provinces after the civic conflict in June 2010. While the previous UNICEF projects have enhanced perinatal care on the secondary hospital level, the ongoing Equity project operates mainly on the primary health care level. High maternal and newborn mortality rates are being tackled by improving equitable access to health care services through capacity building of medical workers and procurement of life-saving equipment as well as increasing the demand through community mobilization. Some activities, for example investments in temperature management of maternity wards and improvement of water and sewage systems have been implemented on the territorial hospitals that are pilot sites of the DaO project and therefore, will be included in the evaluation.

2.3 PROJECT PARTNERS:
Main project partners are MoH including Mother and Child Health Department, National Center of Mother and Child Health, National Health Promotion Center, Kyrgyz Medical Academy, Postgraduate University, UNFPA, WHO, GIZ, USAID, University Murcia in Spain, KAON, Kyrgyz Association of Perinatologists, Kyrgyz Midwives Association, Hospital Association in KR, health facilities, VHCs

2.4 PROJECT BENEFICIARIES:
Main project beneficiaries are:
- Pregnant women
- Women in delivery
- Newborns
- Medical personnel
- EPC and Safe Motherhood National Trainers
- Professional NGOs

2.5 PROJECT DURATION
UNICEF jointly with UNFPA, WHO (only for the first year of the project) and MoH implemented the project for the period of 2010-2013.
CHAPTER 3: EVALUATION PURPOSE, OBJECTIVES AND METHODOLOGY
CHAPTER 3: EVALUATION PURPOSE, OBJECTIVES AND METHODOLOGY

3.1 EVALUATION OBJECTIVES

UNICEF commissioned the evaluation of DaO project as UNICEF Country Programme (2012-2016) is reaching the midpoint. The evaluation will give an opportunity to look in more detail at project design and implementation progress, assess the relevance of the UNICEF perinatal care programme and weight the achieved results as well as specify remaining challenges and recommend necessary corrections for the remaining three years of the Country Programme.

The purpose of the evaluation was to document and increase the knowledge of results, good practices and lessons learnt in perinatal care with specific recommendations. It also specifies UNICEF’s contribution to enhancing maternal and child health care system, quality of care and maternal and child survival in the country as well as determines whether UNICEF pilot projects have been effective and should be scaled up countrywide. In addition to UNICEF Country Office, other UN Agencies and development partners as well as the Ministry of Health will benefit from the evaluation in planning, implementing and coordinating perinatal care.

OVERALL OBJECTIVE OF MID TERM EVALUATION

Overall objective of the evaluation is to support Kyrgyzstan in its efforts to reduce perinatal mortality and to meet the targets of MDGs and beyond by strengthening the implementation of the National Perinatal Care Programme for 2008-2017.

SPECIFIC OBJECTIVES OF FINAL EVALUATION

Specific objective of MTR Evaluation is to generate knowledge on achieved results and shortcomings of the UNICEF programme on perinatal care as well as to produce specific recommendations to set further priorities, strategies and interventions.

The project evaluation findings and recommendations are expected to generate the following benefits:

- The evaluation will contribute to the global knowledge evidence base on child mortality and morbidity reduction.
- The findings and recommendations of this evaluation will primarily be addressed with policy makers and programme managers, both internally in UNICEF and externally in governments, partner organizations, professional associations and academia.

- A better documentation of results achieved and identification of most effective strategies and interventions should also contribute to mobilizing additional funding for achieving further reduction of avoidable maternal and child deaths.
- The results of the evaluation will further inform and influence the development of UNICEF supported programme of cooperation.
- The evaluation will also document lessons learned, which have contributed to formulating policies to support further progress in reducing infant and child mortality and morbidity, thus contribute to the “A Promise Renewed Initiative”.

3.2 SCOPE OF THE EVALUATION

The evaluation focused on assessing the project’s current and potential contribution to the improvement of MCH health indicators in Kyrgyzstan. Each evaluation criterion was analyzed from the perspective of assessing the implications of project activities on:

- Final beneficiaries: women and children;
- Service providers: health care professionals whose capacity has been built (including doctors, midwives, and health facility managers);
- Sub-national decision-making level: Regional health authorities (local governments)
- National decision-making level: national health authorities and key stakeholders (Ministry of Health and Department heads, Education institutions, Health Statistics Department, International Development and Implementing Partners, etc.)

The evaluation examined the relevance, effectiveness, efficiency and sustainability of the UNICEF’s contribution for which the OECD DAC evaluation approach has been applied.

3.3 EVALUATION PROCESS

The evaluation was implemented in three phases.

Phase 1: Design phase (November, 2013) - The Evaluation Team (ET) conducted desk review and prepared detailed evaluation, design which included stake-

holder mapping (key informants), evaluation and results frameworks, interview and focused group discussion guides, observation and criterion based audit checklists as well as a detailed plan for data collection, including selection of project sites and beneficiaries.

**Phase 2: Field phase (December 2013)** – An evaluation team (ET) visited the country in the period of December 1-17, 2013 and completed qualitative and quantitative data collection from project targeted oblasts Osh and Batken. The team visited 1 Tertiary Level Maternity, 2 Secondary Level Maternities and 2 primary level maternities, as well as Family Medicine Center in Batken and Kyzylkya. In this phase the ET used different evaluation tools, such as Semi-structured Interviews (SSI) with key stakeholders, Focused Group Discussions (FGD) with direct beneficiaries (women and medical personnel) in each visited health facility; direct observation of the service provision; as well as reviewed selected Medical Cards from 2010 and 2013 using Criterion Based Audit Check-list (CBA). All these methods allowed to assess changes in application of the EPC technologies, change of management and service organization, service quality and infection control, record keeping as well as improvement in infrastructure, equipment and drug supply.

At the end of the evaluation mission, the team presented preliminary findings and recommendations to the key stakeholder from MOH and UNICEF to validate preliminary findings and recommendations and collect initial comments.

**Phase 3: Reporting phase (December 2013 – January 2014)** - In this phase the evaluation team prepared the draft evaluation report which went through formal review process and incorporated recommendations and comments provided by the reviewers into the final evaluation report.

### 3.4 EVALUATION METHODOLOGY AND DATA SOURCES

As described above, the methodology comprised a mix of site visits and observations, face-to-face semi structured interviews, focus group discussions, criterion-based audit of medical records, desk-based research and review of existing reports, documents and available secondary data.

The six major sources of data were used during the Evaluation.

- **PEOPLE** Individuals were consulted through individual (semi-structured) interviews and focus groups;
- **SITE VISITS**: Data collected during the visits to selected project sites.
- **DOCUMENTS**: All project and thematic area related documents (primary and secondary data sources) were reviewed.

**OBSERVATIONS**: Qualitative data was collected during observation of service delivery at the visited facilities.

**CRITERION BASED AUDIT** Data collected through clinical audit of the patient medical cards.

**QUANTITATIVE ANALYSIS**: The ET utilized quantitative analysis to examine changes in selected but comparable indicators from available data (quantitative facility statistics, monitoring data, researches and studies, etc.).

### 3.5 EVALUATION LIMITATIONS

Evaluation was largely limited due to the non-standardized financial, human resource and quality of care data collection by hospitals at different level of the perinatal care system. Thus in order to collect required data, the ET had to work with available raw data, analyze and present findings.

Unwillingness of few providers as well as women during the delivery, limited ET members to observe service provision patterns, particularly deliveries, in two delivery cases taking place in the facility during the ET visit. However, the evaluation experts are confident, that information derived through observation is sufficient to draw conclusions.

### 3.6 PARTICIPATORY APPROACH

In order to develop ownership and ensure the involvement and interest of the stakeholders for sustainable changes and future developments, the evaluation was conducted in a participatory way. The team of international experts was joined with UNICEF national consultant and two national experts (Ob/Gyn and Pediatrician).

The evaluation findings and recommendations have been presented and verified at MOH and UNICEF stakeholders meetings before final version of the report was produced. Comments, suggestions and clarifications provided by the stakeholders were adequately addressed in the evaluation report. Moreover, initial draft of the report was shared for comments and feedback received is reflected in the final report.

### 3.7 ETHICAL ISSUES

The ET considered ethical issues and applied the following approaches:

1. Kept evaluation procedures (FGD and SSI) as brief and convenient as possible to minimize disruptions in respondents work process;
2. Ensured that potential participant made an informed decision by informing about the purpose of evaluation and final outcome; explaining the process and duration of interview and/or FGD. The ET also ensured respondents about the confidentiality of the source for obtained information and allow them to retain from answering the questions posed in case they felt uncomfortable to respond;

3. Key informants have been interviewed face to face without presence of other individuals. As for the FGD, to encourage open discussion around the evaluation questions the grouping was applied by avoiding presence of their superiors. The FGDs were held separately for each target beneficiary group.

4. Information was analyzed and findings reported accurately and impartially.
CHAPTER 4: EVALUATION FINDINGS
CHAPTER 4: EVALUATION FINDINGS

4.1 RELEVANCE

This section examines relevance and design of the project interventions to address the perinatal care problems at all levels of health care system and summarizes the information derived from the desk review and key informants interviews. Evaluation findings presented below are structured in a way to provide answers to the questions outlined for the given criterion in the Box 1 and Evaluation Framework.

Box 1: Evaluation Questions

- How the project fits to wider context of MCH in the Kyrgyz Republic?
- To what extent the project objectives and achievements are consistent with the national priorities?
- To what extent the project objectives and achievements are consistent with the MDG4 and MDG5?
- To what extent the project objectives and achievements respond to needs of the service providers and final beneficiaries?
- In what extent the project outcomes address key issues, their underlying causes and challenges?
- What is the appropriateness of the design, are the targets and indicators relevant?
- How has the project been implemented? How does it take into account other projects in the region?

Relevance of UNICEF project to national priorities was evaluated based on following two criteria and results are presented in Figure 1 below: i) Relevance of project-specific objectives to the priorities declared in the national policy documents; and ii) Relevance of project-specific objectives to the priority health problems of the population as evidenced by the available epidemiological data.

DAO PROJECT

This Joint Project, implemented by UNFPA, UNICEF and WHO, aims at reduction of perinatal mortality in the Kyrgyz Republic through enhancement of equitable access to health care services of the poor and vulnerable groups by improving the quality of maternal and newborn care and monitoring data in selected maternity hospitals.

Den Sooluk’s expected maternal health care outcomes:

- To reduce by 10 percent the number of parturient women with severe anemia by 2014 and by 20 percent by 2016
- To reduce by 20 percent the incidence of eclampsia by 2016
- To reduce by 20 percent the incidence of post-partum purulent-septic complications using surgical interventions by 2016
- To reduce by 20 percent the incidence of post-partum hemorrhage using surgical interventions by 2016
- To increase by 10 percent the coverage of women of fertile age using modern family planning methods by 2016
- Reduction of child mortality from respiratory diseases in children under 5 down to 7% by 2016
- Reduction of child mortality from diarrhea in children under 5 down to 7% by 2016
- does it take into account other projects in the region?

The project supports the priorities set out in the Kyrgyz Republic “Den Sooluk” National Health Reform Programme and other national programme documents. The relevance of the DaO project to the national priorities is schematically represented in the Figure 1 below.

The mission of the Den Sooluk Programme is to create conditions that are conducive to the promotion and protection of the health of the population and every single individual regardless of his or her social status or gender. The new reform programme design is based on the continuity of reform outcomes achieved throughout the previous years of reforms as well as on a consideration of the country’s current socio-political context. It’s underlying principles include: People-oriented; Results-oriented; Elimination of systemic barriers to health promotion and Sector Wide Approach (SWAP).
Figure 1: Project relevance to national priorities

**MDG 4 & MDG 5**

- **DEN SOOLUK HEALTH REFORM PROGRAMME**
  - OBJECTIVE: Improve obstetric care through provision of individual services and access to quality health services at all levels of an integrated perinatal care system

- **UNICEF CPAP**
  - OBJECTIVE: An increase in the number of women and children from poor and vulnerable families who have access to priority lifesaving health services

- **NATIONAL PERINATAL CARE STRATEGY**
  - OBJECTIVE #1: Building a multi-level system of perinatal/neonatal care
  - OBJECTIVE #2: Establishment of transportation/counseling system
  - OBJECTIVE #3: Perinatal care quality improvement through improvement of professional knowledge and practical skills of the health professionals
  - OBJECTIVE #4: Development of monitoring and evaluation system (audit) for perinatal/neonatal care quality
  - OBJECTIVE #5: Establishment of differentiated payment system for perinatal care based on different level package of services, depending on risk or severity of a case

- **DaO:**
  - Elaboration, printing and dissemination of clinical guideline
  - Integration of PMTCT into the Perinatal Care system
  - Provision of life-saving basic equipment
  - Training of medical staff at maternities
  - CQ Evaluation, monitoring

- **EQUITY PROJECT**
  - Output 1: Significant increase in child and family welfare among targeted poorest families and communities by increasing access to services
  - Capacity development of medical staff at Maternities and PHC level
  - Community mobilization through Village Health Committees
  - Provision of life-saving basic equipment
  - Improving the infrastructure, such as temperature management, installment of water and sewage systems in health facilities
  - CQ Evaluation, monitoring on EPC/NRT/IMCI at PHC and Hospital Level

- **UNICEF CPAP**
  - OBJECTIVE: Achieve MDG 4 & MDG 5 through institutionalization of the continuous quality improvement of medical services for women and children

- **DaO:**
  - Elaboration, printing and dissemination of clinical guidelines

- **EQUITY PROJECT**
  - Output 1: Significant increase in child and family welfare among targeted poorest families and communities by increasing access to services
  - Capacity development of medical staff at Maternities and PHC level
  - Community mobilization through Village Health Committees
  - Provision of life-saving basic equipment
  - Improving the infrastructure, such as temperature management, installment of water and sewage systems in health facilities
  - CQ Evaluation, monitoring on EPC/NRT/IMCI at PHC and Hospital Level
One of the main goals of the new national reform programme is to further improve obstetric care through provision of individual services and access to quality health services at all levels of an integrated perinatal care system.

Moreover, The Government of the Kyrgyz Republic has made strong commitments on these issues, endorsing in May 2011 the UN Secretary-General's Global Strategy for Women and Children's Health and in July 2012 signing the declaration "Committing To Child Survival: A Promise Renewed". In response, the Programme for improvement of perinatal care in the Kyrgyz Republic for 2008-2017 has been developed in accordance to the national health policy, outlined by the National Health Reform Program of the Kyrgyz Republic Manas Taalimi for 2006-2010 and National Reform Programme 2011-2020 and the National Reproductive Health Strategy of the Kyrgyz Republic until 2015. It is aimed at implementation of commitments on achieving MDG (Millennium Development Goals) in health sector.

The National Perinatal Care Programme (NPCP) aims to: reduce maternal, perinatal, neonatal and infant mortality through improvement of the quality of health care to mothers and newborns with equal opportunities and in all regions of the country. The strategy has five specific objectives:

- Building a multilevel system of perinatal / neonatal care with development of key regulations main on antenatal, perinatal and neonatal care based on effective WHO - endorsed technologies and evidence-based medicine principles;
- Establishment of transportation/counseling system in order to provide qualified counseling at the local level to women in childbirth and newborns, and/or transportation to health care facility, which level correspond the risk or severity of patients' condition;
- Perinatal care quality improvement through improvement of professional knowledge and practical skills of the health professionals, which provide care to pregnant women, and newborns; through improvement of evidence-based under-and post-graduate education system
- Development of monitoring and evaluation system (audit) for perinatal/neonatal care quality
- Establishment of differentiated system of perinatal care funding based different level package of services, depending on severity of a case.

The overall goal of UNICEF’s Country Programme Cooperation (CPC) for years 2010-2016 is to support government and civil society efforts to increase in the number of women and children from poor and vulnerable families who have access to priority lifesaving health services, including those of nutrition. The programme in coordination with development partners continues to support the Government in sector reform within the SWAP. Support to develop the capacity of the Ministry of Health to manage mother and child health services, ensuring that priority lifesaving health services and improved monitoring and evaluation systems are in place is also considered by the program alongside with the integration of PMTCT and pediatric AIDS issues into maternal and child health services. With the Joint United Nations Programme on HIV/AIDS (UNAIDS), the programme supports national policies to increase access of women and children to effective diagnostic, preventive and treatment interventions for HIV. Collaboration will be enhanced with the World Health Organization, United Nations Population Fund, World Bank and United States Agency for International Development.

The current UNICEF’s assistance through two main projects under consideration (DaO, Pose emergency and recovery projects and Equity projects), contributes to the achievement of objectives of NPCP and aims to strengthen the capacity of maternity hospitals with the weakest (a) capacity of medical workers, (b) infrastructure, and (c) compliance to standards; but also with the highest rate of delivery. More specifically UNICEF’s part of DaO project supports three out of five key objective set by the government in the National Perinatal Care Programme for 2008-2017 through following key activities:

- Advocacy for Quality Improvement, organization of local and national round tables, workshops, clinical conferences;
- Trainings for Trainers (ToT) on antenatal care, perinatal care, newborn resuscitation;
- Trainings for medical workers on antenatal and perinatal care, newborn resuscitation;
- Regular monitoring and supervisory visits to health facilities;
- Support for the newborn registration system;
- Procurement of medical supplies, improvement of infrastructure;

In addition to the DaO project described above, the Equity project (2012-2015) was initiated in Osh, Batken and Jalal-Abad provinces after the civic conflict in June 2010. While the DaO project has enhanced perinatal care on the secondary hospital level, the ongoing Equity project operates mainly on the primary health care level. High maternal and newborn mortality rates are being tackled by improving equitable access to health care services through capacity building of medical workers and procurement of lifesaving equipment at the primary health care level, as well as increasing the demand through community mobilization.
4.2 EFFICIENCY
This section of the evaluation report examines whether the program resources have been used efficiently in order to achieve the project results. Namely, the evaluation team carefully assessed all activities implemented and examined them for potential duplication and overlap with the activities funded either nationally and/or by other development partners. In addition, analysis was carried out to conclude whether DaO project outputs justified costs incurred and whether there was more efficient alternative ways and means to deliver better and more outputs with available inputs. And finally the team outlined institutional factors that had an impact for efficient program delivery. More specifically the evaluation provided answers to the questions stipulated in the Box 2.

Box 2: Evaluation Questions
- Were the available resources adequate to meet project needs?
- Were the resources (funds, time, expertise) used in the most economical and simply manner to achieve the results?
- What solutions were efficient? Are there more efficient alternatives?
- Were the planned activities conducted on time?

EFFICIENCY OF RESOURCE ALLOCATION
The UNICEF’s share of the Project total costs for years 2010 -2013 comprised of $1.2 million. The distribution of resources per type of activities shows rational allocation of funds. 33% of total budget was allocated for provision of technical assistance and building strong ownership and regulatory framework for effective implementation of the perinatal care at the national and local levels (Figure 7).

Figure 2: Project Resource Allocation

Training Efficiency
20% of resources were allocated for building human resource capacity in targeted health facilities, thus spending on average USD 256 for training per person with the full package (Effective Perinatal Care, Neonatal Resuscitation, Neonatal care) of training course.

Box 3: Satisfaction with trainings
"The duration of training was enough but we would like to study even more and we are glad that our certificate is recognized and it is considered when we pass examination for upgrading our professional category".

Quotes from Focus Group Discussions

The health personnel trained under the project evaluated the training as highly satisfactory. The medical personnel interviewed in the FGDs rated high the relevance of the training topics to their needs and daily practice, training facilities and environment, trainers knowledge and presentation skills, training materials distributed, balance between theoretical and practical training sessions, duration etc. The only concern expressed by few midwives and nurses was organization of trainings in Kyrgyz language. The language barrier issue was addressed by the project and provided trainings in Kyrgyz language for the medical personnel in Batken oblast.

The Ministry of Health has approved training tools and methods and trainings included lecture material in the form of interactive presentations, small group discussions using audio-visual communication, interactive teaching methods, role-playing and case studies. Monitoring of the knowledge through pre and posttest, questions and answers was used for monitoring of the training process. Based on the pre-post

Box 4: Satisfaction with new training
"We liked when Midwife trainer provided EPC training to us, as we, midwives speak same language and understand each other better. When doctors train us we always think twice before answering the question or acting, while with the midwife trainer we are more open. Midwife trainer shared her own experiences that empowered us to believe that we can also practice in the new way "

"It was great to be trained by multidisciplinary teams of trainers. We, Ob/Gyn, Neonatologist, Midwife, Anesthesiologists, were trained together as team. This helped to create team approach to each delivery, where each team member knows his or her roles and responsibilities"

Quotes from FGDs with Midwives and Physicians
training evaluation more than 70% of trained medical personnel passed the minimum score and received a certificate authorized by the Kyrgyz State Medical Institute of Postgraduate Education.

It is noteworthy to emphasize adjustment of the training delivery strategy/modality during the project implementation. Particularly, the project moved away from the training of doctors separately from midwives and introduced multi-specialty team training where the trainees (doctors and midwives) were put together and trained in team approach. The new training modality – being trained in multidisciplinary teams by a team of multidisciplinary trainers – have been appreciated by the trainees (Box 4), since it helped to better understand team dynamics and distribution of tasks and responsibilities during the service provision. Besides, project also realized the need in training of midwives by midwife trainer and not a physician. As expressed by midwives during the FGDs, this change resulted in satisfaction of health facility workforce (Box 4).

The deployment of acquired knowledge into the practice could have provided good understanding of the training efficiency, measured as “% of trained health personnel who improved their knowledge, practice and attitude” as well as “% of trained personnel who practice new approaches”, nevertheless in the absence of these data the evaluators assessed the training efficiency based on qualitative data. The information collected during the evaluation proved that there is a strong evidence of changed practices. Table 6 demonstrates changes in practice observed during the evaluation. It is remarkable that after the training majority of the health facilities visited reallocated midwives from other units to the delivery rooms by delegating management of normal deliveries to them.

While the trainings prove to be efficient, efficiency is undermined by:

- Lack of enabling environment (availability of equipment, medicines, heating and running water, etc.) in some facilities to practice new skills and deploy new knowledge in the daily work;
- High turnover of trained staff due to the migration and retirement.

Efficiency of Training Funding Mechanism

In the first years of project implementation UNICEF contracted Kyrgyz Association of Obstetricians, Gynecologists and Neonatologists (KAON) for the organization and delivery of trainings to the medical personnel in project-targeted oblasts. While the given approach was beneficial for the empowerment of the professional association, the project staff observed the lack of ownership on part of the health facility management. Thus starting from 2013, the organization and funding modality of training has been changed. Entire responsibility for training organization and logistics have been delegated to the hospitals and funds transferred directly to hospitals based on the budget approved by UNICEF, while payments for trainers fees and DSA of participants remained the responsibility of the KAON. The change in the funding modality resulted in decrease of training costs per person per day by 54% (Figure 8), as well as raising ownership and interest of hospital management in training of medical personnel and provision of support for effective implementation of evidence based approaches.

Figure 3: Comparative analysis of the cost of training per person per day

<table>
<thead>
<tr>
<th>Cost Per Participant</th>
<th>Hospital</th>
<th>NGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Loging DSA</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>Refreshments &amp; Lunch</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>Training Materials &amp; Stationary</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>Program Support Costs</td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

Efficiency of Investments in infrastructure and medical equipment

19% of funds (Figure 7) were devoted for provision of critical life saving medical equipment and improvement of infrastructure. While the needs observed in targeted health facilities are rather more than UNICEF’s allocation of funds, but investments in equipment and infrastructure administered under the project proved its efficiency. Investment decisions were based on careful assessment of needs in selected facilities. The priority was given to funding investments that maximized the impact on improvement of services for mother and children. Furthermore, the procurement of equipment was mostly performed through UNICEF Supply Division at minimum possible costs and of high quality. Selected examples of such investments are:

- CPAPs donated by UNICEF helped the facility to increase premature and sick newborn survival in
Intensive Care Unit (ICU) by 64%.

- Funding of oxygen stations improved oxygen supply to the main maternity departments, thus ensuring continuous oxygen supply for women and children in need and contributed to the increase of survival rates.

- Investments in water supply systems contributed to the improvement of infection control in health facilities;

- Investments in fences and doors of the patient rooms and ICUs contributed to the energy efficiency and maintenance of adequate temperature regime, vitally important for newborn survival and good health. According to interviewed health providers (interviews and FGDs), newborns’ admissions to ICU have more than halved due to preventing newborn hyperthermia, along with reducing birth asphyxia and birth trauma by the EPC approach to delivery attendance. Similar information are reported in the 2012 Narrative Progress Report.

**Efficiency of Investments in regular monitoring and supervision**

12% of the UNICEF’s share of the project budget (Figure 7) was allocated to extensive monitoring and supervision purposes. The project has recognized that monitoring and evaluation are not magic wands that can be waved to make problems disappear, or to cure them, or to miraculously make changes without a lot of hard work being put in by the project. With the regular monitoring the project managed to timely identify problems and their causes and suggested to health facilities possible solutions to problems as well as provide technical support and/or investments in infrastructure and equipment. To maximize the monitoring efforts by avoiding potential conflict of interest (vested interests) and considerable amount of organizational time and human resources, UNICEF engaged national and local experts and promoted involvement of the key specialists from different maternity in monitoring of health facilities.

While regular monitoring visits were a powerful tool to trace the changes in the quality of service delivery and recommendations were discussed with the facility administration, it’s efficiency could have been maximized by building facility based capacity in self-monitoring, using same monitoring tools and tracking progress against set targets. The monitoring reports reviewed by the ET lacked a comparison of changes between monitoring visits as well as recommendations provided were not tied to measurable process indicators and timelines.

**Box 5: Quotes on Monitoring and Supervision**

“We understand the importance of the monitoring visits, but they are still treated by most of us as controlling efforts by the MOH, while the supervision missions gives us possibility to better see deficiencies in service provision as well as teach how to practice better. We would welcome more frequent supervision and less monitoring visits”.

Quotes from FGDs with Midwives and Physicians

Apart from monitoring, the project promoted periodic supervision missions to the target health facilities (Box 5), which implied experts’ visits to the health facilities for one to two weeks and provision of on-job training to the health personnel. Based on the observations, supervisors identified shortcomings in service provision and during the week trained and assisted health personnel how to improve and built their knowledge and developed practical skills. The increased number of spinal anesthesia in caesarian section cases is among the results of this supervisory/coaching activity. As in case of monitoring, efficiency of supervision activities could also have been maximized if the measurable and time-bound indicators of change were set and measured before and after the supervision/mentoring mission with the facility administration and health personnel individually and compared later during the follow-up supervision mission.

**PROJECT STAFFING**

The overall staffing of the Health and Nutrition section has been reviewed by the ET and is presented in the Figure 9. It is notable that there is strong cooperation, coordination, communication and division of tasks between staff members of the health section. While the implementation of DaO project was mainly delegated to one Health & Nutrition Officer at Bishkek office overseeing the implementation with assistance from the National Consultant, the entire team is well on top of all developments, shortcomings, challenges faced during the project implementation as well as collectively addressed design of alternative corrective measures for assurance of timely and effective implementation and rational use of available resources.

The existence of decentralized Zonal Office (ZO) in Osh oblast makes a very positive contribution to the greater efficiency of the overall UNICEF programme by ensuring complementarity of activities targeted under different projects and especially for implementation of DaO and Equity projects.

This modality allowed UNICEF staff to maintain permanent contact with local authorities and with a variety of actors and stakeholders. In particular, decen-
Evaluation of UNICEF Programme on Perinatal Care for the period 2010 – 2013

TRIALIZATION helped to speed up the information flow from the national level to the oblast and municipal institutions and vice versa. Availability of professional staff in ZO also contributed to a greater efficiency in the flow of information, provision of technical support and continuous advocacy to local authorities and health facilities, along with implementation and monitoring of activities on ground. In particular, monitoring visits to health facilities and local counterparts within the frame of the Equity and/or other projects, allowed early identification of problems faced by the hospitals and maternity wards as well as problems mostly affecting the DaO project outcomes and ensured prompt and adequate response without waiting for the next scheduled Monitoring visit.

CHANGES AND DELAYS IN PROGRAM IMPLEMENTATION
No particular delays have been observed during project implementation other than of political unrest in 2010 in southern part of the country. Due to these events, UNICEF’s main focus was shifted towards meeting immediate needs, thus causing delays in mid-term evaluation of the project and in change of the training plan. Nevertheless these delays did not affect the final outcomes of the project.

BUDGET EXECUTION
The ET carefully reviewed the budget execution for the period of 2010-2013. It is notable that UNICEF managed to achieve almost 100% budget execution rates per each year of project implementation with minor reallocations between different budget lines mostly in favor of monitoring and supervision activities and purchase of equipment. Reallocation proposals were reviewed and approved by the MoH.

COORDINATION
UNICEF is a leading agency of MCH sector in the country and managed to establish effective collaboration modalities with other government and development players in the sector. UNICEF leadership jointly with MoH resulted in:

- The DaO project contributed to increasing the United Nations impact, effectiveness and efficiency by delivering in a coordinated and coherent way while at the same time reducing transaction costs for the Government and the United Nations by taking advantage of the strength and comparative advantages of the different United Nations agencies (WHO, UNFPA and UNICEF), funds and programmes. The Government supports and values the DaO initiative as it improved coordination and consolidation of its National Perinatal Care Programme with the United Nations.

- The World Bank global evaluation conducted in five countries in 2009 highlighted the Kyrgyzstan experience in implementing a sector-wide approach (SWAP) in the health sector as being among the most successful worldwide. The SWAP 2010 Joint Annual Review highlighted the strategic role of UNICEF in the process, especially through the integration of maternal and child health as a priority in sector reform; successful advocacy for allocation of funds to maternal and child health.

- Geographical distribution of development aid and close collaborations in support of NPCP ensured complimenting different activities of UN and other development partners’ (USAID, GIZ, SDA, etc.) work. Good example is building of the perinatal centers in Osh, Batken and Jalalabad (WB, KFW). Within the framework of the program “Help babies breathing” (HBB) UNICEF jointly with the MoH, GIZ and charity LDS, supported building capacity of 14 medical colleges in Osh, Batken, Jalal-Abad, Naryn and Talas through pooling resources together with other partners and financing training of trainers in these institutions.

- Apart from geographical distribution of development aid, UNICEF, as a lead agency in MCH sector ensured effective utilization of strength and cooperative advantages of developing partners. While WHO mainly provided technical expertise and contributed towards development of the NPCP, national training guidelines and protocols and developed internationally accredited pool of nation trainers in EPC, UNICEF supported printing and distribution of the clinical guidelines and protocols as well as expanded a pool of master trainers as well as trained workforce in project targeted areas. Whereas UNICEF’s support mainly concentrated on hospital sector, UNFPA targeted

Figure 4: Project Staffing
raising public awareness and education of women and their partners in PC related issues through establishment of “Birth Preparedness Schools” at the PHC level.

• Capitalizing on already built capacity in the country is another good example of efficient use of resources. Namely, UNICEF’s Equity Project has effectively used the system of Village Health Committees, built with the SDA support. This system is used for monitoring blood pressure of pregnant women in rural areas, teaching them about danger signs of pregnancy and after delivery, monitors iodine concentration in salt at household level, provides nutrition advices and distributes nutritional supplements. The Equity Project invested in building adequate capacity of VHCs members and equipped them with job aids.

• UNICEF supported development and implementation of national policies to increase access of women and children to effective diagnostic, preventive and treatment interventions for HIV through integration of PMTCT into EPC programme.

• UNICEF provided support and assisted the MoH in organization of round tables with wide participation of developing partners and the MoH representatives to assess the implementation progress of “Access of women of reproductive age and infants to quality health care”. Supported the round table discussion on the evaluation of the quality of hospital care for mothers and newborns and pre-natal and post-natal care in primary care proposal, etc.

• The civic unrest of June 2010 and subsequent inter-agency rapid needs assessments on health and nutrition, and water and sanitation revealed a number of pressing issues. These included a poor water, sanitation and hygiene facilities in health centres. Emergency interventions were mainstreamed and consolidated to address outstanding needs.

4.3 EFFECTIVENESS

This section focuses on the evaluation of the project effectiveness by looking at achievement of the planned outputs in a given timeframe and how they contributed towards achievement of the DaO and National Perinatal Program outcomes.

In order to assess project performance on effectiveness, the ET carefully assessed effectiveness of each intervention implemented under the project; achievement of project results; monitoring, evaluation and accountability systems; lessons learned and their incorporation in implementation process, as well as project contribution towards the policy and practice change in the country.

To date UNICEF’s part of DaO project activities were focused on hospitals in the most vulnerable rayons. Activities implemented within the frame of the project were:

• To improve the capacity of health care providers at Hospitals with maternity wards in the implementation of perinatal care (PC) through theoretical and practical trainings, as well as monitoring and supervision. There is an extensive network of FAPs throughout rural areas in the southern regions of Kyrgyzstan and most of primary health care workforce was not covered with trainings on ANC within the DaO project, therefore to fill this gap UNICEF initiated trainings for this group of providers under the “Equity” project.

Box 6: Evaluation Questions

• To what extent the project succeeded to reach its targets and goals?
• What were the main enabling/hindering factors in achieving the targets and goals?
• How the project supported national priorities in MCH?
• How the project strengthened the national and sub-national capacities, the local administration was strengthened, empowered?
• How the project improved the capacity of service providers in line with evidence-based WHO standards?
• How the project changed medical or administrative practices of service providers?
• How the project changed health outcomes of beneficiaries?
• How the project changed seek for care among beneficiaries? Any barriers removed?
• How many stakeholders benefitted from interventions in the region?
• What was the contribution of the project to improvement of the quality of care in perinatal care?
• What was the contribution of the project to improvement of the rational use of resources (e.g. optimization of wards, reduced use of unnecessary medication, treatment, hospitalization)?
• In what extent the monitoring and evaluation system was in place? How was monitoring used for further planning and adjustment of the project?
• The DaO project also supported **improvement of the quality of infrastructure** in order to improve the quality of medical services provided to women during pregnancy and delivery. The customized assistance has been provided to maternity wards. To name a few, assistance varied from provision of equipment to minor renovations, setting up the water supply and improving oxygen supply systems. According to the monitoring results, FGP s and FAP s still lack about 20 % of the standard basic medical equipment and supplies, including tonometer for measuring blood pressure and stethoscopes for listening to a fetus’ heartbeat.

• **Supportive counseling for parents strengthened family knowledge, helped women to correctly prepare for delivery and enhanced trust in health personnel** where the birth preparedness schools were set up. These schools provide essential services such as counseling clients on danger signs during pregnancy, delivery plans, involved partners and family members, and provided counseling on postpartum family planning. The establishment of birth preparedness schools intended prevention of complications at early stage of pregnancy and to give the opportunity to mothers with families to seek appropriate treatment. Due to the limited budget only seven birth preparedness schools were established under the project. Although the measurable effectiveness of the given investment is difficult to assess due to the limited coverage, according to women surveyed it facilitated institutionalization of the vertical delivery and prepared partners to assist women during deliveries.

• To fill the gap in family knowledge, the Equity Project has been used to **increase targeting of the population through using a volunteer structure** established at the village level through the Kyrgyz- -Swiss- Swedish Health Sector Reform project. Specifically, Village Health Committees (VHC) have been supported with training and basic supplies to regularly measure the blood pressure of pregnant women and deliver information about the state guaranteed basic services as well as inform women and their families on pregnancy related issues.

The coherence and complementarity of these two projects (DaO and Equity) produced the following results:

**The project supported the strengthening of national and sub-national capacities**

National clinical guidelines developed, approved and practiced, which constitutes significant progress compared to the past. Within the framework of the joint project, a number of technical guidelines in maternal, child and neonatal health were developed and approved by the Ministry of Health in 2011 with the support from UNICEF and other developing partners. To address weaknesses in the management of Emergency Obstetric Care (EmOC), the training materials have been developed and will be approved by first quarter of the 2014. It has to be acknowledged that MOH demonstrates full ownership of this process. The process of evidence based guideline development, is led by the Evidence Based Medicine Department (EBMD) of the MOH and involves multidisciplinary team of experts from research and education institutions, professional associations and national trainers. WHO international experts review final products and provide comments and recommendations. The MOH Decree legalizes final approved documents.

**National and Regional Training Capacity built.** New training materials were developed in maternal and newborn care and integrated into the Kyrgyz State Continuous Medical Training Institute (KSCMTI). This has contributed to greater capacity at provincial level and increased coverage of health and services for women and children. The training of master trainers has been supported collaboratively by WHO, UNICEF, UNFPA, GIZ, USAID and utilized for building human resource capacity at targeted health facilities.

Two oblast level training centers have been established (in Osh at the Osh provincial maternity hospital and in Bishkek at the National Center for Mother and Child Health). These centers were equipped with the necessary IT equipment, furniture, and literature, manikins. A series of training events related to perinatal care have been organized at these training centers (Effective Perinatal Care, Primary Newborn Resuscitation, Integration of Prevention of Mother to Child Transmission of HIV into Effective Perinatal Care, Implementation of the Law on Support Breastfeeding and regulate Breast Milk Substitutes, Infection Control and etc.). For today more than 88 per cent of medical staff working in provision of perinatal services have been trained.

Moreover, the capacity of National Trainers is widely deployed in monitoring and supervision visits to the facilities in project-targeted regions. The “Help Babies Breath” training was first introduced in medical colleges for nurses and midwives and master trainers trained. While new PC strategies are well integrated in the post-diploma education curricula, pre-service training curricula still remains to be revised.

**Quality of Service has been addressed at the national level.** The MoH introduced the Service Quality and Pharmaceutical Policy Department in the orga-
nizational structure of the Ministry of Health in 2013. Although the structure is not yet fully operational, it is believed that this department will play an important role in continuous quality improvement of services in general and perinatal services in particular.

To fill the gap until there is a fully operational dedicated structure of continuous quality improvement, the UNICEF financed regular monitoring of the perinatal service quality through the project by involving international, national and local specialists in respective service areas. The tools used for such monitoring visits are based on WHO quality assessment tools for ANC and hospital services and adapted. All developing partners working in different parts of the country use these tools. The findings of the quality monitoring missions and follow-up actions are discussed with the management and staff of assessed facilities.

Accreditation of medical facilities introduced. The mandatory accreditation of medical facilities has been introduced in Kyrgyzstan with support of GIZ. The accreditation methodology and standards were developed with the assistance of the international partners, training of heads of medical staff completed and piloting of the accreditation initiated. The accreditation assessment (self-assessment and external assessment) tools reflect all EPC elements. Two facilities visited completed the accreditation process recently.

The project supported institutionalization of Newborn and Maternal Registers. In order to improve quality and completeness of data collection on maternal, newborn and children under one year of age, as well as to monitor effectiveness of PC Program in the republic, an individualized database “Register of Newborns, Maternal and Infant Mortality” has been launched, which would allow policy makers to make evidence based decisions. Based on the evaluation findings, the system will further benefit from improved record keeping and recording.

Maternal and Infant Mortality Commissions established at national and sub-national levels but mostly serve as a punitive structure. A deceive steps have been put forward for introduction of the maternal and infant mortality commissions at national and oblast levels, that reviews each mortality case as well as mortality notification system by the government. Paper based information about mortality cases is submitted to the oblast level within 24 hours, as well as to the National Medical Statistics Department of the MoH by the facilities. The national commission recently completed the confidential enquiry of maternal death for the years 2011 and 2012 and the results were presented and discussed with the head doctors of all hospitals in the country.

While the system seems to function, its punitive nature (Box 7) undermines the purpose and effectiveness of this structure. The ET witnessed a case when the oblast level commission held the discussion of the maternal mortality case in the visited facility, though the ET members were not allowed to attend the meeting. On another occasion the ET team had to support the Hospital director when the Prosecutor from Oblast Prosecutor’s Office was enquiring reasons for neonatal deaths.

Box 7: Fear of Mortality Cases

“We are afraid of each mortality case, as we may lose our job”

Quote from Head Doctors Interviews and Physician’s FDGs.

Statistical Forms reflecting PC indicators desires perfection. Substantial improvement of the monthly statistical form #14 has been observed by the ET, however there is a considerable space for further improvement of data collection and analysis by integration of the quantitative PC service quality indicators with adequate disaggregation. The latter will enable policy makers to routinely collect wider range of data and plan informed strategic interventions in the system.

Box 8: PC funding requires revision

“Though case rates for deliveries are higher of any other services, they are less than actual costs of services. Moreover, the case rates do not reflect the new approaches of EPC, thus requires revision.”

Quote from Interview with Oblast MHIF Director’s

Financing of the PC services requires improvement – In order to improve PC in the country and provide equal access to women and children to quality services, the government introduced case based financing of PC services at in-patient care and per capita funding for primary care services including the antenatal and postnatal care without co-payments. While this demonstrates government ownership and attempt to ensure financial accessibility to quality perinatal services, according to the MHIF representative interviewed, PC service case rates do not correspond to the actual costs of services and requires revision.

Building MHIF staff capacity in application of EPC guidelines and protocols resulted in decrease of financial penalties of providers. The monthly reimbursement of facilities by MHIF based on the number and case mix is practiced without significant delays. However providers interviewed highlighted lack of knowledge and awareness of MHIF staff in new protocols and referral algorithms resulting in issuance of financial penalties during by-annual case reviews.
UNICEF was instrumental in addressing this issue in 2013 in Osh Oblast. A joint, MHIF and Facility Management team, practical training course was organized that improved knowledge and understanding of the EPC strategies and approaches. The first signs of improved case revisions and claims adjudication have been observed in Osh Inter-territorial Hospital, where financial penalties introduced to the maternity department decreased by 70% compared to previous year.

**The DaO project supported integration of PMTCT into EPC in Osh Oblast** – The integration of PMTCT into EPC strategy was piloted in Osh Oblast with UNICEF’s support. If in past VCT and ARV treatment was concentrated in the Oblast AIDS Centers, at present these services are decentralized to the rayon level Family Medicine Centers that brings services closer to those in need. The given approach already shows positive results. Number of pregnant women tested at PHC level during pregnancy is increasing, judged by the decreasing trend in number of rapid tests administered at maternities during delivery (Table 3). It is notable that all maternities visited possessed ART medicines and tests were readily available for women and children.

**Medical and Administrative Practices, alongside with service quality improvement and rational use of resources are evident, but room for improvements yet remain**

The Managers are satisfied with introduction of EPC that helped to change administrative practices. The Head doctors of maternity homes interviewed were all satisfied with the introduction of EPC, but find difficult to provide justification for their satisfaction. However, the Director of the Territorial Hospital in Kara Suu, was very articulate naming different arguments in support of his satisfaction.

- Firstly, the institutionalization of EPC helped him to understand the different approach of service organization, which he applied to other departments too.
- Secondly, the EPC helped to decrease expenditure on medicines and allocation of more funds to the consumables and infection control materials and supplies.
- Thirdly, decrease of complications consequent-ly shortened the average length of stay (from 5 days in 2010 to 3.3 days in 2013) and lowered expenditures on treating complicated cases and staff salaries.

**Table 1: Use of Internal revenues by Territorial Hospital**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation</td>
<td>104,539</td>
<td>50,600</td>
<td>1,123,048</td>
<td>1,211,827</td>
</tr>
<tr>
<td>Inventory</td>
<td></td>
<td>768,637</td>
<td>40,580</td>
<td>873,500</td>
</tr>
<tr>
<td>Total</td>
<td>106,549</td>
<td>821,248</td>
<td>1,165,640</td>
<td>2,087,340</td>
</tr>
</tbody>
</table>

**In summary introduction of EPC helped the hospital to save money that could have been used for improvement of infrastructure (Table 3, Box 9), purchase of medical equipment and ensure adequate supply of basic lifesaving medicines and supplies for maternity department. As a result of EPC introduction the Hospital Management was able to increase the investments on renovation and equipment procurement for maternity department from 106,549 SOM in 2010 to 2,087,340 SOM in 2013 (Table 1).**

**Box 9: EPC helped to save money**

“EPC helped to purchase more equipment. When UNICEF provided Baby Heater Matrasses, I bought more to ensure adequate number”

Quote from Interview with Hospital Director

Another good example is from Kyzilkya maternity ward where the hospital management prioritized maternity department and managed to improve the quality of care after introduction of the EPC through renovation of the building, purchase of basic equipment and ensure uninterrupted supply of medicines and medical supplies.

**Figure 5: Expenditure on medicines and equipment in 2010-2012 at Kyzyl kyy maternity ward**

**Table 3:**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUIPMENT</td>
<td>1,509,900</td>
<td>1,902,401</td>
<td>635,490</td>
<td></td>
</tr>
<tr>
<td>MEDICINES</td>
<td>2,371,027</td>
<td>167,000</td>
<td>2,778,100</td>
<td></td>
</tr>
</tbody>
</table>

In summary introduction of EPC helped the hospital to save money that could have been used for improvement of infrastructure (Table 3, Box 9), purchase of medical equipment and ensure adequate supply of basic lifesaving medicines and supplies for maternity department. As a result of EPC introduction the Hospital Management was able to increase the investments on renovation and equipment procurement for maternity department from 106,549 SOM in 2010 to 2,087,340 SOM in 2013 (Table 1).
The first training in EPC was conducted in 2010. The Figure 4 shows increase in expenditures for maternity ward. While the expenditure on medicines in 2011 increased almost three times compared to 2010, two-fold increase is demonstrated in 2012 compared to the baseline year. The given trend clearly shows that right after the training in 2010 the management ensured availability of medicines by increasing share of budget spent on medicines from 6% to 15%, while after the second training in 2011, the implementation of EPC resulted in rational use of medicines, thus the expenditure on medicines as share of the total budget decreased from 15% to 8% in 2012. There is a enormous increase in expenditure on equipment. It changed from 2% of the total budget in 2010 up to 12% in 2012.

The evaluation team attempted to collect and analyze some indicators that can measure effectiveness of the perinatal care programme on organization and quality of medical practices in visited health facilities. The comparative analysis of quantitative indicators provided in the Table 4, and collected qualitative data revealed the following trends:

There is a proven evidence of functional regionalization system, however criteria for the referral and transportation system are deficient. The data collected from each level of perinatal services demonstrates increase in number of deliveries and referrals to the tertiary and secondary level maternities (Table 4). Premature and deliveries with less than 2500 grams as well as newborns requiring qualified treatment at ICU departments are mostly referred from the first level maternities to the higher levels. Operationalization of referral system resulted in decrease of Early Neonatal Mortality (ENM) and Neonatal Mortality (NMR) at first and tertiary level maternities;

While these data shows a positive trend it has to be treated with caution. Key informants from the secondary and tertiary level maternities perceive that women are referred to these facilities without strong justification for referral. The fear for being punished if the women die mainly influences this practice. Furthermore, there are cases when FMC refers the pregnant women with diagnosis, which are not supported by parameters and symptoms.

Rapid increase and uncontrolled referrals results in overutilization of high technology maternity beds and negatively affects the service quality. Unfortunately the ET was not able to obtain information on the share of unjustified referrals, as measuring this indicator is not in the interest of respective medical institutions due to the vested interest in generating more revenues from MHIF. Based on the information provided by the key informant from MHIF, unjustified referrals are not considered during adjudication of claims from these institutions.

### Table 2: Change (%) of selected indicators between 2010-2012

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Osh Inter-territorial Hospital*</th>
<th>Osh City Hospital, Perinatal Center**</th>
<th>Batken Oblast Hospital</th>
<th>Karasu Territorial Hospital</th>
<th>Kysilkya Territorial Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>III Level</td>
<td>II Level</td>
<td>II Level</td>
<td>I Level</td>
<td>I Level</td>
</tr>
<tr>
<td>% of change 2010-2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total # of Deliveries</td>
<td>33%</td>
<td>62%</td>
<td>8%</td>
<td>-1%</td>
<td>-19%</td>
</tr>
<tr>
<td>Premature Deliveries</td>
<td>11%</td>
<td>7%</td>
<td>118%</td>
<td>-28%</td>
<td>-26%</td>
</tr>
<tr>
<td># Life birth less than 2500 gr</td>
<td>10%</td>
<td>52%</td>
<td>13%</td>
<td>-32%</td>
<td>-46%</td>
</tr>
<tr>
<td># Newborns transferred to ICU</td>
<td>49%</td>
<td>46%</td>
<td>-47%</td>
<td>-69%</td>
<td>-62%</td>
</tr>
<tr>
<td>ENM</td>
<td>-11%</td>
<td>23%</td>
<td>-8%</td>
<td>-46%</td>
<td>-24%</td>
</tr>
<tr>
<td>PMR</td>
<td>-8%</td>
<td>14%</td>
<td>-3%</td>
<td>-38%</td>
<td>-16%</td>
</tr>
<tr>
<td>Stillbirth</td>
<td>-8%</td>
<td>4%</td>
<td>5%</td>
<td>-30%</td>
<td>-2%</td>
</tr>
<tr>
<td>Pre-eclampsia</td>
<td>19%</td>
<td>26%</td>
<td>33%</td>
<td>-73%</td>
<td>-49%</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>-21%</td>
<td>43%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td># Women transferred to higher level</td>
<td>0%</td>
<td>100%</td>
<td>50%</td>
<td>1150%</td>
<td>126%</td>
</tr>
<tr>
<td># Newborns transferred to higher level</td>
<td>1%</td>
<td>0%</td>
<td>400%</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Highest referral center for women; **Highest referral center for newborns

Nonetheless, key informants highlighted inadequate operation of emergency transportation system for high risks women and newborns being an important obstacle to programme effectiveness (Box 10). In some cases there is only one professional emergency ambulance vehicle fully or partially equipped with necessary equipment and oxygen or an old soviet style ambulance car without heating and necessary equipment.
Improved teamwork and organization of workplace is evident. The implementation of EPC requires coordinated action from the team of professionals. This aspect of the EPC approach has been highly appreciated by staff at all levels who understood the importance of the coordinated action and EPC trainings and protocols equipped them with the means to deploy teamwork in the practice. Another contributing factor for improved teamwork being named by the key informants is improved organization of workplace and availability of emergency kits for mothers and newborns, however the emergency kits are not always complete and/or contain medicines not included in national protocol.

Insufficient and/or inappropriate distribution of human resources, migration of trained personnel to other countries, being the general pattern in the health sector in Kyrgyzstan, alongside with inflow of poorly trained young professionals emphasizes the importance of refreshment trainings and continuous professional development needs.

Examination of age structure of the tertiary level maternity, visited by the evaluation team, revealed 16% of medical personnel being pensioners, 7% of retirement age and 20% newly graduated. Whereas the average age staff observed in other facilities represents about 30-35 years, mostly due to the young generation. 65% of medical staff in the maternity ward in Kyzyl Kia are young professionals. Though the rejuvenation of medical workforce is welcomed, key informants questioned the quality of pre and post diploma education and readiness of young professionals for independent practice.

The managers of all facilities visited stressed humble basic medical education of newly graduates. In response to this challenge, the management assigned more senior and well-trained individuals to train new comers and equip them with knowledge and required skill set. Staff believes, that results of EPC could have been better if not the shortage of experienced and trained staff in modern approaches.

Internal training courses are organized for young specialists in most of the facilities visited. In order to fill the knowledge gap, heads of the maternity wards initiated internal training courses, where more experienced and senior staff regularly provides trainings to the young professionals.

Results of the new approaches to delivery management are further undermined by demoralization of personnel with widely practiced punitive admin-
Administrative measures. Administrative sanctions and financial penalties is a common practice in the sector practiced by supervising / controlling institutions as well as by facility management.

Financial motivations introduced and practiced in the health care system hardly serve the purpose and informal payments underline different behaviors. The monthly bonus pay introduced by the MOH and paid by MHIF, allocates funds to the facilities based on the criteria that do not contribute to the improvement of the service quality. Frequently the bonus pay is used to pay MHIF penalties by the management thus leaving limited amount for staff motivation. Departments and/or individuals having administrative sanctions are penalized and do not receive bonuses. Those who receive, see a little value of such bonuses, as it may no receive more than 5-30 USD depending on the position person occupies. Informal payments appear to be a common practice. Women in FGDS were hesitant to name a sum paid for delivery, but confirmed that relatives always take care payment.

Box 12: Attempts to changed motivation system

“We made an effort to change the motivation system. We believe, that punitive measures create fear in staff, pushes them to hide problems and manipulate. Thus we promote staff motivation by providing incentives and acknowledging good performance. When performance is poor we try to provide training, analyze the reasons of such performance and provide assistance”.

Quote form key informant interview

UNICEF supported equipment improved maternal and newborn survival. While UNICEF supported equipment, emergency kits and other supplies proved to be effective, availability of functional basic medical equipment, medicines and consumables requires improvement.

The statistical data analyzed in one of the secondary level maternity shows how availability of basic equipment affects service outcomes. UNICEF supported CPAP equipment helped the facility to increase newborn survival from 20% to 64%. The Head of secondary level maternity in Osh was extremely grateful of UNICEF’s assistance in renovation and provision of required equipment for the oxygen station that ensured uninterrupted supply of oxygen to five key units of the maternity. Although most of the facilities targeted under the project received substantial support from UNICEF and other partners, if equipment needs are not addressed it will undermine achievement of desired outcomes and impact.

Difficulties in equipment maintenance and repair have been named as another impeding factor by most of the facility heads interviewed. When funds for equipment maintenance and repair are made available, the country experiences shortage of qualified medical engineers and spare parts.

Introduction of the EPC programme resulted in savings. According to the Head Doctor of the tertiary maternity home, within one year they managed to decrease expenditures on medicines by 27% mostly by discontinuation of prescribing antibiotics and IV transfusions (Table 1).

While effective and efficient use of medicines was named by all facilities visited as one of the benefits of the EPC programme and allowing facilities to improve continuous supply of medicines and consumables, shortages and stock-outs still remains to be evident. There are cases where facilities experience stock out of medicines and consumables for 2-3 months. A combination of different factors appears to impede continuous supply effecting quality of care and shifting financial burden to the patients. Namely:

- Quarterly procurement practiced by the hospital managements and length of the procurement process was most frequent problem mentioned during interviews. Though some more proactive managers addressed this issue by increasing of quarterly needs estimation, thus minimizing stock-out of medicines and consumables.
- Inadequate allocation of financial resources for the procurement of medicines and consumables was another revealing factor named by key stakeholders. Maternity departments are mostly structural units of the city, territorial and oblast hospital. Often revenues mobilized by these units are used to cross subsidize other expenditure categories of the hospital, thus leaving limited funds for the procurement of medicines and consumables.
- Difficulty in needs estimation is another challenge faced by the management. The introduction of referral system under the regionalization programme of the perinatal services resulted in unpredictable increase of number of deliveries and case mix. Historical budgeting and planning practiced by these facilities often results in underestimation of needs.

Although needs estimation and procurement planning still remains a challenge to be addressed, a step forward has already been taken by the management of the hospitals. In order to ensure transparency, the heads of the maternity wards have been included in the procurement commission. The latter is believed will allow maternities to improve allocation of resources for the procurement of medicines and supplies.
Poor diagnostics and laboratory capabilities were named as an impediment for the provision of the quality services. As an example, as Viral Load testing for HIV positive women is not performed in the oblast Aids Center, according to the guidelines C-sections are performed thus eventually contributing to the increase of the C-section rates. The quality of the laboratory test is often questioned by the physicians.

Service Quality improved, though still remains insufficient

Partner deliveries and Vertical deliveries alongside with rooming in and exclusive breastfeeding are widely practiced. Vertical and partner deliveries are widely practiced almost at all levels of perinatal care, though mother mostly attends deliveries in laws and rarely by husbands. Nonetheless, partner assisted deliveries are not utilized at full potential as partners lack the guidance on their role during delivery.

The ET observed two cases when after C-section the first skin-to-skin contact was performed with the partner. Mothers are encouraged to take care of their babies. The “Mother Checklist” is institutionalized, when mother has to record regularly newborn’s temperature, stool, regurgitation, feeding etc. on a checklist. While this initiative is highly valued, the lack of mother’s awareness on the importance of the checklist as well as poor monitoring of these vital signs from medical personnel undermines the effectiveness of the initiative.

Introduction of EPC ensued decrease of complications and share of unjustified C-sections. The Table 3 demonstrates substantial decrease (27%) in the cases of hemorrhage, complications (4%) during and after delivery and medically unjustified C-sections (23%). While the positive trend in number of complications is evident, MMR demonstrates an increasing trend mostly explained by delays in referrals of high-risk group women.

Introduction of Neonatal Resuscitation Training (NR) resulted in decreasing trend of Early Neonatal Mortality (ENM). While ENM is reducing (18%), increase (15%) is observed in Neonatal Mortality Rate (NMR) mostly due to the substantial increase of recorded stillbirth cases (93%) out of which more than a half is prior to labor. The latter indicates the poorly recognized, untreated or inadequately treated maternal conditions including hypertensive disorders and infections during antenatal period. The comparison between 2010 and 2013 medical records (patients admitted to maternity hospitals) showed that in 2013 there is still an over/miss-diagnosis of pre-eclampsia and pyelonephritis; and the management of pre-eclampsia, hypertension in pregnancy and pyelonephritis is still poor and not always conforming to the national protocol.

Table 3: Change in selected indicators between 2011-2012 at Tertiary Level Maternity Department (TLM)

<table>
<thead>
<tr>
<th>TERTIARY LEVEL MATERNITY</th>
<th>2011-2012 Change</th>
</tr>
</thead>
<tbody>
<tr>
<td># Deliveries</td>
<td>54% †</td>
</tr>
<tr>
<td># Referred cases</td>
<td>56% †</td>
</tr>
<tr>
<td>% Complications</td>
<td>-4% †</td>
</tr>
<tr>
<td>% Hemorrhage</td>
<td>-27% †</td>
</tr>
<tr>
<td>Preeclampsia</td>
<td>9% †</td>
</tr>
<tr>
<td>Extra genital pathologies</td>
<td>63% †</td>
</tr>
<tr>
<td>C-sections (%)</td>
<td>2% †</td>
</tr>
<tr>
<td>Medically unjustified C-Sections (%)</td>
<td>-23% †</td>
</tr>
<tr>
<td>MMR</td>
<td>73% †</td>
</tr>
<tr>
<td>ENM</td>
<td>-18% †</td>
</tr>
<tr>
<td>NM</td>
<td>15% †</td>
</tr>
<tr>
<td>NM Due to the still-birth</td>
<td>93% †</td>
</tr>
<tr>
<td>ALOS</td>
<td>-6% †</td>
</tr>
<tr>
<td>Expenditure on drugs</td>
<td>-27% †</td>
</tr>
<tr>
<td>Partner delivery</td>
<td>16% †</td>
</tr>
<tr>
<td>Fines MHIF</td>
<td>-70% †</td>
</tr>
<tr>
<td>San/Epid station</td>
<td>-50% †</td>
</tr>
<tr>
<td>Vertical delivery</td>
<td>30% †</td>
</tr>
<tr>
<td>Rapid Testing on HIV</td>
<td>-30% †</td>
</tr>
</tbody>
</table>

Decrease of number of sick newborns - Decrease of number of sick newborns was another benefit named by key informants due to the less cases of asphyxia, birth trauma and hypothermia since the introduction of EPC. Controlling newborn hypothermia was a huge breakthrough for most of the health professionals as before, nobody considered the importance of the newborn body temperature. The thermal protection of the newborn is now assured by a chain of measures, which involve the newborn (immediately dried

Box 13: Satisfaction with partner delivery

“After my husband attended delivery of our child, we feel that our family ties became stronger”…

“This is a great experience. It is wonderful to have your child next to you. I compare my previous delivery when I was separated from my baby and I was scared…”

“I was so glad to be allowed to see and sit next to my child as many time as I wanted despite the fact that she was in the neonatal intensive care unit”…

Quotes from FGD with mothers
and covered; skin-to-skin contact with the mother; etc.) and environment (optimal room temperature of delivery and admission rooms). Births asphyxia cases, as well as birth trauma, have been reduced due to the current "waiting" approach for normal deliveries. Therefore, improved management of deliveries, prevention of the distress syndrome with Dexamethasone, dry open management of umbilical cord, rooming in, breastfeeding has been noted as factors contributing to decrease of newborn complications and increase of survival.

Decrease of ALOS – decrease of average length of stay has been named as one of the benefits of EPC programme introduced at each level of perinatal care. The review of the statistical data of facilities visited, revealed decrease of ALOS for delivery wards on average from 5 days to 3.5 days.

Changes in service organization and quality assurance practices are evident but still deficient. Facility Service Quality Commissions established and functioning though need to be strengthened. According to the Governmental and MoH Decrees facilities have formed Service Quality Commissions represented by the head of the maternity, chief midwife, heads of units and nurse representatives. The commission performs monitoring of the service quality on a quarterly basis and prepares reports on the findings. Based on the revealed weaknesses, identifies areas for improvement and assigns responsible staff member and the latter provides periodic training, explanations to the staff as well as monitors progress.

Table 4: Results of the QC Clinical Audits at PHC level (2012-2013)

<table>
<thead>
<tr>
<th>Deficiencies</th>
<th>% of Change (2012-2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Medical Cards with deficiencies</td>
<td>14%</td>
</tr>
<tr>
<td>% of non-compliance with supervision protocols</td>
<td>17%</td>
</tr>
<tr>
<td>% of non-compliance with treatment protocols</td>
<td>9%</td>
</tr>
<tr>
<td>% of delays in immunization of children_U5</td>
<td>-35%</td>
</tr>
<tr>
<td>% of un-justified referrals</td>
<td>21%</td>
</tr>
<tr>
<td>% Post-hospitalization patronage</td>
<td>56%</td>
</tr>
<tr>
<td>% of prescription under SDBP</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Data From FMC, Batken

A good example was observed in one secondary level maternity where the hand washing as part of the infection control measures have been defined as priority area for improvement. The responsible individual developed an observation check lists on sanitation and hand washing. Chief midwife/nurse in each unit is tasked to observe staff practice on a daily basis and compare results with the self-report checklists filled in by each staff member. Where miss reporting is observed, the explanations and reminders are given to staff member(s) three time after which the administrative sanctions are enacted. Though this is a good practice that demonstrates ownership and determination for improvement of infection control in the facility, using punitive measures undermines effectiveness of this model.

Another example of good practice was observed at FMC in Kara Suu Rayon of Osh Oblast where the Quality Assurance Committee performs by-annual clinical audit of medical cards of sub-ordinated FAPs and GPCs. A report of a comparative analysis for the period of 2012-2013 (Table 4) was readily made available for the ET and selected indicators measured among many others are provided in the Table 5. Although the analysis show worsening of the indicators assessed, it demonstrates that the QoC performs a very sorrow analysis of the quality of record keeping, compliance with the supervision and treatment protocols, justified referrals etc. While initiation of the clinical audits is definite positive move towards continuous quality improvement, the QoC and the management lack knowledge and tools to plan corrective measures, rather utilize punitive measures to penalize the PHC facility by not paying the monthly bonus. The given approach will shortly undermine the benefits of the continuous quality assurance if adequate measures are not put in place.

Local protocols/algorithms developed and approved, though quality and compliance require improvement. Based on the national protocols facilities developed and approved local protocols and algorithms customized to their facility using internal intellectual potential, however, direct observations and criterion based audits of the medical cards performed during the evaluation, revealed poor quality of the local protocols, serious deviations form the national guidelines, as well as in certain cases non-compliance with guidelines.

Whereas these findings call for immediate intervention, it is worth acknowledging the initiative taken by the Karasu Rayon maternity and FMC. Based on the analysis of MMR and NMR and complications the decision has been made by both institutions to customize the national referral protocol in a way, which considers existing capacities of the perinatal services in the rayon and ensures quickest referral of the pregnant women and/or baby to the required level of service. As a result clear referral criteria have been elaborated. The Head of the Territorial Hospital approved the local referral algorithm, the protocol was widely distributed and training was provided to the midwives, family nurses and Family Doctors in all PHC facilities.
Moreover, the FMC institutionalized the monthly register of the risk group pregnant women in order to timely refer pregnant women to the appropriate level of care, as well as follow-up after delivery.

While weaknesses in service quality are noted, the ET has documented improvements of some quality aspects in service delivery at maternities and an example of such improvements are presented in the table below (Table 5). The finding are based on observations and clinical records reviews of the health institutions that have been visited. They do not refer to one specific health institution, and are applicable to the time of observation/clinical records review.

### Table 5: Performance improvements in delivery and neonatal wards

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>2010</th>
<th>2013</th>
<th>REMAINING CHALLENGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational posters and visual aids displayed on the walls</td>
<td>🚫</td>
<td>🚫</td>
<td>Lack of patients’ awareness about the governmental benefit package (for mother and child).</td>
</tr>
<tr>
<td>Clinical protocols displayed on the walls (management of induced delivery, neonatal resuscitation, vaginal bleeding, etc.)</td>
<td>🟢</td>
<td>🚫</td>
<td>Clinical protocols not always followed</td>
</tr>
<tr>
<td>Water points, soap and antiseptic available and hand washing practiced</td>
<td>🟢</td>
<td>🚫</td>
<td>Correct washing hands procedure (all 6 steps) not always followed</td>
</tr>
<tr>
<td>Prophylaxis of newborn respiratory distress syndrome (RDS) in Preterm Labor and Preterm Premature Rupture of Membrane (PPROM) is implemented. Prophylaxis of neonatal sepsis in prolonged PROM, PPROM and preterm labor is implemented.</td>
<td>🟢</td>
<td>🚫</td>
<td>National protocols for treatment of emergency obstetric conditions not always correctly implemented.</td>
</tr>
<tr>
<td>Partograph used, properly filled in real time and used to monitor the process of childbirth.</td>
<td>🚫</td>
<td>🚫</td>
<td>Partograph is not always used. It is either incomplete or filled in after delivery</td>
</tr>
<tr>
<td>Emergency Kits available at admission and delivery rooms</td>
<td>🟢</td>
<td>🚫</td>
<td></td>
</tr>
<tr>
<td>Vertical delivery is implemented, delivery rooms have appropriate temperature, (heated radiant warmer, heating light) open care system for newborn practiced</td>
<td>🟢</td>
<td>🚫</td>
<td></td>
</tr>
<tr>
<td>Active Third Stage of Labor (ATSL) is implemented.</td>
<td>🟢</td>
<td>🚫</td>
<td></td>
</tr>
<tr>
<td>Early skin-to-skin contact (with delivery partner in case of c/s); all measures to prevent newborn hypothermia implemented; early and unrestricted breast-feeding; rooming-in (also for c/s cases); no bottles, no baby pacifiers, no promotion of formula.</td>
<td>🚫</td>
<td>🚫</td>
<td></td>
</tr>
<tr>
<td>The body temperature of the newborn is recorded (after 30 minutes and after two hours).</td>
<td>🟢</td>
<td>🚫</td>
<td></td>
</tr>
<tr>
<td>Routine prophylaxis implemented (eyes ointment, Vit. K, vaccinations)</td>
<td>🚫</td>
<td>🚫</td>
<td>Tetracycline ointment and Vit. K not always provided by the hospital. The sequence of vaccines administration does not always comply with national protocol.</td>
</tr>
<tr>
<td>Umbilical cord is kept dry, without dressing and disinfectant.</td>
<td>🟢</td>
<td>🚫</td>
<td>Umbilical cord is not always clamped after the pulsation has stopped (no pulse checking)</td>
</tr>
</tbody>
</table>
Criteria for newborn internal referral and discharge available and practiced

Mothers involved on care of newborn, both healthy and sick (taking temperature, passing stools, breastfeeding, etc.)

In neonatology and ICU, newborns’ vital signs check list is appropriately and regularly filled in.

Medicines prescribed according to guidelines

IV transfusion hourly register maintained

Daily dose calculated and speed of transfusion recorded

RH and Group is recorded on each medical card

Newborn’s Rhesus factor checked when the mother’s Rh factor is negative.

Express test performed in case of undiagnosed women, pre and post test counseling provided and ARV treatment initiated

Prior discharge mothers receive information concerning continuing breastfeeding, care of the baby, danger signs of newborn, contraceptive effect of breastfeeding, and are advised to report to the family doctor to activate post-partum home visiting.

Record keeping practices improved, though there is a space for further improvement. The CBA of the medical cards for years 2010 and 2013 revealed improved record keeping in some assessed maternities, however there is plenty room for improvement. In general, formal completion of clinical records, logbooks, and the formal filling in of charts and data: partograph during labour, APGAR score and charts for new-born resuscitation is wide spread. The assessors’ observations revealed that, for example, most partographs are not completed in real time immediately after observation. On the other hand, health-care providers seem aware of the need for correct documentation, but find it hard to fulfill all assigned tasks, therefore, they give priority to clinical work and sometimes leave “bureaucratic” work for later. The observation of deliveries also revealed a mixed use of partographs at different level of perinatal services. Medical personnel are more tend to use pantographs during normal deliveries, while in case of complicated deliveries partographs are not practiced and used to guide case management.

Data collection & reporting improved but rarely used for planning. Data collection is mainly used for administrative and statistical reports, rather than with the intention of analyzing the situation. There is a clear preference for developing and providing very clean and apparently complete numbers though this exercise seems related to reporting to higher levels, and providing the basis for inspections. It is difficult for healthcare providers and managers to use and compare available data, and to follow up trends, causes and correlations for informed decision making in care provision and organization.

Women are satisfied with improved conditions at maternities. During the FGD mothers reported the changed attitudes of the health workers. Many of them particularly noted the friendly attitude of the doctors and midwives and nurses. They are satisfied with the partner and vertical deliveries as well as having their child next to them. Some of the women interviewed had previously given birth and could compare their current experience of labour and birth with their previous ones in the same facility, and they reported positive changes. Though some complained about the lack of information on details of their health and clinical management, prescribed drugs, status of their babies and prognosis, as well as on family planning.

Key informants noted poor knowledge and lack of birth readiness of pregnant women and their partners. Majority of mothers who took part in the focus group discussions were not able to recall the main messages regarding breast feeding, danger signs in postpartum period in U5 children, breastfeeding and introduction of the complementary feeding. Although within the framework of Dao project UNFPA supported establishment of “Birth Preparedness Schools” at FMC in selected rayons and provided equipment and information materials, as well as training of a nurse /
midwives, the utilization of these services remains at low level. Based on the example of one of the FMC visited by the ET, only 40% of pregnant women registered at FMC attended on average 3 lessons, only 18% of pregnant women attended lessons with their partners and none of them completed the full course of education.

Both the staff and consumers interviewed would like better conditions in facilities, which should include running water, hot water, toilets, and showers.

**Effectiveness of Regular Monitoring is undermined by weak results based monitoring**

Although regular monitoring carried out during the project proved to influence service quality improvement, the project’s M&E system lacks orientation towards results based monitoring. Though monitoring reviews are carried out on a by-anual basis and are mainly directed towards monitoring of inputs and activities as well as changes in the service organization and quality, it fails to provide comparative data on the observed changes and/or remaining shortfalls. Furthermore, the ET failed to obtain project results framework, which is updated periodically and provides clear description of project achievements. Though the project description outlines outcomes, it fails to propose indicators to measure achievement of outcomes and indicators provided are mainly output based.

### 4.4 SUSTAINABILITY

This section of the evaluation report examines the sustainability of the UNICEF investment. Namely, assesses whether the program included strategies that will insure sustainability, how the project influenced national decision-making and policies, whether there is the likelihood that the project will have lasting results upon its termination and whether the implementing partners will be able to continue activities without technical and financial support from UNICEF.

**UNICEF planted seeds for Perinatal Care sustainability in Kyrgyzstan** – UNICEF has become a leader and reliable partner in the MCH sector and PC in particular. Several informants have stated that the agency has “planted the seeds of MCH/PC which will result in sustainment of PC in the country”. The Project was able to develop capacities at the enabling environment, organizational and individual levels. Project components have mostly worked through Government systems and sub-national service providers as well as through selected Professional Association.

**Government demonstrates a stewardship role in improvement of maternal and child health services** - The key challenges of the MCH system is addressed and targeted within number of national policy documents. More specifically, the Kyrgyz poverty reduction strategy; Den Sooluk National Health Reform Programme, National Perinatal Care Programme, National Reproductive Health Programme, National HIV/AIDS programme and etc. are the examples of government’s dedication and ownership towards achievement of the MDG 4 and MDG 5. Apart from these policy documents, the MOH has approved national evidence based guidelines for effective perinatal care, neonatal resuscitation, effective neonatal care, PMTCT, effective antenatal care, nutrition, IMCI etc.

**Country demonstrates ownership for Free maternity services delivery** - The free of charge service provision for perinatal services is another demonstration of government’s ownership and dedication for improvement of the MCH services.

**UNICEF supported strengthening of Government’s institutional capacity in service quality assurance** - The project facilitated strengthening of MoH capacity in continuous quality assurance through provision of service quality monitoring tools and building critical mass of national experts.

**Integration of PC training materials in the post-diploma education curriculum is a step forward for sustainment** - High advocacy of UNICEF facilitated integration of the new technologies of the perinatal care into the post-diploma education curriculum, which will eventually ensure that new generation of physicians will be well equipped with adequate knowledge and skills. The short courses of EPC, NR and ENC supported by the project, have been certified by the MoH and counted in the continuous medical education system. While integration of PC training materials into the post-diploma education curriculum is a step towards sustainment, in isolation from undergraduate/pre-service education reform, will be shorthanded to secure production of knowledgeable and skilled medical work force. In addition, building
the training capacity of trainers within the education institutions as well as at clinical/practical training facilities also requires being addressed. Furthermore, introduction of the health workforce planning based on the estimation of health workforce production, development, deployment and retention strategies deserves a due attention. In the absence of such plan, there is a potential devastation risk of the capacity produced lately and shortages of qualified perinatal services in most difficult to reach areas in the country.

**Dao project supported building national and sub-national training capacity** - The Master trainers trained through Dao by the WHO and utilized by UNICEF and UNFPA in their training activities, ensures availability of the pool of national and local master trainers. Moreover, UNICEF supported building national and Oblast level training capacity through the provision of training equipment and materials to training facilities.

**Health facility accreditation system incorporates new technologies of perinatal care with support of GIZ** – The Government introduced health facility accreditation system aims at improvement of the health service quality. It is notable, that accreditation criteria and indicators for maternity hospitals and wards are mostly based on the new clinical guidelines and protocols, which consequently will ensure continuous improvement of perinatal services in the health care institutions of Kyrgyzstan.

**Institutionalization of “Confidential Inquiry to Maternal Death” is another demonstration of Government’s ownership** - Within the Dao project as a result of the advocacy efforts and technical assistance from WHO and UNFPA, GIZ, the MOH completed first “Confidential Inquiry to Maternal Death” in December 2013, covering the period of 2011-2012. The analysis and the results of this exercise has been presented to wide range of national and local stakeholders and resulted in prioritization MoH efforts in strengthening emergency obstetric care capacity in the country.

**While there is a demonstrated ownership at the central level, sub-national level of government still has to show substantial degree of political commitment towards improved maternal and child mortality reduction** - While national-level commitment to maternal and child mortality reduction is growing, it is equally important for sub-national levels of government (oblasts and municipal government) to show substantial degrees of political commitment particularly oriented towards organization and funding of emergency transportation and consultation services.

**Absence of the strategic vision for organization of Emergency Transportation and Consultation Services alongside with the lack of creative solutions to ensure uninterrupted supply and availability of blood products in maternity facilities** will undermine country’s efforts and potential achievements in meeting MDG 4 and MDG 5.

**The lack of strong managerial capacity in the country is another factor that hinders potential achievements in improving maternal and child survival and health status in Kyrgyzstan.** Whereas introduction of the new evidence based perinatal care technologies already shows initial positive results, maximization of its potential and sustainment is hindered by poor managerial capacity at facilities. If the government in the nearest future does not address building health facility managerial capacity, it is unlikely that government targets for reduction of maternal and child mortality could be attained.

**Continued efforts and further nation wide expansion of PC model introduced in south regions of the country is required to ensure long lasting results.** Although the reform of the perinatal care is piloted in other oblasts and selected districts of the country, the MOH realizes the need for applying universal PC model, piloted by UNICEF in Osh and Batken oblasts. Only partial coverage of the country will not be able to demonstrate accomplishment of the MDG targets in a relatively short period of time.

### 4.5 HUMAN RIGHTS BASED AND EQUITY APPROACH

The protection of children's rights and interests is a priority for Kyrgyzstan. In 1994, the country ratified the UN Convention on the Rights of the Child\(^\text{40}\). The Children's Code, adopted in 2006, was the first attempt in Central Asia to put the provisions of the Convention on the Rights of the Child coherently into national legislation in order to more adequately protect children's rights. After recommendations from the UN Committee on the Rights of the Child, the Children's Code includes a provision for the country's Ombudsman to protect the rights, freedom and legal interests of children including through the court system, and a Child Rights Department was established in the Ombudsman's Office in 2009. The Office has carried out several inspections and other monitoring since its founding but there are still concerns that it does not have the capacity to monitor the full range of children's right around the country. There is no specific official institution for the protection of children's rights, or anybody who brings together different sectors to ensure that children's rights are respected widely. This gap was demonstrated during the response to the June crisis, in which no government body was systematically collecting information.

\(^{40}\) Government of the Kyrgyz Republic, Consolidated Third and Fourth Periodic Reports to the Committee on the Rights of the Child, July 2010
on children's rights issues. While there are civil society organizations involved in the monitoring of children's rights, these tend to be concentrated in Bishkek and, to a lesser extent, Osh.

The DaO project aiming at attainment of the MDG goals 4 and 5 (Reduce Child Mortality and Improve Maternal Health respectively), by its design is directed towards protecting the basic health right for children and mothers. Although there is no explicit evidence in the project documents that HRBA has been used in project design, planning, implementation and monitoring activities, the project interventions are targeted towards both, the right-holders as well as duty – barriers.

Main actors acting as duty-barriers such as MoH, Oblast Health Authorities and health service providers have been identified during the project design. The project interventions were designed to close the most important capacity gaps of the duty-bearers to be able to meet their duties and were directed towards building their capacity in coordination and partnership, evidence based policy formulation and regulation, quality service provision through institutionalization of the modern treatment guidelines. The project ensured duty-barrier's involvement in the design, implementation and M&E activities.

Mother and children (under five years) were identified as key right holders. The project identified what interventions/activities were required to close the most important capacity gaps of the right-holders to be able to claim their rights interventions and thus were directed towards ensuring that they get improved access to best quality of antenatal, perinatal and postnatal care, are empowered with adequate knowledge and information and their health status is improved. Nonetheless, there is no evidence that key actors have been involved on the project design, planning, implementation and monitoring phases.

Even though the project targeted areas were proposed by the GoK and project did not particularly focused on selecting the regions based on the indicators such as share of poverty, health status of right holders and/or access barriers, eventually it targeted 32% of the country's population and almost 16% of most poor individuals living in the project oblasts; The MMR ranging from 57.8 in Osh city to 66.6 in Batken oblast per 100,000-life birth (Figure 7) while the MMR accounted for 58.9 per 100,000 life birth. The Batken oblast (31.4) and Osh city (50.1) demonstrated higher IMR compared to national average of 27.1 per 1000 life births.

This selection proves that project interventions were targeted at poor and disadvantaged regions with relatively high MMR. However, further actions are needed in order to guarantee greater utilization (and coverage) of MCH services to the population segments living in isolated and underserved areas; which is the main focus of the Equity project.

There was no built-in gender-differentiation in the project design although by promoting BFHI and EPC the project indirectly reached the male partners attending the childbirth. Observed predominance of females on training courses was mainly guided by the gender composition of the national health workforce. The majority of national trainers were female but they have been selected on merit bases.

EPC training provided skills aimed at improving care provided to pregnant women and mothers. This has contributed to reducing the occurrence of events that affect female health. Improving health status of mother and children has been one of the achievements of the project.

Project targeted females - both as participants in the capacity building programme as well as beneficiaries of improved quality health services. There is a strong likelihood of greater gender equality as a result of the project as the new knowledge increases the empowerment of females as mothers.

The project's work in pilot hospitals as well as provided trainings will ultimately benefit women and children of all classes, ethnic background and wealth etc. Thus although the project does not explicitly address human rights issues, its results and impact will improve the health of mothers and children at all levels.

4.6 CONCLUSIONS

Based on the analysis it is obvious that the relevance of the project is high through a clear alignment with national reform and national perinatal care policies and strategies as well as with the country cooperation.
programme and has a grate potential for improving health of mother’s, children and vulnerable groups with particular focus on decreasing high levels of maternal and child mortality.

**Quality of the project design requires improvement.** The project approach proved relevant in practice, though the rationale and workings of it were not made sufficiently explicit in the project document. The project was not built around an explicit and shared theory of change on the whole.

In terms of **efficiency** the governance and management mechanisms set up proved to work well. So did the coordination system set at a national level. Efficiency was ensured by adequate resource allocation, selection of most efficient funding modalities, especially for training and monitoring and supervision components, timely implementation of the planned activities and budget adjustments for meeting additional training, equipment and monitoring needs. The main limitation in efficiency concerns the focus on activities and their immediate outputs in project planning and monitoring.

The project has been **relatively effective** and has been able to reach mostly outcome level changes. In particular the decrease in postpartum hemorrhage, complications and increase in newborn survival in the intervention provinces stand out. These outcome level changes appear to be affected by the output level results identified, in particular improvements in quality of perinatal care at maternities due to the training of health personnel, improved infection control due to the important investments in infrastructure and better access to the vitally important life saving equipment etc.

Project effectiveness was largely undermined by system related challenges. However, the outcome level changes have been affected by the outputs that could have been reached by more focusing on all six building blocks of the health care system. While it is well understood that UNICEF operates within its organizational competence, issues beyond UNICEF’s competence could have been addressed either by advocacy or by mobilization and involvement of technical expertise from other developing partners. The remaining system wide challenges, which undermines project effectiveness is summarized below in Table 7.

**Table 6: Summary of PC System wide challenges**

<table>
<thead>
<tr>
<th>Building Blocks</th>
<th>Project Activity</th>
<th>Major Shortcomings</th>
</tr>
</thead>
</table>
| Service Delivery| Improved infrastructure, water and oxygen supply, provided life saving equipment. | Access to service delivery is undermined by:  
  • Poorly functional ANC services  
  • Non-functional emergency transportation and consultation service |
| Human Resources for Health | 88% of staff including managers were trained at the maternity wards | High staff turn over and lack of well educated new generation of physicians;  
  • Lack of Government policy on health work production, deployment, development and retention; |
| Medical Products | Introduction of EPC resulted in better supply of essential and life saving drags | Access and affordability to medicines remains a challenge. Especially for Blood products. |
| Information | Project contributed towards institutionalization of the Newborn Register and routine medical statistical forms. | Although data collection has improved, there is a lack of data utilization for planning, effective management and further investments. |
| Governance/Leadership | Project trained health facility managers in EPC, though project’s contribution towards improvement of health facility management is diverse. | In general weak managerial capacity at the health facility level. |
| Finance | NO | Deficient funding of perinatal services and highly dependence of perinatal services on informal payments undermine effectiveness of UNICEF’s project. |
The project was instrumental in building national and sub-national ownership and influencing national policies. Nonetheless, the capacity built in the system and the benefits achieved so far are at risk to maintain, if system wide shortcomings as described in the Table 7 above are not adequately addressed in a timely manner. Moreover, the DaO project proposal was not implicit on the intended sustainability strategies planned to be deployed during the project implementation.
CHAPTER 5: LESSONS LEARNED
CHAPTER 5: LESSONS LEARNED

This section of the report outlines main lessons learned that should be taken into account for the effective design and implementation of the next phase of the project and relevant interventions. Moreover, these lessons are more of general character that could be equally applicable to any project designed and implemented in host country. Building on the experiences of previous projects and/or countries will mitigate the risks of further failures or ineffectiveness of UNICEF’s support and contribution towards strengthening of health sector.

Lesson 1:

UNICEF a coordinator of MCH sector – UNICEF is a coordinator of the MCH sector on behalf of all development partners in Kyrgyzstan. The lesson learned from UNICEF operations in Kyrgyzstan, demonstrates having UNICEF as a leader/coordinator for the sector (under SWAP) increased government ownership of reforms in MCH sector, built government’s programming, budgeting, and coordination capabilities, ensured informed allocation and alignment of external funding towards national priorities. Whereas few years ago a geographical distribution of development aid has been given a priority that enabled to better map assistance and make implementing agencies accountable for results, diverse results achieved persuaded the decision to change the mapping of assistance from geography approach to competency approach, where every single organization will act within its competency.

Lesson 2:

Delivering as One - The given mechanism show three main results: i) increased government leadership and ownership was leading to greater alignment of UN and government development-related priorities; ii) UN agencies demonstrated increased participation and joint programming; iii) One programme, One funding framework and One Leader. However, UN agencies on the ground showed a comprehensive and coordinated effort while coexisting under separate mandates. Joint programming at a country level was showing clear benefits as well. There was an apparent increase in awareness for facilitated national ownership of programs accomplished by aligning DaO efforts with country-specific priorities. Delivering as one has helped the country to gain greater access to the range of development expertise and resources in the United Nations system.

Challenges remain in the development of shared monitoring and evaluation systems. The horizontal accountability of resident coordinators and United Nations country team for results achieved under the One Programme remained weak. This has implications for the measurement of performance, which remains primarily vertical, i.e., within organizations.

Lesson 3:

Vertical Integration – The DaO project mostly focused on hospital sector and less invested in the antenatal care services, which apparently minimized potential effectiveness of the project. This shortcoming has been realized by UNICEF and ensured vertical integration of primary, secondary and tertiary levels through DFID financed Equity Project. The latter apart from continuing efforts to improve the quality of services at maternity wards, focuses on building capacity at primary health care level in improvement the quality of antenatal services as well as targets women, their partners and families with interventions directed towards improvement of their knowledge, attitude and practice.

Lesson 4:

Inter-sectoral Integration - Inter sectoral coordination at the municipal level by bringing together health and nutrition, education and social service structures and joint development of municipality development plans oriented on meeting vital population needs has been endorsed within the Equity project. Application of such approach demonstrated increased commitment of local governments and communities in organization of alternative pregnant women transportation system to the health facilities in the absence of functional state emergency transportation system. More specifically, the local governments allocated financial resources to reimburse fuel expenses, while communities volunteered drivers with vehicles on duty. The given approach demonstrates shared responsibility of communities and government entities at national and local levels in resolving access to better health services for population in general and women and children in particular.

Lesson 5:

Participatory monitoring - Participatory monitoring approach was deployed in the project through involvement of national, local and facility experts and professionals. These experts have been involved in monitoring missions to the health facilities by the
project. A cross monitoring approach has also been practiced when health professionals from one district health facility participated in the monitoring of another health facility in neighboring district and/or other oblasts. The given approach to M&E resulted into:

- A process of individual and collective learning and capacity development through which people become more aware and conscious of their strengths and weaknesses, their wider social realities, and their visions and perspectives of development outcomes;
- This learning process creates conditions conducive to change and action;
- It is a flexible process, continuously evolving and adapting to the project specific circumstances and needs.
- Contributes to raising ownership of new technologies and builds a critical mass of change “champions” and ultimately promotes the likelihood that project activities and impact would be sustainable.

According to Kyrgyz example it is recommended that participatory monitoring is widely applied in UNICEF projects’ and ensures wide participation of community, local government, policy makers and service providers’ participation in monitoring and evaluation of projects.

**Lesson 6:**

**Supervision/mentoring vs. one time training** - The series of evaluations of health human resource capacity building interventions, conducted in the CEE/CIS region, revealed that one time training is insufficient for achieving desired capacity in health facilities and requires periodic refreshment trainings, though the latter is constraint by scarcity of funds for such activities. The DaO project was innovative in addressing this challenge. Specifically, instead of funding refreshment trainings for couple of days, the project shifted from training towards supervision/mentoring approach, when a multidisciplinary team of experts visited maternity ward for one-two weeks, assessed knowledge and practice of health professionals and provided on-job practical training as well as assisted them to change/remodel the service provision. The evaluation revealed that application of this approach is highly appreciated by the health professionals as well as contributed to better outputs and outcomes.
CHAPTER 6: RECOMMENDATIONS
CHAPTER 6: RECOMMENDATIONS

This Section provides key recommendations based on the findings of the evaluation, priority issues affecting effectiveness of perinatal care and health status of children and women in the country, and suggests possible strategic interventions for the Government and its development partners.

6.1 GENERAL RECOMMENDATIONS FOR UNICEF

Recommendation #1: Continued support to GOK's Perinatal Care Strategy Implementation - In MCH sector, UNICEF is recognized as one of the leading agencies. This confirms its legitimacy and the capacity to continue work in MCH area and EPC in particular. Ensure continuous support to the GoK's perinatal care programme implementation in line of recommendations provided in the section 6.2 below.

Recommendation #2: Strengthen inter-agency collaboration - Continue and further improve inter-agency collaboration where all partners, building on their comparative advantage, will have a role to play in supporting the MoH in the implementation and update of programmes in the area of perinatal health, including further investment in strengthening the main health system components, and policies to reduce inequities in access to care, as well as in the quality of services provided, all of which will further improve the health status of mothers and children in Kyrgyzstan.

Recommendation #3: Enhance advocacy - The new challenges identified, in the section below, will require promotion of greater linkage and partnership through strengthening of the UNICEF Country Office (CO) technical capacity in the health policy advice. When selecting final set of interventions for the new project phase, attention has to be paid to CO capacity. Some recommended actions might demand specific technical expertise, which require additional resourcing. Moreover supporting research and analysis of the MCH sector performance will be instrumental for effective advocacy. Building on “what’s already working” will help to influence the government policy decisions.

Recommendation #4: Improve project design - Comprehensive Project design, addressing all health system blocks, with clear distribution of functions (activities and geographical and/or thematic areas between key UN agencies), coordination mechanism between UN and other developing partners, as well as well formulated Results framework with annual targets, should be given a priority.

6.2 SPECIFIC RECOMMENDATIONS

Though UNICEF is well positioned to influence the PC policy in the country, success of the perinatal services will very much depend on going beyond the perinatal care sector and targeting other health sector policy areas. While bellow outlined recommendations are not explicitly targeted for UNICEF assistance, evaluation team considered listing the most important system building blocks requiring intervention on the national level in order to ensure that UNICEF interventions are sustained and ensures access to quality PC services to the population.

Recommendations outlined below provides actions required from the GoK, UNICEF’s potential contribution as well as defines priority and time frame for implementation.

STEWARDSHIP

The National Perinatal Care Program is good demonstration of government’s dedication and attempt to meet MDG 4 and MDG 5 targets. While the programme is well formulated and is results oriented, the MoH fails to regularly assess the progress in achieving the set objectives. It is highly recommended that regular assessment of programme implementation is practices that enable timely identification of problems and evidence based decision making for corrective actions.
<table>
<thead>
<tr>
<th>RECOMMENDATIONS</th>
<th>RESPONSIBILITIES</th>
<th>PRIORITY</th>
<th>TIME-FRAME</th>
</tr>
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<tbody>
<tr>
<td>Regularly assess progress in achievement of PC programme objectives through monitoring and evaluation of results and revision when necessary</td>
<td>Ensure implementation of periodic technical and operational research to monitor progress and inform further corrective steps</td>
<td>Consider provision of financial and technical support</td>
<td>Medium</td>
</tr>
<tr>
<td>Refinement of the referral criteria and close monitoring of referral patterns</td>
<td>Formulate clear and straightforward referral criteria</td>
<td>Consider provision of technical support</td>
<td>High</td>
</tr>
<tr>
<td>Continue the practice and provide adequate financial means for “Confidential Enquiry of Maternal death”</td>
<td>Ensure adequate funding and implementation of “Confidential Enquiry of Maternal death” on an annual basis</td>
<td>NA</td>
<td>Medium</td>
</tr>
<tr>
<td>Ensure elimination of punitive measures for maternal and neonatal mortality audit</td>
<td>Develop regulation for elimination of punitive measures for maternal and neonatal mortality audit</td>
<td>Advocate the Government for elimination of punitive measures for maternal and neonatal mortality audit</td>
<td>High</td>
</tr>
<tr>
<td>Encourage research of “Near Miss Cases” at national, sub-national and facility levels</td>
<td>Introduce research of “Near Miss Cases”</td>
<td>Consider provision of technical support to MoH</td>
<td>High</td>
</tr>
<tr>
<td>Development and approval of the EmOC clinical guidelines and protocols</td>
<td>Mobilize national and international technical expertise for the development of EmOC clinical guidelines and protocols; Ensure issuance of MoH Decree before introduction of workforce trainings</td>
<td>Consider provision of technical support</td>
<td>High</td>
</tr>
<tr>
<td>Expertise of facility EPC protocols and guidelines</td>
<td>Mobilize national and technical expertise for the expertise of facility EPC protocols</td>
<td>Consider provision of financial and technical support</td>
<td>High</td>
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</table>

**HUMAN RESOURCE DEVELOPMENT**

The ability of the country to meet its health goals depends largely on the knowledge, skills, motivation and deployment of the people responsible for organization and delivery of health services. The Government of Kyrgyzstan acknowledged the lack of human resources needed to deliver essential quality perinatal services for a number of reasons, poor quality of pre-service education, migration of health workers within and across countries, poor mix of skills and geographical demographic imbalances. The formulation of policies and plans in pursuit of human resources for PC services requires sound information and evidence. Presently comprehensive and robust methodologies are not available for assessing the adequacy and of the health workforce to respond to the health care needs of the target population (women and children). However, a shortage of health workers can be perceived from the inadequate skill mix or maldistribution of their deployment, as well as losses caused by death, retirement, carrier change and or out migration.

The need for comprehensive, reliable and timely information on human resources, including numbers, demographics, skills, services being provided and factors influencing recruitment and retention has been
identified in Kyrgyzstan. Based on this information the priority should be given to the development of the health workforce plan including the plan for the development of the PC workforce. The latter should address production, deployment and continuous professional development of health personnel. While such strategy is needed for entire health sector, initially the government can develop it only for the MCH sector.

Apart from PC human resource plan, the government is advised to streamline the pre-service and post diploma education systems alongside with the refinement of licensing and certification of the medical professionals. There is a need for enhancement of the continuous medical education by integration of the new perinatal technologies into the training curricula, training of master trainers, selection of clinical bases, as well as development of the mentoring capacity in EPC.

Another important area for immediate intervention is formation of ETCS as well as definition of staffing levels and training of EMTC teams in EmOC.

MHIF, the single payer in the country, will also requires to be equipped with modern knowledge of perinatal technologies in order to perform effective adjudication of provider claims.

<table>
<thead>
<tr>
<th>RECOMMENDATIONS</th>
<th>RESPONSIBILITIES</th>
<th>GOK</th>
<th>UNICEF</th>
<th>PRIORITY</th>
<th>TIME-FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of the Human resource Strategy and Implementation Plan</td>
<td>Analysis of the current human workforce structure, planning of production numbers by specialization, deployment needs by geographical principle, elaboration of retention strategy of medical personnel, especially in remote areas.</td>
<td>Consider provision of financial and technical support</td>
<td></td>
<td>High</td>
<td>Short Term</td>
</tr>
<tr>
<td>Introduction and institutionalization of PC approaches in pre-service and post diploma education system including CPD for physicians, midwives and nurses through application of multidisciplinary teaching approach</td>
<td>Advocate the Ministry of Education and other relevant government agencies to reform the pre-service training curricula at the Education institutions. Ensure that new PC technologies are adequately reflected and provided through application of multidisciplinary teaching approach not only at pre-service medical education institutions, but also at post-diploma medical education institute.</td>
<td>Advocate the GoK, MoH and MoE for revision of the pre-service curricula Support training of trainers for education institutions</td>
<td></td>
<td>High</td>
<td>Short Term</td>
</tr>
<tr>
<td>Introduce the certification of clinical/practical sites in EPC for education institutions</td>
<td>Develop accreditation criteria and procedure through mobilization of national and international experts</td>
<td>Provide technical expertise for the development of the certification criteria and methodology</td>
<td></td>
<td>Low</td>
<td>Medium Term</td>
</tr>
<tr>
<td>Streamline certification/licensing of physicians, midwives and nurses through integration of EPC into the certification process</td>
<td>Revision of certification/licensing process of physicians, midwives and nurses</td>
<td>Provide technical expertise</td>
<td></td>
<td>Medium</td>
<td>Medium Term</td>
</tr>
<tr>
<td>Develop PC mentoring capacity, methodology, process and funding modality</td>
<td>Through mobilization of national and international expertise, create a methodology for mentoring staff at maternity departments, develop critical pool of trained mentors; develop mentoring plan and ensure adequate annual budget allocation for mentoring implementation.</td>
<td>Provide technical expertise in the development of mentoring methodology; Implement mentoring in targeted facilities;</td>
<td></td>
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<tr>
<td>Training of medical workforce of maternity wards in application of EmOC approaches</td>
<td>Based on the new EmOC guidelines and protocols develop training materials, training plan and ensure (state + donor) funding for training implementation</td>
<td>Support financing of the training interventions</td>
<td></td>
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<tr>
<td>Promote Internal Training activities at facility level and develop mechanism for self-assessment of knowledge and practices</td>
<td>In order to support facility based internal training activities, through national and international expertise develop mechanism of self-assessment of knowledge and practices and regulate this process through MOH Decree, as a mandatory activity at the hospitals.</td>
<td>Provide technical expertise</td>
<td>High</td>
<td>Short to Medium Term</td>
<td></td>
</tr>
<tr>
<td>Expansion of training activities to the PHC level</td>
<td>Develop a training plan and budget oriented towards targeting the PHC for effective antenatal services and ensure its implementation nationwide.</td>
<td>Continue training of medical personnel at PHC level in evidence based approaches to ANC</td>
<td>High</td>
<td>Short Term</td>
<td></td>
</tr>
<tr>
<td>Expand the coverage of oblasts targeted with training of medical personnel</td>
<td>Through fund rising, ensure nationwide coverage of staff at maternity wards of the hospitals with new PC technologies.</td>
<td>Provide technical and financial assistance where applicable</td>
<td>High</td>
<td>Short Term</td>
<td></td>
</tr>
<tr>
<td>Develop basic hospital management training course and support training of hospital and PHC management teams</td>
<td>In order to feel the gap in hospital management, develop a short course in hospital management with the assistance of the international experts. Ensure the training of the management teams at hospital and PHC levels.</td>
<td>Support Management trainings in UNICEF targeted health facilities</td>
<td>High</td>
<td>Short to Medium Term</td>
<td></td>
</tr>
<tr>
<td>Training of Emergency transportation and consultation teams</td>
<td>Upon formation of the EMTCS, ensure 100% training of EMTC teams working in perinatal sector in new PC technologies and EmOC</td>
<td>Provide technical assistance in the development of the training materials</td>
<td>High</td>
<td>Short to Medium Term</td>
<td></td>
</tr>
<tr>
<td>Support training of MHIF experts in evidence based approaches</td>
<td>Develop MHIF staff training materials alongside with the claims management standard checklists that incorporate new PC technologies. Ensure training of MHIF staff countrywide.</td>
<td></td>
<td>High</td>
<td>Short Term</td>
<td></td>
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**INFRASTRUCTURE, EQUIPMENT AND MEDICINES**

In line with the regionalization of the perinatal care services, the MoH initiated development of the PC master plan for selected oblasts and districts, which guides investments decision for these geographic areas. As the health facility infrastructure and medical furniture and equipment are outdated, the MoH is advised to expand the master planning exercise countrywide, development of facility investment plan and ensure its periodic revision due to the possible future local and international investments. Alongside with the latter, development of the EMTC system design, investments plan and its realization should be given a high priority.

In order to ensure access to essential and life saving medicines at PC facilities, it is recommended that MoH periodically reviews the list of essential and life saving medicines and through its regulatory function ensures continuous availability and supply of the pharmaceutical market with these medicines.

Another area deserving immediate MoH attention is design of alternative blood supply system to ensure uninterrupted supply of blood products at the perinatal care facilities. The current system, when the patient’s relatives have to travel to the Blood Bank located in the oblast center and pay out of pocket, could be redesigned in a way, when relatives pay at the facility (in worst case scenario if the GoK can ensure funding) and the Blood Bank ensures delivery of blood products directly to the facility and maintaining the cold change regimen during transportation.
### RECOMMENDATION

**Development and periodic revision of the Perinatal Care Master Plan**
- **GOK**: Through deployment of national and international expertise develop Perinatal Care master plan for all health facilities in the country.
- **UNICEF**: Provide Technical Assistance
- **Priority**: Medium
- **Time Frame**: Short to Medium Term

**Development/revision of the facility investment plan**
- **GOK**: Based on the assessment of current status develop facility investment plan and ensure periodic revision based on the investments materialized by any party in facilities.
- **UNICEF**: Provide Technical Assistance in the absence of any other partner interest
- **Priority**: Medium
- **Time Frame**: Short to Medium Term

**Design and introduction of effective Emergency Medical Transportation and Consultation system (EMTC)**
- **GOK**: Develop design of the EMTC system (Ownership, governance, technical and material requirements, composition and competencies of EMTC teams, staffing norms, funding sources and reimbursement modalities, etc.) and ensure establishment of conducive legislative environment.
- **UNICEF**: Consider provision of technical support
- **Priority**: High
- **Time Frame**: Short to Medium Term

**Develop investment plan for EMTC system and ensure its realization in a phased manner**
- **GOK**: Develop EMTC system design, governance, staffing, procedures, communication means, investments plan and budget.
- **UNICEF**: Provide Technical Assistance in the absence of any other partner interest
- **Priority**: High
- **Time Frame**: Short to Medium Term

**Periodic revision of National list of Essential and Life Saving medicines according to new evidence based guidelines introduced**
- **GOK**: Ensure periodic revision of National list of Essential and Life Saving medicines according to new evidence based guidelines introduced.
- **UNICEF**: NA
- **Priority**: Medium
- **Time Frame**: Continuous

**Development/revision of the strategy to ensure availability of blood products at the health facilities**
- **GOK**: Development/revision of the strategy to ensure availability of blood products at the health facilities.
- **UNICEF**: Provide Technical Assistance in the absence of any other partner interest
- **Priority**: High
- **Time Frame**: Short Term

**Develop/review a standard set of medical equipment for each level facility of the perinatal care system**
- **GOK**: Develop/update the standards.
- **UNICEF**: Consider provision of technical support
- **Priority**: Medium
- **Time Frame**: Short to Medium Term

**Develop a critical mass of medical engineers and technicians**
- **GOK**: Support development of the medical engineers through standardization of equipment required for PC services and using partner support in training of medical engineers and technicians.
- **UNICEF**: NA
- **Priority**: High
- **Time Frame**: Medium Term

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**FUNDING OF PERINATAL CARE AND STAFF REIMBURSEMENT MODALITIES**

The GoK's commitment for free perinatal care services are challenged by inadequate service case rates and weight resulting in underfinancing of health providers. Deficient reimbursement became more problematic with the introduction of the regionalization of perinatal services where the same case rates are applied for perinatal services regardless of the level.
of service provider. The situation is further complicated with absence of standardized claims management methodology, mostly based on previous service provision practices and poor understanding and knowledge of claims managers in new perinatal service provision technologies and referral guidelines, thus resulting in introduction of financial penalties to the health providers. Filling these gaps is a high priority for the MoH. There is an urgent need to revisit the case rates and case weights in line with the regionalization of perinatal services as well as development of standardized claims adjudication methodology based on newly introduced service protocols.

The current performance pay system implemented in the health care system is shorthanded and requires revision of the performance indicators. It is believed that the WB financed project will assist the government in introduction of new pay for performance system that potentially could be applied in those facilities, which are targeted by UNICEF, and falls in the group of pilot facilities under the WB financed project.

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<th>RECOMMENDATION</th>
<th>RESPONSIBILITIES</th>
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<tbody>
<tr>
<td>Maintain the case based funding and reimbursement modality though ensure periodic revision of the case rates and case weights</td>
<td>Mobilize technical assistance for revision of the case rates and case weight in line of the regionalization of the perinatal services</td>
<td>Advocate the MoH for revision of case rates and case weights in line of the regionalization of PC services</td>
<td>High</td>
</tr>
<tr>
<td>Develop standard claims adjudication methodology for PC cases including referrals and ensure theoretical and practical training of MHIF Claim Managers/Experts</td>
<td>Develop standard claims adjudication methodology for PC cases including referrals and ensure theoretical and practical training of MHIF Claim Managers/Experts</td>
<td>Advocate the MoH</td>
<td>Medium</td>
</tr>
<tr>
<td>Modernization of the Performance bonus system and allocation formula</td>
<td>With the assistance of the WB financed performance based payment project develop a new Pay for performance system and apply to pilot districts</td>
<td>Keep abreast to the developments in pay for performance system and in close collaboration with the WB financed project ensure application in WB selected health facilities</td>
<td>Medium</td>
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</table>

CONTINUOUS SERVICE QUALITY IMPROVEMENT

Assurance of the population access to quality PC service is important for attainment of the MDGs. The MoH already established the QoC and Pharmaceutical Policy Department at the MoH. Apart from this, the QoC committees are operational at the health facility level though with limited national guidance. Whereas availability of these structures demonstrates government’s ownership of the service quality improvement, much remains to be done to ensure well functioning service quality assurance system in the country. More specifically, the MoH needs to develop the QoC strategy, QoC audit processes and tools as well as implementation plan and budget. Enhancement of external and internal MCH service quality audit system in the country will have the following benefits: a) it will enhance ownership at facility, district, oblast and national levels; b) created PC service quality audit capacity will improve evidence based managerial decision making at facility and local levels, as well as evidence based policy development on a national level; c) it will require less financial resources; d) the benchmarking of service providers will increase the competition and motivate them to better perform; and finally all the above will ensure improved access to quality PC services.
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<th>RECOMMENDATION</th>
<th>RESPONSIBILITIES</th>
<th>PRIORITY</th>
<th>TIMEFRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop MoH/QoC Unit Strategy, implementation plan and budget</td>
<td>Through mobilization of national and international expertise facilitate develop-</td>
<td>Short</td>
<td>Short Term</td>
</tr>
<tr>
<td></td>
<td>ment of the QoC strategy, annual plan and ensure funding of planned activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop QoC assessment methodology</td>
<td>With the assistance of the international experts develop QoC assessment methodol-</td>
<td>High</td>
<td>Short Term</td>
</tr>
<tr>
<td></td>
<td>gy for the perinatal care facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strengthening of Continuous Quality Improvement structures and procedures at</td>
<td>Ensure staffing of the QoC department of the MoH and development and approval of</td>
<td>High</td>
<td>Short Term</td>
</tr>
<tr>
<td>national, sub-national and facility levels</td>
<td>the department strategy, plans and budget</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design a facility based “Dash Board” for measuring service quality (based on</td>
<td>Mobilize national and international expertise</td>
<td>High</td>
<td>Short to Medium</td>
</tr>
<tr>
<td>accreditation standards)</td>
<td></td>
<td></td>
<td>Term</td>
</tr>
<tr>
<td>Design Facility QoC Ranking system to acknowledge best performing facilities</td>
<td>Utilize experience with hospital accreditation system and design the PC facility</td>
<td>High</td>
<td>Short to Medium</td>
</tr>
<tr>
<td></td>
<td>ranking methodology</td>
<td></td>
<td>Term</td>
</tr>
<tr>
<td></td>
<td>Support annual review/reporting of the QoC indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce Annual National Award Ceremony/ conference</td>
<td>Organize National Conference with National Award Ceremony of Best Performing</td>
<td>Medium</td>
<td>Short to Medium</td>
</tr>
<tr>
<td></td>
<td>PC facilities</td>
<td></td>
<td>Term</td>
</tr>
<tr>
<td>Build capacity of facility based QoC committees in regular quality monitoring,</td>
<td>Develop a strategy for capacity building of QoC committees and ensure funding</td>
<td>High</td>
<td>Short to Medium</td>
</tr>
<tr>
<td>interpretation of quality indicator data and planning</td>
<td>(state_donors)</td>
<td></td>
<td>Term</td>
</tr>
<tr>
<td>Continue accreditation of health facilities and ensure periodic revision of</td>
<td>Ensure periodic revision of the accreditation criteria, scoring and weights</td>
<td>Medium</td>
<td>Short to Medium</td>
</tr>
<tr>
<td>accreditation criteria alongside with introduction of new evidence based</td>
<td></td>
<td></td>
<td>Term</td>
</tr>
<tr>
<td>approaches</td>
<td></td>
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</tr>
</tbody>
</table>
HEALTH INFORMATION SYSTEM

Sound and reliable information is a foundation of decision making across all health system building blocks. It is essential for health system policy formulation and implementation, governance and regulation, human resource development, health education and training, service delivery and financing and health research. The health information system serve multiple users and a wide array of purposes that can be summarized as the generation of information to enable decision makers at all levels of the health care system to identify problems and needs, make evidence based decisions and allocate scarce resources optimally.

The MOH was successful in introduction of the Newborn Register and institutionalization of reporting nationwide. Apart from Newborn Register there is a need for routine reporting on key quantitative service quality indicators. MOH is advised to integrate some of these indicators, currently being monitored by the project, into the routine reporting forms. Moreover, in order to ensure accuracy of MCH data collection, the MOH is recommended to build the capacity of the Data Quality Audit (DQA) at national and local levels. The project can be instrumental assisting the government in this endeavor.

Building MCH/PC analytical as well as evidence based policy and managerial decisions making capacity at national and local levels is another area requiring government attention. Based on the evaluation findings the MOH and the health facility management lack the capacity of data analysis which leaves the latter short-handed for the evidence based policy formulation and decision-making. Present Health Statistical Reports is informative; recording changes of selected indicators over the years, but does not contain analysis, which attempts to explain reasons behind reported changes. The MOH is recommended to build the national and local capacity for MCH/PC data analysis with the assistance from international partners. This will help the sector to plan further interventions based on the evidence, leverage additional resources for the sector as well as allocate scarce resources optimally.

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
<th>RESPONSIBILITIES</th>
<th>PRIORITY</th>
<th>TIME-FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>GOK</td>
<td>UNICEF</td>
</tr>
<tr>
<td>Improve data collection and analysis through introduction of the Data Quality Audit (DQA) system at national, sub-national and facility levels of the data collected through maternal and child registers</td>
<td>Develop DQA methodology and training materials; Introduce DQA function at national, sub-national and facility levels; Train data auditors in application of DQA methodology.</td>
<td>In coordination with other developing partners support development of the DQA methodology and training of data auditors at national, sub-national and targeted health facilities</td>
<td>High</td>
</tr>
<tr>
<td>Revise statistical form #14 (Hospital) &amp; 12 (PHC) and include reporting requirements for selected quantitative service quality indicators</td>
<td>In close consultation with national and international experts define a list of measurable indicators for service quality and integrate into the routine statistical forms. For reporting health facilities, develop methodological guideline for the generation and recording of such indicators.</td>
<td>Provide technical assistance and support training of health facility staff in data generation and reporting.</td>
<td>Medium</td>
</tr>
<tr>
<td>Build facility based capacity in data collection, analysis, interpretation and planning</td>
<td>Develop Health facility capacity building plan and budget</td>
<td>Support health facility capacity building in targeted facilities</td>
<td>Short</td>
</tr>
</tbody>
</table>
ANNEXES
ANNEXES

ANNEX 1: LIST OF DOCUMENTS REVIEWED

1. Assessment of the quality of maternal and neonatal services at hospital and primary health care levels, Bacci, 2012
3. Consolidated Annual Progress Report on Activities Implemented under the Kyrgyzstan One Fund, UNDP, 2011
4. CPAP Results and Resources Framework, UNICEF
5. CPD 2012-2016, UNICEF
6. DAO proposal 2009 –2013, UNICEF
7. Den Sooluk National Health Reform Program 2012-2016
8. EPC Baseline Study, UNICEF, 2010
9. Government of the Kyrgyz Republic, Consolidated Third and Fourth Periodic Reports to the Committee on the Rights of the Child, July 2010
14. Maternal And Newborn Health In Chui Province & Kyrgyzstan: Assessment And Implications For Interventions, UNICEF, 2009
15. MDG Acceleration Framework, Kyrgyzstan, 2013
16. MDG Second Progress Report, UNDP, 2010
18. Ministry of Health, Manas Taalimi Indicators, 2009
21. Perinatal Care Improvement Program in the Kyrgyz Republic for 2008-2017
22. Rapid Assessment in FGPs and FAPs with maternity beds in target oblasts, UNICEF, 2013
23. Reforming the Perinatal Care System in Kyrgyzstan, UNICEF, 2010
24. Reforming the Perinatal Care System in Kyrgyzstan, UNICEF, 2010
26. Report on implementation of joint plan, 2010
27. RWP 2010-2011, UNICEF
28. RWP 2012-2013, UNICEF

30. Study of knowledge and awareness among the population of Batken, Osh, and Dzhalalabad oblast of the danger signs of childhood illness and complications in pregnancy and knowledge of rights to social benefits - Research results, UNICEF, 2012

31. Socio-medical causes of mortality of children under 2 years of age at home and in the first 24 hours of hospitalization. UNICEF Kyrgyz Office, 2009

32. Tamer Rabie, Kyrgyz Republic Results Based Financing: Paying for Performance to Improve Maternal and Child Health Outcomes, PowerPoint presentation, World Bank, 9 November 2010

33. THE SECOND PROGRESS REPORT ON THE MILLENIUM DEVELOPMENT GOALS, UNDP, 2010

34. UNICEF, Progress for Children - Achieving the MDGs with Equity, Number 9, September 2010

35. United Nations Office for the Coordination of Humanitarian Affairs, Kyrgyzstan: Extended and Revised Flash Appeal - June 2010 to June 2011


37. UNOCHA, Kyrgyzstan: Extended and Revised Flash Appeal - June 2010 to June 2011, November 2010,


39. Rapid Assessment in FGPS and FAPS with maternity beds in target oblast. UNICEF. 2013

40. The Kyrgyz Republic. Third report on progress towards achieving the Millennium Development Goals' UN Kyrgyzstan 2013


## ANNEX 2: LIST OF KEY INFORMANTS

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Position</th>
<th>Organization</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eshkhodjaeva Anara</td>
<td>Head of Department for organization of medical assistance and medicines policy</td>
<td>Ministry of Health</td>
<td>Bishkek</td>
</tr>
<tr>
<td>2</td>
<td>Boobekova Aigul</td>
<td>Main specialist of Department for organization of medical assistance and medicines policy</td>
<td>Ministry of Health</td>
<td>Bishkek</td>
</tr>
<tr>
<td>3</td>
<td>Boronbaeva Elnura</td>
<td>Main specialist of Department for organization of medical assistance and medicines policy</td>
<td>Ministry of Health</td>
<td>Bishkek</td>
</tr>
<tr>
<td>4</td>
<td>Kenjebaeva Gulnara</td>
<td>Head of Maternity Department</td>
<td>Osh Interterritorial Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>5</td>
<td>Asanova Asylkan</td>
<td>Deputy for treatment issues in Maternity Department</td>
<td>Osh Interterritorial Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>6</td>
<td>Nogoibaeva Kulumkan</td>
<td>Head of NICU in Maternity Department</td>
<td>Osh Interterritorial Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>7</td>
<td>Omuralieva Aigul</td>
<td>PC Coordinator in Osh Olast</td>
<td>Osh Interterritorial Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>8</td>
<td>Jirgalbekova Asilkan</td>
<td>Head of Delivery Ward</td>
<td>Osh Interterritorial Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>9</td>
<td>Shakirov Zamir</td>
<td>Head of Perinatal Center</td>
<td>Osh City Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>10</td>
<td>Kultaeva Roza</td>
<td>Deputy on nursing in Perinatal Center</td>
<td>Osh City Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>11</td>
<td>Turkbaeva Fatima</td>
<td>Head of NICU in Perinatal Center</td>
<td>Osh City Hospital</td>
<td>Osh</td>
</tr>
<tr>
<td>12</td>
<td>Omoreev Maksim</td>
<td>Director</td>
<td>Osh Regional Branch of MHIF</td>
<td>Osh</td>
</tr>
<tr>
<td>13</td>
<td>Tursubekova Damira</td>
<td>Deputy Head</td>
<td>Osh Regional Branch of MHIF</td>
<td>Osh</td>
</tr>
<tr>
<td>14</td>
<td>Narmatova Elmira</td>
<td>Director</td>
<td>Osh AIDS Center</td>
<td>Osh</td>
</tr>
<tr>
<td>15</td>
<td>Chogolova J.</td>
<td>Director</td>
<td>Southern branch of the Republican centre for health strengthening</td>
<td>Osh</td>
</tr>
<tr>
<td>16</td>
<td>Muratov Kanybek</td>
<td>Director</td>
<td>Kara Suu Territorial Hospital</td>
<td>Kara Suu</td>
</tr>
<tr>
<td>17</td>
<td>Muratova Gulkair</td>
<td>Head of Maternity Department</td>
<td>Kara Suu Territorial Hospital</td>
<td>Kara Suu</td>
</tr>
<tr>
<td>18</td>
<td>Tokotanazarov Nurgazy</td>
<td>Director</td>
<td>Family Medicine Center</td>
<td>Kara Suu</td>
</tr>
<tr>
<td>19</td>
<td>Akmatova Cholpon</td>
<td>Family Doctor, PC Coordinator</td>
<td>Family Medicine Center</td>
<td>Kara Suu</td>
</tr>
<tr>
<td>20</td>
<td>Aijigitov Turgunby</td>
<td>Director</td>
<td>Batken Oblast Hospital</td>
<td>Batken</td>
</tr>
<tr>
<td>21</td>
<td>Joroeva Kanymgul</td>
<td>Deputy of Director</td>
<td>Batken Oblast Hospital</td>
<td>Batken</td>
</tr>
<tr>
<td>22</td>
<td>Baktybaeva Salima</td>
<td>Deputy of Director on nursing</td>
<td>Batken Oblast Hospital</td>
<td>Batken</td>
</tr>
<tr>
<td>23</td>
<td>Huseinova Mahbuba</td>
<td>Head of Maternity Department</td>
<td>Batken Oblast Hospital</td>
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</tr>
<tr>
<td>24</td>
<td>Saporova Aigul</td>
<td>Head of NICU in Maternity Department</td>
<td>Batken Oblast Hospital</td>
<td>Batken</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Position</td>
<td>Organization</td>
<td>Location</td>
</tr>
<tr>
<td>-----</td>
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<td>-------------------------------</td>
<td>---------------------------------------------</td>
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</tr>
<tr>
<td>25</td>
<td>Toroev Saipidin</td>
<td>Director</td>
<td>Batken Oblast Family Medicine Center</td>
<td>Batken</td>
</tr>
<tr>
<td>26</td>
<td>Janybekov Abdrasul</td>
<td>Director</td>
<td>Kizil Kia Territorial Hospital</td>
<td>Kizil Kia</td>
</tr>
<tr>
<td>27</td>
<td>Suglina Ludmilla</td>
<td>Head of Maternity Department</td>
<td>Kizil Kia Territorial Hospital</td>
<td>Kizil Kia</td>
</tr>
<tr>
<td>28</td>
<td>Joldosheva Omina</td>
<td>Head of NICU in Maternity Department</td>
<td>Kizil Kia Territorial Hospital</td>
<td>Kizil Kia</td>
</tr>
<tr>
<td>29</td>
<td>Monolbaev Kuban</td>
<td>Health Officer</td>
<td>WHO</td>
<td>Bishkek</td>
</tr>
<tr>
<td>30</td>
<td>Smankulova Nurgul</td>
<td>Health Officer</td>
<td>UNFPA</td>
<td>Bishkek</td>
</tr>
<tr>
<td>31</td>
<td>Askerov Arsen</td>
<td>President</td>
<td>Kyrgyz Association of Obstetricians-gynecologists and neonatologists</td>
<td>Bishkek</td>
</tr>
<tr>
<td>32</td>
<td>Orozalieva Asel</td>
<td>Executive Director</td>
<td>Kyrgyz Alliance of Midwives</td>
<td>Bishkek</td>
</tr>
</tbody>
</table>
ANNEX 3: EVALUATION FRAMEWORK

I: MEASURING PROJECT RELEVANCE

This section of the evaluation framework will be filled for each project component separately and summarized in the Final MTR Evaluation Report

<table>
<thead>
<tr>
<th>#</th>
<th>STRATEGIC DOCUMENTS REVIEWED</th>
<th>PROJECT RESULTS</th>
<th>STRATEGY/DIRECTION NOT COVERED BY THE PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Indicated which particular result is in line of the given strategy /direction</td>
<td>Indicate strategy/direction, which in your expert view is important but not addressed by the PROJECT. Please provide justification on why the importance of the subject strategy/ direction for the country</td>
</tr>
</tbody>
</table>

II: MEASURING PROJECT EFFECTIVENESS

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Evaluation Questions</th>
<th>Specific Questions/ instructions</th>
<th>Performance</th>
<th>Sources of data</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF 1</td>
<td>To what extent were the expected results of the project achieved or are likely to be achieved through the events and activities implemented? What were the main enabling/hindering factors in achieving the targets and goals? How the project supported national priorities in MCH</td>
<td>Collect latest information on the status of targetted indicators and assess the status of the indicator. If the indicator is not met as stated in the Project please provide explanation of reasons for not meeting targets Identify hindering/enabling factors.</td>
<td>Status of indicators and targets as of 2010 (baseline) &amp;2013 (end line)</td>
<td>Document: Project Document Progress Reports Monitoring Reports National Statistics Studies, researches</td>
<td>Desk Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Key-Informants: Project staff Service providers National and sub-national government agencies/entities</td>
<td>Semi-Structured Interviews</td>
</tr>
<tr>
<td>EF 2</td>
<td>Extend to which the project strengthened the national and sub-national capacity?</td>
<td>Review baseline needs assessment findings for capacity building. Evaluate implemented activities and Needs based capacity building activities implemented at national and sub-national level</td>
<td>Document: AWPs, Budgets Progress Reports Monitoring Reports Studies, researches</td>
<td>Desk Review</td>
<td></td>
</tr>
<tr>
<td>EF 3</td>
<td>Extend to which the project improved the capacity of service providers in line with evidence-based WHO standards?</td>
<td>Assess whether care protocols are approved and deployed, whether medical personnel have been trained</td>
<td>Evidence based guidelines are complied with by the service providers</td>
<td>Document: AWPs, Training reports and budgets Progress Reports Monitoring Reports Studies, researches</td>
<td>Key-Informants: Project staff Facility and department Managers National and sub-national government agencies/entities TOT, Training institutions</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>EF 4</td>
<td>How the project changed medical or administrative practices of service providers?</td>
<td>Assess medical practice change by inquiring how current medical and administrative practices are different from the ones before the project. What are the benefits of the given project and how it changed the medical and administrative practices</td>
<td>Demonstrated change in medical and administrative practices are evident</td>
<td>Document: AWPs, Progress Reports Monitoring Reports Studies, researches</td>
<td>Key-Informants: Project staff Facility and department Managers</td>
</tr>
<tr>
<td>EF 5</td>
<td>How the project changed health outcomes of beneficiaries?</td>
<td>Assess whether main service coverage bottle-necks (physical availability, affordability,</td>
<td>Increased number of beneficiaries reporting having improved service coverage</td>
<td>Document: Progress Reports Monitoring Reports Studies, researches</td>
<td></td>
</tr>
</tbody>
</table>
### EF 6
**What was the contribution of the project to improvement of the quality of care in perinatal care?**

<table>
<thead>
<tr>
<th>Acceptability barriers, quality – satisfaction with services</th>
<th>Quantitative data</th>
</tr>
</thead>
</table>
| Were removed, if not, document which barriers still remain and explore reasons behind. | FGD
Pregnant Women
Women in postpartum period
Village Health Committees |
| Obtain number of women accessing care during the project period |

<table>
<thead>
<tr>
<th>Data collected at facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD</td>
</tr>
</tbody>
</table>

- **Assess main activities implemented for each quality dimension (structure, process, outcome)**

### EF 7
**What was the contribution of the project to improvement of the rational use of resources?**

<table>
<thead>
<tr>
<th>Evaluated changes in improvement of rational use of resources is evident measured as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Less post partum hemorrhages;</td>
</tr>
<tr>
<td>ii) Less use of transfusions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWPs, Progress Reports Monitoring Reports Studies, researches</td>
</tr>
</tbody>
</table>

- **Key-Informants:** Project staff Facility and department Managers

### Site Visits
- Site visits to project targeted medical facilities.
- Conduct observations where possible National Trainers Collect quantitative data

<table>
<thead>
<tr>
<th>FGD Medical personnel</th>
</tr>
</thead>
</table>

### National Trainers Collect quantitative data

<table>
<thead>
<tr>
<th>Semi-Structured Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Visits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FGD</th>
</tr>
</thead>
</table>

### FGD Medical personnel

<table>
<thead>
<tr>
<th>Desk Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-Structured Interviews</td>
</tr>
<tr>
<td>Site Visits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FGD</th>
</tr>
</thead>
</table>
**EF 8** In what extent the monitoring and evaluation system was in place? How was monitoring used for further planning and adjustment of the project?

- Assess the M&E system, tools used, supervision visits, supervision reports and recommendations, follow-up on previous recommendations, changes in implementation plans, policies, practices if any
- Effective M&E system in place, operational, informing future action plan and policies

**Document:** AWP, M&E Plan, Progress Reports, Monitoring Reports  
**Key-Informants:** Project staff, Facility and department Managers, National assessment team  
**Method:** Desk Review, Semi-Structured Interviews

**EF 9** Was there sufficient synergy among the various project components?

- Assess the degree of synergy between Project components, degree of integration of different services. Identify potential gaps, duplications, etc.
- There is synergy between Project components

**Document:** Project Document, Progress Reports, Monitoring Reports  
**Key-Informants:** Project staff, Partners, Local government agencies/entities  
**Focused Group Discussions:** Service Providers  
**Method:** Desk Review, Semi-Structured Interviews, FGD

**EF 10** The extent to which the partnership modalities facilitated/constrained the implementation of this type of project

- Assess partnership modalities, synergies in AWP, and actual implementation, coordination between partners, etc.
- Demonstrated effective partnership modality

**Document:** Project Document, AWP, Progress Reports, Monitoring Reports, Coordination meeting minutes  
**Key-Informants:** Project staff, Partners, MOH representatives, Health facility and Ward Managers  
**Focused Group Discussions:** Service Providers  
**Method:** Desk Review, Semi-Structured Interviews, FGD

**EF 11** Was Project’s actual implementation in line with expectations and plans? Were there any significant changes or delays?

- Assess implementation progress, identify deviations and reasons.
- Project was implemented with minor deviations from plan

**Document:** Project Document, AWP, Progress Reports, Monitoring Reports, Coordination meeting minutes  
**Key-Informants:** Project staff, Partners, MOH representatives, Health facility and Ward Managers  
**Method:** Desk Review, Semi-Structured Interviews
<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Specific Questions/instructions</th>
<th>Performance</th>
<th>Sources of data</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>80F1</td>
<td>Was Project’s actual expenditure in line with expectations and plans? Were there any significant changes or delays? <strong>THIS QUESTION WILL BE ASSESSED FOR EACH COMPONENT OF THE PROJECT</strong></td>
<td>Review project budget, annual planned budget and budget execution reports</td>
<td>Project actual expenditures are in line with approved budget</td>
<td>Project’s financial resources are sufficient to meet target objectives and results</td>
</tr>
<tr>
<td>80F2</td>
<td>How well the various activities transformed the available resources into the intended results in terms of quantity, quality and timeliness?</td>
<td>Collect latest information on the status of targeted indicators and assess expenditures related to the indicator. If the indicator is not met as stated provide explanation of reasons for not meeting targets.</td>
<td>Indicators and targets are met</td>
<td>Document: Project Document Progress Reports Monitoring Reports Project Budget by year and budget execution reports Statistics Studies, researches</td>
</tr>
</tbody>
</table>
**EFF 3** Were the available resources adequate to meet project needs?

Assess the budget and estimate adequacy of spent resources.

**EFF 4** Were the resources (funds, time, expertise) used in the most economical and simple manner to achieve the results? What solutions were efficient? Are there more efficient alternatives?

Interview staff and assess whether the skill mix and continuity of staff was appropriate to the country context and project needs. Assess whether the time of Project staff spent (i.e., policy dialogue vs. technical assistance; project work vs. administration) is efficient.

<table>
<thead>
<tr>
<th>Document:</th>
<th>Project Document</th>
<th>Progress Reports</th>
<th>Monitoring Reports</th>
<th>Project Budget by year and budget execution reports</th>
<th>Statistics</th>
<th>Studies, researches</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key-Informants:</strong></td>
<td>Project staff</td>
<td>Project Finance Office</td>
<td>Health Facility Managers</td>
<td>MOH</td>
<td>FGD</td>
<td></td>
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<tr>
<td><strong>Focused Group Discussions:</strong></td>
<td>Service Providers</td>
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<table>
<thead>
<tr>
<th>Document:</th>
<th>Organizational Chart</th>
<th>Project staff job descriptions, Salary Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key-Informants:</strong></td>
<td>UNICEF and Project staff</td>
<td>MOH National and sub-national health authorities Health facility Managers</td>
</tr>
</tbody>
</table>

**IV: MEASURING PROJECT SUSTAINABILITY**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Evaluation Questions</th>
<th>Specific Questions/ instructions</th>
<th>Performance</th>
<th>Sources of data</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>S 1</td>
<td>Did the project incorporate adequate exit strategies and capacity development measures to ensure sustainability of the results over time?</td>
<td>Assess capabilities built by the project, identify gaps and provide recommendations. Assess activities planned/implemented</td>
<td>Strong and demonstrated national/sub-national/local ownership is evident. Adequate budgetary support ensured at Federal and/or sub/national/local levels</td>
<td>Documents: Government (National/local) Policy/strategies. MTEF. Annual sub-national budgets and execution reports. Legislation.</td>
<td>Desk Review</td>
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<tr>
<td>Question</td>
<td>Details</td>
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<tr>
<td>S 2</td>
<td>Are conditions and mechanisms in place so that the benefits of the project, interventions are sustained and owned by policy makers, institutions and stakeholders at the national and sub-national, local levels after the interventions are completed? Under the project that contributed towards sustainability (policy, legislation, regulation, human resources, etc.) Presence of the enabling legal environment Evidence based Policy development capacity built Enabling functional environment established at commissions, institutions and stakeholders at the national and sub-national, local levels Consumers are satisfied with the quality of services provided</td>
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<td>S 3</td>
<td>What could have been done within the timeframe of the project additionally to improve the likelihood of positive long-term effects and reduce the likelihood of negative long-term effects? Recommend actions required for achievement of sustainable outcomes</td>
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<td>S 4</td>
<td>To what extent MoH and regional health authorities demonstrate ownership in the project? Demonstrated ownership is apparent</td>
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<td>S 5</td>
<td>How the project influenced in national decision-making and policies? Highlight in the lessons learned</td>
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<td>S 6</td>
<td>How sustainability of the project is ensured on the national/sub-national/facility level? Will the benefits be maintained?</td>
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<td>S 7</td>
<td>What are the possible factors that enhance/inhibit sustainability (e.g. commitment, finance, institutional/technical capacity)? How the project has taken these factors into account?</td>
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<td>S 8</td>
<td>To what extent possible positive changes in final beneficiaries is expected to last?</td>
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<td>S 9</td>
<td>What are the enablers and bottlenecks that can enhance/inhibit sustainability of that change? Recommend how to address the bottlenecks and explain what are enablers and how they support sustainability</td>
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**Documents:** Orders, Decrees, etc. Annual Government Reports Mid-Term and Annual Government Plans

**Key Informants:** MOH and sub-national, local Institutions Health facility Managers; Partners, Other Implementing Agencies CSOs & NGOs Education institutions

**Focused Group Discussions**
- Youth
- Parents
- Providers
- Peer Educators

**Semi-structured Interviews**
- FGDS
ANNEX 4: SEMI-STRUCTURED INTERVIEW QUESTIONNAIRE GUIDE

Even though semi-structured interviews are flexible, they require rigorous preparation. Based on the Evaluation criteria, the Evaluation Team will decide which questions (provided in the Evaluation Framework) are most appropriate for the subject respondent and list them as a checklist. The given checklist/guide will be used during the interview.

ANNEX 5: FGD GUIDES

ANNEX 5.1 FGD GUIDE FOR PREGNANT AND WOMEN IN POSTPARTUM PERIOD

This FGD addresses Women admitted to maternities (or maternity department). It mainly explores factors that might influence the use of hospital services.

1. Introduction to the objectives of the research
2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once
3. Ask people to describe who they are and say few words about themselves
4. Introduce the topic under review – “We are here to evaluate UNICEF contribution towards improvement of service coverage…”
5. Facilitator/s should follow the suggestions (below), and facilitate the group dynamic (allowing all women in the group to express their opinion) without influencing women’s opinions and accounts (there is not wrong or right):

**Availability**

a. Is this the health facility nearest to you home that provides the service you require/required? *(Note. If this is not the nearest health facility for some respondents, try to understand why they have come here).*

b. If you could, would you have chosen a different health facility? Please, explain.

c. In this health facility, are medical personnel in charge of taking care of the service you require/ed available (day and night; days per week)? If not, please explain.

d. In your experience, do this health facility have all necessary medications, materials/equipment to ensure adequate quality of services,? If not, please name deficiencies?

e. In your opinion, how would you characterize knowledge, skills and morale of health facility staff at each level and provide justification of deficiencies?

f. Were the hospital premises conditions suitable for you and your baby needs? Please, explain. *(Note. This refers to the hospital environment, i.e. temperature of rooms, toilets, etc.)*.

**Accessibility**

a. How long did you travel for reaching here? Is the road accessible? Do you have to pay either for services (admission, delivery assistance), medicines (while admitted) and/or transportation and food (while admitted)? If yes, please specify.

b. Who took the decision to deliver in hospital? Did all your family members agree on the decision? Please, explain.

c. Did you sense a respectful/understanding attitude towards you, your family members (if present at delivery time), and your baby? Please explain.

d. According to your opinion, did the staff give you enough information/explanations (about your health status and your baby conditions), and were the explanations/information made clear for you? Please
explain.
e. In your opinion, does the system of referral of the pregnant mother or the newborn from one health institution to another according to need of more specialist care work? Why? (Yes and no). Do you have any personal experience?

Acceptability
a. Did you ever go or consider going to private health facilities for pregnancy, delivery and infant care? Please, explain the reasons (for both yes and no).
b. If you have already had previous experience/s with pregnancy, delivery and newborn care (before November 2010), how would you assess the current experience compared to previous one/s? Why?
(Note. Women might consider current experience better or worse than previous one, despite the improvement of the service. Try to have them identifying three best and three worst things they have experienced during current experience)

Effective coverage
• Are you satisfied with services received? If not, Please explain.
• How would you assess the quality of services received on a scale 1 to 5, where 5 is highly satisfactory and 1 very bad.
• Do you have any suggestions how to improve service quality?
(Note. For instance: more information, confidentiality, etc.).

6. Ask if they would like to add further comments.
7. Bring the discussion to closure by summarizing the main points.
Thank you.

ANNEX 5.2 FGD GUIDE FOR PREGNANT AND WOMEN IN POSTPARTUM PERIOD
This FGD addresses Women admitted to delivery maternities (or maternity department) before delivery or in the post-partum period. It mainly explores factors that might influence the use of Ante-Natal-Care (ANC) services.

1. Introduction to the objectives of the research
2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once
3. Ask people to describe who they are and say few words about themselves
4. Introduce the topic under review – “We are here to evaluate UNICEF contribution towards improvement of service coverage….”
5. Facilitator/s should follow the suggestions (below), and facilitate the group dynamic (allowing all women in the group to express their opinion) without influencing women's opinions and accounts (there is not wrong or right):

Availability
a. Did you attend ANC visits during current/last pregnancy? Where, and what was the frequency of visiting
health facility?

b. If you could, would you have chosen a different health structure (for ANC)? Other governmental structure or private health facility?
(Note. Try to differentiate comments/opinions from women who attended governmental structures and private ones, if any).

c. In your experience, do the health facility where you went for ANC have all necessary medications, materials/equipment to ensure adequate quality of services? If not, please name deficiencies?
(Note. Same as above).

d. In your opinion, how would you characterize knowledge, skills and morale of the ANC-health-facility's staff, and, please, provide justification of deficiencies?
(Note. Same as above).

e. Did you attend birth preparedness classes? Would you do it again in the next pregnancy? Why? (Both, yes and no)

Access

a. Who took the decision to attend ANC visits? Did all your family members agree on the decision? Please, explain.

b. Could you name three emergency signs in pregnancy? Was it clear to you (and your family) what to do and where to go for seeking care? Did you agree with these instructions? Please, explain.

c. In your opinion, does the system of referral of the pregnant mother or the newborn from one health institution to another according to need of more specialist care work? Why? (Yes and no). Do you have any personal experience?

d. Did you have to pay for pregnancy and delivery care (if woman already delivered)? How much (roughly)? Among the services you had to pay for, which one was more expensive? (Medications, health services. Other).

e. Could you name three factors that would ease your attendance to ANC? (Note. For example: less time, transportation, opening hours/days, family member consent, etc.).

Acceptability

a. Did you receive the kind of information you wanted or needed to receive as pregnant woman and mother-to-be? Please, explain.

b. Who provided the information that you have received during pregnancy?
(Note. Any kind of source, also family members).

c. Referring only to the information you have received by health staff, were they (explanations/information) made clear to you? Please explain.

d. And, how often did you apply acquired skills and knowledge into practice?

e. Did other family members receive adequate information on pregnancy, delivery and infant care?

f. What is the primary form of communication that moves you to action?
(Note. For example: Flip chart on health seeking practices, key child feeding and caring; mother card; posters; examples; practice; radio/TV; Other –please specify-).

g. If you have attended ANC visits in previous pregnancy/ies (before November 2010), how would you assess the last ANC experience compared to previous one/s? Has something changed? Please, explain.
(Note. Women might consider current experience better or worse than previous one, despite the improvement of the service. Try to have them identifying three best and three worst things they have experienced during current experience)
Effective coverage

• Were you satisfied with services received? If not, Please explain.
• How would you assess the quality of services received on a scale 1 to 5, where 5 is highly satisfactory and 1 is very bad.
• Do you have any suggestions how to improve service quality?
  (Note. For example: more/less lab tests, more/less ANC appointments, etc.)

6. Ask if they would like to add further comments.
7. Bring the discussion to closure by summarizing the main points.
   Thank you.

ANNEX 5.3 FGD GUIDE FOR SERVICE PROVIDERS
(Obstetricians, Pediatricians, Neonatologists, Nurses, Midwives, Patronage Nurses, GPs)

1. Introduction to the objectives of the research
2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once
3. Ask people to describe who they are and say few words about themselves
4. Introduce the topic under review - We are here to evaluate the training supported by the UNICEF’s “Ensuring access to affordable health services in the affected areas of the country for women of reproductive age and newborns” Project
5. Ask questions

Which training package did you attend? PLEASE SPECIFY

Relevance

• Are training contents (including protocols and guidelines) suitable for the Kyrgyz MCH care delivery system? Why?
• Was this training pertinent to your current daily work? Why?
• Before attending the training, did you feel the need to upgrade your knowledge and skills? Why? In which field/s?
• Do patients appreciate the improvement of quality care in your health facility? Why do you say this?
• Since you started applying the acquired skills, is there any noticeable improvement in the health status of the patients/community who attends your health facility? Why do you say this?

Effectiveness

• Do you feel that the training enabled you to fully apply, in your daily practice, what you have learnt? Why?
• How often do you apply the acquired skills and knowledge into work practice?
• Were you reluctant to accept new practices/procedures (reluctant to change)? Which ones? Why?
• Did the acquired knowledge and skills affect (could be both, positively and negatively) your self-confidence and the value you put on your daily work? Why?
• What is the significance, if any, of providing MCH quality care?
• Is there a supportive supervision and monitoring system in place? Is this system able to support you to apply acquired skills, and reliable information and data for decision makers? Why? Please describe. What is your involvement in the monitoring process?

**Efficiency**

• Monitoring and Quality Improvement activities are meant to facilitate and ensure quality MCH care delivery. In your health facility, has the quality of care for mothers and children improved? Please provide arguments in support of your statement?

**Sustainability**

• At the work place, are there some conditions that prevent you to correctly practice your skills? (i.e. non-confident in skills despite training, shortage/lack of basic equipment/amenities, drugs, time constraints, referral etc.). Please, describe.
• Are you receiving any incentive/did you expect to be incentivized/awarded for delivering quality MCH services? Please, describe.

6. Ask if they would like to add further comments.
7. Bring the meeting to a close by summarizing the main points.
8. Thank you

**ANNEX 5.4 FGD GUIDE FOR BENEFICIARIES AT PHC LEVEL**

Target groups are caregivers (mothers, fathers, grandmothers) at PHC level health facility for under five years old children care.

1. Introduction to the objectives of the research
2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once
3. Ask people to describe who they are and say few words about themselves
4. Introduce the topic under review - We are here to evaluate the training and monitoring component supported by the IMCHS Project
5. Facilitator/s should follow the suggestions (below), and facilitate the group dynamic (allowing all women in the group to express their opinion) without influencing women's opinions and accounts (there is not wrong or right):

**Education Package**

• Did you ever receive information/instructions on sick child (symptoms and actions to be taken)? Could you name three important conditions with their (three) danger signs that characterize the gravity of the condition?
• If pregnant lady, ask also about complications during pregnancy.
• Who provided the information on sick child and/or danger signs in pregnancy?
• How often do you apply acquired skills and knowledge into practice?
• Did other family members receive adequate information on child care (and danger signs in pregnancy)? And who provided this information?
• Were the explanations/information (on childcare and/or danger signs in pregnancy) made clear to you? Please explain.
• Did you receive the kind of information you wanted/needed to receive as mother/caregiver on childcare (and danger signs in pregnancy)? Please, explain.
• Was the content of materials and the way it was presented easy to understand and practical? Please, explain.
• What is the primary form of communication that moves you to action?
  a. Flip chart on key child feeding, caring and health seeking practice for mother and child;
  b. Mother card
  c. Posters
  d. Examples
  e. Practice
  f. Radio/TV
  g. Other, please specify

**Human Resources for MCH**
• What kind of topics did nurse cover during communication on children’s care: provide information? Or/and show examples or/and give you an example for practice?
• How long it takes the counseling on childcare? Do you think that duration of the counseling and the content is sufficient?
• Can you describe the visit to patronage nurse, duration and process of the visit and topics of counseling if you received it?
• Did the nurse cover also maternal health issues? Please explain.

**Health Service**
• Is this the health facility nearest to you home that provides MCH service for mothers and children?
• If you could, would you have chosen a different health facility? Please, explain
• What was the frequency of visiting health facility during the pregnancy and after delivery?
• Do you have to pay for MCH services? If yes, do you pay out of the pocket directly to the doctor, or to the cash office of the medical facility?
• Are you satisfied with MCH services received? Why?
6. Ask if they would like to add further comments.
7. Bring the meeting to a close by summarizing the main points
Thank you
ANNEX 5.5 FGD GUIDE FOR NATIONAL TRAINERS

1. Introduction to the objectives of the research

2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once

3. Ask people to describe who they are and say few words about themselves

4. Introduce the topic under review - We are here to evaluate the training and monitoring component supported by the IMCHS Project

5. Facilitator/s should follow the suggestions (below), and facilitate the group dynamic (allowing all women in the group to express their opinion) without influencing women’s opinions and accounts (there is not wrong or right):

Relevance

• Are training contents (including protocols and guidelines) suitable for the Kyrgyz MCH care delivery system? Why?

• What is the significance, if any, of providing MCH quality care? Please, explain.

• Do you agree that the Kyrgyzstan health system needed to improve QoCMCH? Please, explain.

• Do you agree that Service Providers (Obstetricians, Pediatricians, Neonatologists, Nurses, Midwives, Patronage Nurses, GPs) needed to improve their knowledge and skills? Please, explain.

• Could you assess (in general) the improvement of quality care (if any) in the health institutions that were covered by project activities? Please, explain.

• In which field/area of perinatal care do you see greater improvement? Why?

Effectiveness

• Did you appreciate any “resistance to change” among the trainees?

• In your opinion, why do they resist? Please, explain.

• What would you suggest in order to ease “resistance to change”?

• What topics/areas were most difficult to teach? Why? (Was it difficult for you or for trainees?).

• What topics/areas were most easy to teach? Why? (Was it easy for you or for trainees?).

• Which areas need to be supported most?

• Would it be any difference if quality perinatal cares were integral part of the university/diploma curriculum? Please, explain.

• Which major obstacles might hinder a rapid implementation of QoC in MCH? Please, explain.

• Which (feasible) solutions would you suggest? Please, explain.

• Do hospital management acknowledge the results of the monitoring activity? Please, explain.

Efficiency

• How do you assess the training process? (Teaching methods; balance theory/practice; time; etc.). Please explain.

• Would you suggest any change?
• How do you assess the monitoring process?
• Are monitoring assessment results taken into consideration and needed action implemented by the management of health institution? Could you explain?
• Would you suggest any change in the monitoring process?
• Did you see any inefficient/ineffective use of human resources for health (i.e. service provider who is in a job position that does not allow her/him to fully implement her/his fully professional capacities)? Please explain, and offer suggestions if any.

**Sustainability**

• Do you think that the system of continuing education – monitoring will last after the end of the project? Why?
• Do you think that the current system is the one that will guarantee quality care? Please explain.
• If so, would you suggest strategies to maintain this system?
• Any further suggestion?

6. Bring the meeting to a close by summarizing the main points

Thank you

ANNEX 5.6 FGD GUIDE FOR NATIONAL ASSESSORS

1. Introduction to the objectives of the research
2. A brief introduction to the rules of focus groups
   a. Everything said and done is confidential and will not be used outside the room except for the purposes of this research;
   b. Every statement is right;
   c. Please do not hesitate to disagree with someone else;
   d. But do not all talk at once
3. Ask people to describe who they are and say few words about themselves
4. Introduce the topic under review - We are here to evaluate the training and monitoring component supported by the IMCHS Project
5. Facilitator/s should follow the suggestions (below), and facilitate the group dynamic (allowing all participants in the group to express their opinion) without influencing people's opinions and accounts (there is not wrong or right):

**Relevance**

• What is the significance (if any) of providing MCH quality care?
• Do you practice medicine? If yes, considering your daily work practice, how often do you apply knowledge and skills that you assess?
• Could you assess (in general) the improvement of quality care (if any) in the health institutions that were covered by project activities? Please, explain.
• In which field/area of perinatal care do you see greater improvement? Why?

**Effectiveness**

• What are the main strengths and weaknesses of the whole project capacity building process (training courses and monitoring)? Why?
• Do you think the monitoring process is well understood by Hospital Health Managers? Do they take into
consideration of monitoring results and implement needed action? Please, explain.

• What are the limitations that might hinder the implementation of the monitoring process?
• According to your experience and considering MCH care delivery at hospital and PHC level, which services have more chances to improve in the short run as result of training and monitoring activities? Why?
• According to your experience and considering MCH care delivery at hospital and PHC level, which services have less chance to improve in the short run as result of training and monitoring activities? Why?
• Are supervised Health Service Providers (who underwent training) reluctant to apply new practices/procedures? Which ones and why?

**Efficiency**

• Would you describe the contribution given by the monitoring activities to the improvement of MCH quality care?
• Did you see significant changes in quality of care in between assessments?
• What is the attitude of Health Service Providers towards being monitored?
• Did you see any inefficient/ineffective use of human resources for health (i.e. service provider who is in a job position that does not allow her/him to fully implement her/his fully professional capacities)? Please explain, and offer suggestions if any.
• Which were strengths and weaknesses of the International Consultants assistance to the monitoring process?

**Sustainability**

• Do you think that the current system (continuing education – monitoring) is the one that will guarantee quality care? Please explain.
• Do you think that the system of continuing education – monitoring will last after the end of the project? How?
• Would you suggest any change in the monitoring process?
6. Ask if they would like to add further comments
7. Bring the meeting to a close by summarizing the main points
Thank you
ANNEX 6: WHO ASSESSMENT CHECKLIST

ANNEX 6.1
INDICATORS ON IMPLEMENTATION OF EFFECTIVE PERINATAL TECHNOLOGIES

<table>
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<th>Indicator</th>
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<td>Number of deliveries in a month</td>
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<td>Number of Rahmanov obstetric beds</td>
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<td>Level of partner deliveries</td>
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<td>Level of deliveries in a free position</td>
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<td>Level of drug anesthesia</td>
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<td>Active management of the III stage of labor</td>
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<td>Percentage of labor induction</td>
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<td>Level of manual examinations</td>
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<td>Level of episiotomy and perineotomy</td>
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ANNEX 6.2 FORM FOR ASSESSMENT OF MATERNITY WARDS

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<tr>
<th>Data</th>
<th>NAME of the Auditor</th>
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<tr>
<td>Name of the institution</td>
<td>Rayon Oblast</td>
</tr>
</tbody>
</table>

CHECK AT THE EACH MATERNITY WARD

<table>
<thead>
<tr>
<th>Safety / basic medical equipment</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there an ordinary bed in MW?</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Is there the Rahmanov obstetric bed in MW?</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Is the Rahmanov bed covered by bed sheet?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Is there a fetoscope in MW?</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Is there a wall thermometer in MW?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is a temperature in MW (°C)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Is there an electronic thermometer in MW?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there the Ambu bags and masks for the newborn in MW?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a radiant heat source or a heat table in MW?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.1.10 Is there a tonometer for an adult?  

1.1.11 Is there a wall clock with a second hand?  

1.2 Amicability/privacy  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

1.2.1 Are there curtains on windows and door to assure privacy in MW?  

1.2.2 Are there at minimum 2 chairs in MW for the woman and her partner?  

1.2.3 Is there in MW the set of accessories for woman to take free positions during labor (floor mat, ball, wall bars, and labor chair)?  

1.2.4 Is there information about free positions during labor?  

1.2.5 Are there water, soap, and towel?  

1.2.6 Is there information on hand washing?  

---

**ANNEX 6.3 FORM FOR ASSESSMENT OF LABOR MANAGEMENT PRACTICE AND CARE AFTER THE MOTHER AND THE NEWBORN**

<table>
<thead>
<tr>
<th>Data</th>
<th>NAME of the Auditor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of the institution</th>
<th>Rayon</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**I. CONDITIONS FOR CHILDBIRTH ASSISTANCE**

1. Is there a rule to knock at the door before entering the Maternity ward?  
   Yes () No ()

2. How many health workers are present at birth?  
   a. Less than three ()  
   b. Three ()  
   c. More than three ()

3. What is the temperature in the maternity ward? ____________°С

4. Is the resuscitation table / radiant heat source connected to the electricity network and heated?  
   Yes () No ()

5. Is there a resuscitation toolkit in the MW?  
   Yes () No ()

6. Is there a tonometer in MW?  
   Yes () No ()

7. Is there an electronic thermometer in MW?  
   Yes () No ()

The temperature in the maternity ward should be no less than 25°C
II. CARE DURING THE FIRST STAGE OF LABOR

<table>
<thead>
<tr>
<th>#</th>
<th>QUESTIONS</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are there any of the woman's family or friends constantly present during the first stage of labor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do the maternity hospital personnel support woman during the first stage of labor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do the maternity hospital personnel involve the woman/partner in decision-making process (explain what they plan to do, ask for woman' permission to carry out the procedures / manipulations, etc.)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do the maternity hospital personnel offer the woman to take a vertical position?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do the maternity hospital personnel help the woman to find comfortable position?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can the woman take a light meal and drink during the first stage of labor?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. PARTOGRAPH

1. Is the partograph used? Yes () No ()

   If yes, then note the following:

2. Are the records of partograph logged properly?

   Watch, which of the following data are properly logged and recorded during labor:

   - Information on woman Yes () No ()
   - Fetal heartbeats Yes () No ()
   - Condition of amniotic fluid Yes () No ()
   - Fetal head configuration Yes () No ()
   - Cervical dilatation Yes () No ()
   - Descent of fetal head Yes () No ()
   - Time Yes () No ()
   - Uterine contraction intensity Yes () No ()
   - Oxytocin, drugs, intravenous introduction of solutions Yes () No ()
   - Arterial pressure, pulse, temperature of the mother Yes () No ()
   - Volume of urinary excretion Yes () No ()

IV. CARE DURING THE SECOND STAGE OF LABOR

1. Is the woman encouraged to select the position during labor herself, in addition to a supine position? Yes () No ()

2. Is the woman encouraged to actively bear down during labor? Yes () No ()

   If Yes – specify the reason:
   - Fetal distress ()
   - Prolonged second stage of labor, longer than 3 hours ()

3. Do you listen to the fetal heartbeats rate after each labor pain? Yes () No ()

4. Is there a practice of pressure on the fundus of uterus for childbirth? Yes () No ()

5. Is there an episiotomy? Yes () No ()

   If yes, please specify the reason:
• Fetal distress  
• Prolonged second stage of labor  
• Large fetus  
• Premature baby  
• Induced labor

6. Has anesthesia been done in connection with episiotomy?  Yes () No ()

V. CARE AFTER THE UMBILICAL CORD

1. Clamping of umbilical cord  Yes () No ()
   a. Immediately after birth  
   b. About 1 minute after birth  
   c. After the termination of the umbilical cord pulsation

2. Treatment of the stamp of umbilical cord with disinfectant  Yes () No ()

3. No bandage on the stamp of umbilical cord  Yes () No ()

VI. CARE DURING IN THE THIRD STAGE OF LABOR

1. Has woman been informed on risk factors and advantages of the physiological and active management of the third stage of labor?  Yes () No ()

2. The third stage of labor is managed:
   a. Physiologically (waiting)  
   b. Actively

3. In case of active approach it should be noted, what actions have been done properly:
   a. Introduction of 10 units of Oxytocin intramuscularly  Yes () No ()
   b. Controlled traction by umbilical cord  Yes () No ()
   c. Massage of the uterus  Yes () No ()

VII. CARE AFTER THE NEWBORN IMMEDIATELY AFTER BIRTH

1. Is the routine suction of mucus carried out to all newborns?  Yes () No ()

2. Were the child’s clothes, nappies and blanket warmed before use?  Yes () No ()

3. Was the newborn wiped dry immediately after birth?  Yes () No ()

4. Newborn was dressed with cap and socks  Yes () No ()

5. Was the newborn put for “skin-to-skin” contact immediately after birth?  Yes () No ()

6. Were the newborn and the mother covered together by one blanket?  Yes () No ()

7. Is the assessment of the newborn’s status carried out immediately (within 30 seconds) after birth?  Yes () No ()

8. Time of the first temperature measurement:
   a. After 30 minutes  Yes () No ()
   b. Other __________________________________________

9. Is the assessment of the newborn’s state carried out on the mother’s abdomen?
10. Is the counseling on feeding methods carried out?  
Yes () No ()

ANNEX 6.4 OBSERVATION AT THE POSTNATAL DEPARTMENT

<table>
<thead>
<tr>
<th>Data</th>
<th>NAME of the Auditor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knock at the door and ask politely if you may enter to look the room and ask some questions. If the woman is breastfeeding, ask what she would prefer, if you come later, or she agrees that you do it now. Assess the following points:

1. Only 1 woman + 1 child in the ward (individual postnatal ward)   Yes () No ()  
2. Whether the child is dressed in the home clothes?*   Yes () No ()  
3. Whether the child swaddled tightly, including arms, shoulders and neck? Yes () No ()  
4. Whether the child is sleeping on supine position?**   Yes () No ()  
5. Check whether the umbilical residue hold in dry open way, or is treated with antiseptic? Yes () No ()  
6. Is there a wall thermometer?      Yes () No ()  
7. Is the temperature in the ward more than 22° C?    Yes () No ()  
8. Is there in the room advertisement of baby foods??***    Yes () No ()  
9. Have you seen the baby bottles or pacifiers in the ward? Yes () No ()  
10. Are there towels and soap in the ward?      Yes () No ()  
11. Is there access to water in the ward?       Yes () No ()  
12. Are there educational posters on the walls?      Yes () No ()

If yes, please indicate on what topics:  
__________________________________________________________________________________________  
__________________________________________________________________________________________  
__________________________________________________________________________________________

* If you are doubt, ask the mother, if she is allowed using home clothes for the baby.  
** If the mother is breastfeeding, ask her if she put baby sleep on his back.  
*** For instance, advertisement of Nestle or Hip, that may have side effect to breastfeeding.
ANNEX 7: CRITERION BASED AUDIT TOOL

ANNEX 7.1 NORMAL DELIVERY

Instructions:
Q1. Facility Name:

Q2. Date of Audit (Day/month/year)

Pull 5 files of patients who have been admitted at the facility in the past 6 months.

Indicate:
YES (for all criterion that have been met)  1
No (if the criteria has not been met)  0
NA (not applicable)    999
NR (if the criteria is not recorded)   555

<table>
<thead>
<tr>
<th>Q1</th>
<th>Admission</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.1</td>
<td>Date of admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.2</td>
<td>Time of admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.3</td>
<td>Temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.4</td>
<td>Blood Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.5</td>
<td>Pulse</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q1.6</td>
<td>Danger signs the woman is experiencing are noted</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q1.7</td>
<td>Time of onset of contractions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Review of ANC card</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q2.1</td>
<td>Noted that ANC card was reviewed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.2</td>
<td>Results of HIV test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.3</td>
<td>Test for HIV done if no result from ANC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q3</td>
<td>Physical exam—which of the following was recorded?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q3.1</td>
<td>Fundal height</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.2</td>
<td>Presentation of fetus</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Q3.3</td>
<td>Fetal heart tones</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Q3.4</td>
<td>Fetal descent</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q3.5</td>
<td>Frequency of contractions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.6</td>
<td>Duration of contractions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.7</td>
<td>Cervical dilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.8</td>
<td>Status of membranes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.9</td>
<td>If membranes ruptured, status of fluid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>Lab exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4.1</td>
<td>Urine for protein</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>Partograph</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5.1</td>
<td>Partograph opened</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

If no  ➔ Q3.1
If no  ➔ Q6.1
### Q5. Evaluation of UNICEF Programme on Perinatal Care for the period 2010 – 2013

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5.2</td>
<td>First cervical dilation is plotted on alert line</td>
</tr>
<tr>
<td>Q5.3</td>
<td>Fetal heart tones plotted every 30 minutes</td>
</tr>
<tr>
<td>Q5.4</td>
<td>Status of membranes recorded at least once</td>
</tr>
<tr>
<td>Q5.5</td>
<td>Contractions plotted every 30 minutes</td>
</tr>
<tr>
<td>Q5.6</td>
<td>Pulse plotted every 30 minutes</td>
</tr>
<tr>
<td>Q5.7</td>
<td>Temperature plotted at least once</td>
</tr>
<tr>
<td>Q5.8</td>
<td>Blood pressure plotted at least once</td>
</tr>
<tr>
<td>Q5.9</td>
<td>Is action line reached? <strong>If no ➔ Q6.1</strong></td>
</tr>
<tr>
<td>Q5.10</td>
<td>If action line is reached is action taken to resolve problem?</td>
</tr>
</tbody>
</table>

### Q6. Delivery

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6.1</td>
<td>Time of delivery recorded</td>
</tr>
<tr>
<td>Q6.2</td>
<td>Type of delivery recorded</td>
</tr>
<tr>
<td>Q6.3</td>
<td>Spontaneous vaginal delivery</td>
</tr>
<tr>
<td>Q6.4</td>
<td>AMTSL performed</td>
</tr>
<tr>
<td>Q6.5</td>
<td>Time of placental delivery recorded</td>
</tr>
<tr>
<td>Q6.6</td>
<td>Condition of newborn recorded</td>
</tr>
<tr>
<td>Q6.7</td>
<td>Maternal vital signs recorded every 15 minutes for 1 hour</td>
</tr>
<tr>
<td>Q6.8</td>
<td>Maternal complication: specify</td>
</tr>
<tr>
<td>Q6.9</td>
<td>Mother transferred to postnatal ward</td>
</tr>
<tr>
<td>Q6.10</td>
<td>Mother referred to another facility</td>
</tr>
</tbody>
</table>

### ANNEX 7.2 COMPLICATED DELIVERY

Instructions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.1</td>
<td>Date of admission is recorded</td>
</tr>
</tbody>
</table>

Indicate:

- YES (for all criterion that have been met) 1
- No (if the criterion has not been met) 0
- NA (not applicable) 999
- NR (if the criteria is not recorded) 555
<table>
<thead>
<tr>
<th>Q1.2</th>
<th>Time of admission is recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.3</td>
<td>Date of delivery is recorded</td>
</tr>
<tr>
<td>Q1.4</td>
<td>Method of delivery is recorded</td>
</tr>
<tr>
<td><strong>Q2 Clinical state on admission</strong></td>
<td></td>
</tr>
<tr>
<td>Q2.1</td>
<td>Pulse is recorded</td>
</tr>
<tr>
<td>Q2.2</td>
<td>Blood pressure is recorded</td>
</tr>
<tr>
<td><strong>Q3 Outcome on discharge</strong></td>
<td></td>
</tr>
<tr>
<td>Q3.1</td>
<td>Patient discharged alive</td>
</tr>
<tr>
<td>Q3.2</td>
<td>Date of discharge recorded</td>
</tr>
<tr>
<td>Q3.3</td>
<td>Discharge diagnosis recorded</td>
</tr>
<tr>
<td>Q3.4</td>
<td>If death, date of death is recorded</td>
</tr>
<tr>
<td>Q3.5</td>
<td>If death, reason for death is recorded</td>
</tr>
<tr>
<td><strong>Q4 Referral status</strong></td>
<td></td>
</tr>
<tr>
<td>Q4.1</td>
<td>The woman was referred TO this facility from another facility</td>
</tr>
<tr>
<td>Q4.2</td>
<td>The woman was referred FROM this facility to another facility</td>
</tr>
<tr>
<td><strong>Q5 Postpartum hemorrhage</strong></td>
<td></td>
</tr>
<tr>
<td>Q5.1</td>
<td>Time of onset of hemorrhage is recorded</td>
</tr>
<tr>
<td>Q5.2</td>
<td>Cause of hemorrhage is recorded</td>
</tr>
<tr>
<td>Q5.3</td>
<td>Total blood loss recorded</td>
</tr>
<tr>
<td>Q5.4</td>
<td>An IV infusion was initiated</td>
</tr>
<tr>
<td>Q5.5</td>
<td>If total blood loss estimated at &gt;1500 ml was a blood transfusion carried out?</td>
</tr>
<tr>
<td>Q5.6</td>
<td>The pulse was monitored at least once in the first hour after hemorrhage was recognized</td>
</tr>
<tr>
<td>Q5.7</td>
<td>The blood pressure was monitored at least once in the first hour after hemorrhage was recognized</td>
</tr>
<tr>
<td>Q5.8</td>
<td>The uterine massage was performed at least once after onset of hemorrhage</td>
</tr>
<tr>
<td>Q5.9</td>
<td>Uterotonics (oxytocin, ergometrine, misoprostol) used at least once after onset of hemorrhage</td>
</tr>
<tr>
<td>Urine output measured at least once after hemorrhage identified</td>
<td></td>
</tr>
<tr>
<td>Q5.10</td>
<td>Definitive treatment was carried out within 30 minutes of onset of hemorrhage (i.e. manual removal of placenta, bimanual compression, curettage, surgery, etc.)</td>
</tr>
<tr>
<td><strong>Q6 Severe pre-eclampsia (diastolic BP ≥110 mmHg, AND proteinuria ≥3+, no convulsions)</strong></td>
<td></td>
</tr>
<tr>
<td>Q6.1</td>
<td>The diastolic blood pressure was &gt;110 mmHg</td>
</tr>
<tr>
<td>Q6.2</td>
<td>The urine protein measured and recorded</td>
</tr>
<tr>
<td>Q6.3</td>
<td>The urine protein ≥ 3+</td>
</tr>
<tr>
<td>Q6.4</td>
<td>IF diastolic blood pressure ≥110 AND urine protein ≥3+ magnesium sulfate was administered IV</td>
</tr>
<tr>
<td>Q6.5</td>
<td>After initial administration of magnesium sulfate it was administered again not later than 4 hours later</td>
</tr>
<tr>
<td>Q6.6</td>
<td>The blood pressure was taken at least once after the initial diastolic blood pressure of ≥110 mmHg</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Q6.7</td>
<td>The urine output recorded at least once after the first dose of magnesium sulfate</td>
</tr>
<tr>
<td>Q6.8</td>
<td>Respiratory rate recorded at least once after administration of magnesium sulfate</td>
</tr>
<tr>
<td>Q6.9</td>
<td>If diastolic blood pressure ≥110 mmHg, an anti-hypertensive was administered at least once</td>
</tr>
<tr>
<td>Q6.10</td>
<td>Delivery occurred within 24 hours of initial diastolic blood pressure ≥110 mmHg</td>
</tr>
<tr>
<td>Q6.11</td>
<td>The last dose of magnesium sulfate was given not earlier than 24 hours after delivery</td>
</tr>
</tbody>
</table>

**Q7**  Eclampsia (convulsions, may have elevated blood pressure and proteinuria)

<table>
<thead>
<tr>
<th>Q7.1</th>
<th>The time of convulsion recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7.2</td>
<td>Magnesium sulfate administered within 15 minutes of onset of convulsion</td>
</tr>
<tr>
<td>Q7.3</td>
<td>The urine protein measured at least once</td>
</tr>
<tr>
<td>Q7.4</td>
<td>If diastolic blood pressure ≥110 mmHg, anti-hypertensives were given at least once</td>
</tr>
<tr>
<td>Q7.5</td>
<td>Blood pressure recorded at least once after first convulsion</td>
</tr>
<tr>
<td>Q7.6</td>
<td>Respiratory rate recorded at least once after administration of magnesium sulfate</td>
</tr>
<tr>
<td>Q7.7</td>
<td>Another dose of magnesium sulfate was administered not later than 4 hours after the first dose</td>
</tr>
<tr>
<td>Q7.8</td>
<td>Delivery took place within 12 hours of onset of the first convulsion</td>
</tr>
<tr>
<td>Q7.9</td>
<td>The last dose of magnesium sulfate was given not earlier than 24 hours after delivery OR the last convulsion, whichever was last</td>
</tr>
</tbody>
</table>

**Q8**  Obstructed labor (no cervical dilation and/or no fetal descent after 4 hours of adequate contractions)

<table>
<thead>
<tr>
<th>Q8.1</th>
<th>Time of identification of obstructed labor recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8.2</td>
<td>Time of intervention to resolve obstructed labor recorded (i.e. cesarean section, referral)</td>
</tr>
<tr>
<td>Q8.3</td>
<td>More than one hour elapse between identification of and treatment for obstructed labor</td>
</tr>
<tr>
<td>Q8.4</td>
<td>Uterine rupture occur</td>
</tr>
<tr>
<td>Q8.5</td>
<td>Fetal or newborn death occur</td>
</tr>
</tbody>
</table>

**Q9**  Maternal sepsis

<table>
<thead>
<tr>
<th>Q9.1</th>
<th>The mother's temperature was ≥38°C at any time during labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9.2</td>
<td>Membranes were ruptured for ≥18 hours before delivery</td>
</tr>
<tr>
<td>Q9.3</td>
<td>Temperature ≥38°C OR membranes were ruptured for ≥18 hours antibiotics were administered within 1 hour of identification of either condition</td>
</tr>
</tbody>
</table>
Q9.4 IV Antibiotics (ampicillin) were administered

Q9.5 IV Antibiotics (gentamycin) were used

Q9.6 IV antibiotics (metronidazole) was used

### ANNEX 7.3 NEWBORN RESCUSITATION

Instructions:

| Q1. Facility Name: | Q3: Enumerator number: |
| Q2. Facility number: | Q4: Date of Audit (Day/month/year) |

Pull 5 files of patients who have been admitted for AMI in the past 6 months cannot be pulled use past 12 month as recall period. Indicate:

- YES (for all criterion that have been met) 1
- No (if the criteria has not been met) 0
- NA (not applicable) 999
- NR (if the criteria is not recorded) 555

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>GO TO</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Admission Data - are the following recorded?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.1 Date of birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q1.2 Time of birth</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q2 Clinical Data: Condition of baby at birth and interventions - are the following recorded?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q2.1 Baby dried at birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.2 Respiration &lt;30/m after drying</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Q2.3 Time of onset of resuscitation recorded</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q2.4 Baby positioned on back with neck slightly extended</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q2.5 Mouth and nose suctioned with bulb or catheter</td>
<td></td>
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<tr>
<td>Q2.6 If respiration still &lt;30/m after suctioning, ventilation with bag and mask begun at 30 – 50 ventilations/m</td>
<td></td>
<td></td>
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<tr>
<td>Q2.7 Ventilation carried out until spontaneous respiration are &gt;30/m</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q2.8 Oxygen administered if respiration remain &lt;30/m</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q2.9 Time baby breathed on its own and ventilations ceased recorded</td>
<td></td>
<td></td>
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<tr>
<td>Q2.10 Time ventilations ceased and baby declared dead</td>
<td></td>
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<tr>
<td>Q2.11 Baby breastfed after resuscitation</td>
<td></td>
<td></td>
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<tr>
<td>Q2.12 Baby's condition monitored for at least 2 hours after resuscitation</td>
<td></td>
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<td></td>
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<tr>
<td>Q3</td>
<td>Outcome Recorded</td>
<td></td>
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</tr>
<tr>
<td>Q3.1</td>
<td>Baby to room with mother</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Q3.2</td>
<td>Baby to special care nursery</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q3.3</td>
<td>Baby referred to another facility</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q3.4</td>
<td>Baby died</td>
<td></td>
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</tr>
</tbody>
</table>

### ANNEX 7.4 NEWBORN SEPSIS

Instructions:

Q1. Facility Name:    Q3: Enumerator number:

Q2. Facility number:    Q4: Date of Audit (Day/month/year)

Pull 5 files of patients who have been born in the past 6 months, if cannot be pulled use past 12 month as recall period. Indicate:

- YES (for all criterion that have been met) 1
- No (if the criteria has not been met) 0
- NA (not applicable) 999
- NR (if the criteria is not recorded) 555

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>GO TO</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Admission Data- are the following recorded?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.1</td>
<td>Date of admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.2</td>
<td>Time of admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.3</td>
<td>Date of birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.4</td>
<td>Time of birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.5</td>
<td>Weight</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q1.6</td>
<td>Pulse</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q1.7</td>
<td>Respirations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1.8</td>
<td>Temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Clinical Data: Labor/Delivery History—are the following recorded?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.1</td>
<td>Number of hours membranes ruptured before delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.2</td>
<td>Character of amniotic fluid prior to delivery (i.e. clear, malodorous)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2.2</td>
<td>Mother’s temperature during labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>Clinical Data: Newborn - are the following recorded?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.1</td>
<td>Assessment of breathing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.2</td>
<td>Assessment of state of consciousness: difficult to rouse/lethargy OR restless/irritable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.3</td>
<td>Ability to breastfeed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.4</td>
<td>Assessment of skin lesions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.5</td>
<td>Assessment of lesions of umbilical cord</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3.6</td>
<td>Assessment of eye discharge/redness/lesions</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Q4** **Treatment - are the following recorded?**

| Q4.1 | Maintains warmth with skin-to-skin contact with mother |
| Q4.2 | Encourage exclusive breastfeeding |
| Q4.3 | If unable to breastfeed give expressed breast milk via nasogastric tube |
| Q4.4 | If expressed breast milk not available give formula via nasogastric tube |
| Q4.5 | Blood culture obtained prior to initiating treatment |
| Q4.6 | Antibiotic therapy with Ampicillin 50mg/kg IM/IV every twelve hours or equivalent |
| Q4.7 | Antibiotic therapy with Gentamycin 5mg/kg IM/IV daily or equivalent |
| Q4.8 | If extensive pustules are present Cloxacillin 25 – 50 mg/kg IM/IV every 12 hours or equivalent is given |
| Q4.9 | If no improvement in 2 – 3 days change antibiotic treatment OR refer to higher level of care |

**Q5** **Outcome of treatment - are the following recorded?**

| Q5.1 | Baby referred to specialist in same facility |
| Q5.2 | Baby referred to another facility |
| Q5.3 | Date of discharge |
| Q5.4 | Newborn death |
ANNEX 8: EVALUATION TEAM COMPOSITION AND DIVISION OF RESPONSIBILITIES

TEAM COMPOSITION AND RESPONSIBILITIES

The evaluation team composition and their roles and responsibilities are given in the Table 3 below.

Evaluation Team composition, experience and responsibilities

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Leader</td>
<td>TAMAR GOTSADZE, MD., PHD</td>
<td>Evaluation Team Leader responsible for overall design, planning, implementation and preparation of the final evaluation report. Takes lead in formulation of evaluation framework, method and tools as well as format of the final deliverables, performs desk review, data collection in the field, data triangulation and produces required inputs for the inception and final reports.</td>
</tr>
<tr>
<td>Co-evaluator, MCH expert</td>
<td>CHIARA ZANETTI</td>
<td>Contributes towards formulation of evaluation framework, method and tools as well as format of the final deliverables;                                                                                      Contributes to the design of evaluation methodology and tools, performs desk review with the focus on MCH related issues, performs facility based observation and criterion based audits, data triangulation and produces required inputs for the final report.</td>
</tr>
<tr>
<td>UNICEF National Consultant</td>
<td>ELVIRA TOIALIEVA</td>
<td>Evaluation Team member responsible for logistics in the filed, participates in the data collection activities and provides project specific information and documents for evaluation purposes</td>
</tr>
<tr>
<td>MoH National Experts</td>
<td>BATMA DALBAEVA</td>
<td>Evaluation Team member responsible for data collection through CBA for deliveries and filling in observation checklists for deliveries</td>
</tr>
<tr>
<td></td>
<td>JANARA BOTBAEVA</td>
<td>Evaluation Team member responsible for data collection through CBA for newborn care and filling in observation checklists for deliveries, newborn care at ICU department.</td>
</tr>
</tbody>
</table>

EVALUATION TEAM MEMBERS EXPERTISE

Lead Evaluator

Tamar Gotsadze MD., PhD - brings over 17 years of experience and considerable expertise in the design and implementation of Health and Social sector Reform programs/projects in developing countries; provision of policy advice to Ministry of Health's top management for the a) development and implementation of national policies and strategies, b) structural and organizational changes of the ministry and reform implementation entities c) design, management, monitoring, and evaluation of health systems at national, regional, district, and rural health facility levels; d) provision of technical support to the government in coordination, planning, development of implementation strategies and action plans of the programs.

She has strong background and extended work experience in Public Health Issues, with particular emphasis on MCH and Reproductive Health, HIV/AIDS, TB and nutrition.

Tamar has over 10 years of experience in Program/Project evaluation. During her carrier she has conducted number of analytical assignments (end of programme, Mid-term Reviews and evaluations, Health system assessments and service gap analysis, etc.) involving triangulation of primary and secondary qualitative and
quantitative data; synthesized data for health systems and programme performance and developed analytical reports and policy papers, she has worked with teams of different cultural and ethnical backgrounds and led more than ten project evaluations financed by WB, UNICEF, UNFPA, USAID etc. in different countries (Georgia, Armenia, Ukraine, Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, Romania, Kosovo, Namibia, Nigeria, Russia).

Co-Evaluators

Chiara Zanetti MD, MPH - Chiara Zanetti is a Medical Doctor, specialized in Obstetrics and Gynecology, with a Master in Public Health and a Diploma in Tropical Medicine and Hygiene. At the beginning of her professional career, she worked in Italy, within the National Health System, as Ob&Gyn Specialist. She then left her home country to join humanitarian work, gradually shifting from the ObGyn field to the broader domain of Public Health.

Chiara has over twenty years of operational work experience in the fields of programme design and implementation; monitoring and evaluation in Maternal, Neonatal and Child Nutrition and Health (MNCNH); Public Health (PH); Emergency Obstetric Care (EmOC); and Emergency Preparedness and Response. Maternal and child health has always been part of the development and emergency programs she has managed in coordination with local authorities/Ministry of Health and other international humanitarian actors. Chiara's expertise in evaluating development programmes commenced with her being in charge of assessing Emergency Programs (in Ethiopia, Iran), Women Reproductive Health Programme (in Gaza Strip) and, more recently, Improvement of Mother and Child Health Services (in Uzbekistan).
ANNEX 9: TERMS OF REFERENCE

<table>
<thead>
<tr>
<th>Programme/Project Title:</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultancy/Services Title:</td>
<td>Evaluation of the UNICEF Perinatal Care Programme in the Kyrgyz Republic</td>
</tr>
<tr>
<td>Reference:</td>
<td>RWP 2012-2013, IMEP 2012-2013</td>
</tr>
<tr>
<td>Consultancy Mode:</td>
<td>National □ International ☑</td>
</tr>
<tr>
<td>Type of Contract :</td>
<td>Consultant ☑ Individual Contractor ☑ Institutional □</td>
</tr>
<tr>
<td>Mode of Selection :</td>
<td>Competitive ☑ Single Source □</td>
</tr>
<tr>
<td>Duration of Contract :</td>
<td>From: 1 November – 16 January 2013, 48 working days</td>
</tr>
</tbody>
</table>

1. Objective/Purpose of the Services

International expert is required to conduct a summative evaluation of the UNICEF programme for improvement of perinatal care in the Kyrgyz Republic 2010-2013.

2. Background

Country Context

Kyrgyzstan is a former Soviet country in mountainous Central Asian region. The country has a population of five million, of which ethnic Kyrgyz make up the majority (71%); while Uzbeks (14%) and Russians (8%) are the largest minorities. The population is heavily concentrated in rural areas of the country, and only one-third of the people are living in cities. In terms of vulnerability, children from rural and remote areas are more prone to poverty, ill-health, and abandonment. Children in rural areas are also often vulnerable to migration of parents, natural disasters and poor access to social services including health care and education. Nearly half of the children in Kyrgyzstan live in poverty.

Since 2010, Kyrgyzstan is on-track to achieve Millennium Development Goal (MDG) 4 on Reducing Child Mortality as infant and under-five mortality rates have steadily decreased. According to 2012 data, under-five mortality rate is at 27 and infant mortality at 24 per 1,000 live births. Neonatal deaths comprise 52% of all under-5 deaths at the rate of 14 per 1,000 live births. However, though 97% of pregnant women receive antenatal care and give birth under attendance of skilled health care professional, high maternal mortality rates (MMR) have been observed in Kyrgyzstan for many years. In 2010, MMR was at 49.7 per 100,000 live births indicating that reaching the target of MDG 5 seems very unlikely. Therefore, the country has focused on maternal mortality as part of the MDG Acceleration Framework. In addition, looking beyond the MDGs and 2015, the Government of the Kyrgyz Republic has pledged A Promise Renewed initiative, a global movement to accelerate efforts to improve maternal, newborn and child survival, and has committed to work towards a new target - decreasing under five mortality rate to 20 or fewer deaths per 1,000 live births by 2035.

Despite growing poverty rates in recent years, Kyrgyzstan has made progress in the health sector. In 2012, National Health Care Programme Den Sooluk was developed following the previous programmes Manas (1996-2005) and ManasTaalimi (2006-2010). The programme is being implemented using a Sector-wide Approach (SWAp) mechanism that ensures programme integration and leverage funding in the health sector. The reform has resulted in the development of an internationally recognized primary health care structure with a new financing model and restructured service delivery.

The maternal and newborn health care system in the country is developed with adequate services in terms of the quantity. The system includes maternity hospitals and departments as well as a network of rural health points on the primary health care level (known as Family Group Practices, FGPs and Feldsher-midwife posts, FAPs). However, the quality of care is a serious concern. Analysis of mortality cases in the country show that the

42 UNICEF. Situation Assessment of Children in the Kyrgyz Republic, 2011.
majority of neonatal deaths occur in the first seven days of infants’ life, and of these the largest share during the first 24 hours after childbirth meaning that the majority of neonatal death takes place under supervision of the health professionals.\textsuperscript{46} In addition, high MMR ratio with high institutional delivery rate indicates lack of quality in perinatal care.

The health care system is severely constrained by antiquated infrastructure and lack of funds for development. The majority of hospitals were built more than 25 years ago, and most do not have central heating, running water or sewage systems. Particularly in MCH facilities in rural and remote areas, there are shortage of drugs, medical equipment and skilled health care personnel. Staffing crisis due to migration and low pay hinders the development further.\textsuperscript{47} Particularly emergency medical services and infectious control are underdeveloped areas in MCH.\textsuperscript{48}

As the lead agency in the Mother and Child Health (MCH) cluster in the SWAp, UNICEF has successfully been advocating for comprehensive approach to perinatal care. In 2008, the National Perinatal Care Improvement Programme of the Kyrgyz Republic for 2008-2017 was developed in accordance with ManasTaalimi and the National Reproductive Health Strategy by 2015. The goal of the programme is to reduce maternal, perinatal/neonatal and infant mortality in the country in line with MDG targets and improve the quality of care by introducing a multilevel structure of referral in perinatal care. Based on the recommendation of WHO on regionalization, the programme defines the delivery of services in four stages: in addition to primary health care (FGPs and FAPs), the system consists of three levels of hospital services: territorial and city hospitals (primary); provincial and provincial capital hospitals (secondary); and national centers in the two largest cities in the country (tertiary level).

To support the realization of the Perinatal Programme, UNICEF in coordination with the donor community, has advocated for decentralized decision-making in health care with good results. More authority has been given directly to clinics and hospitals. To strengthen the referral system and improve the quality of care, enhancing professional knowledge and practical skills of health professionals has been an important focus area of UNICEF. Effective Perinatal Care, newborn care and resuscitation, Baby-Friendly Hospital Initiative (BFHI), child nutrition, Integrated Management of Childhood Diseases (IMCI) as well as infectious control in hospitals have all been implemented by UNICEF during the past decade.

**UNICEF Perinatal Programme**

In 2007, within the MCH programme, UNICEF shifted from supporting several small projects to development of a comprehensive, systemic strategy to strengthen the health reform and policies on the national level. Perinatal care became a major focus area, and as mentioned above, UNICEF supported the MoH in development of the National Perinatal Care Improvement Programme for 2008-2017\textsuperscript{49}. The programme resulted in harmonized approach with integrated activities to improve the quality of perinatal care in the country and moreover, to attract donors to invest in perinatal services. An important cornerstone for the National Perinatal Programme was an evaluation of maternal and newborn services conducted by Dr. Bhutta\textsuperscript{50} with support of UNICEF which formulated a guideline for implementation of evidence-based MCH projects in the country.

During 2009-2013 three major UNICEF projects have contributed to improvement of perinatal care. In 2009-2010 UNICEF implemented a project Reforming Perinatal Care System in Kyrgyzstan that aimed to reduce perinatal mortality by creating an enabling environment for the implementation of National Perinatal Care Improvement Programme for 2008-2017 mentioned above, enhancing expertise on perinatal care on the national level, supporting establishment of Baby Friendly Hospitals as well as by improving monitoring through national newborn register. As a result, the nascent referral system was strengthened, two regional training and research centers were supported, Baby Friendly Hospital Initiative in several maternities was implemented and the capacity of maternal hospitals to deliver emergency and neonatal care was improved. In terms of Quality of Care, the project strengthened the institutionalization of quality management in perinatal care\textsuperscript{51}.

\textsuperscript{46} Bhutta, Zulfiqar. Maternal and Newborn Health in Chui Province & Kyrgyzstan: Assessment and Implications for Interventions. UNICEF, 2009.
\textsuperscript{47} UNICEF. Situation Assessment of Children in the Kyrgyz Republic, 2011.
\textsuperscript{48} UNICEF & UNFPA. Assessment of Quality of Maternal and Neonatal Services at Hospital and Primary Health Care Levels, 2012.
\textsuperscript{50} Bhutta, Zulfiqar. Maternal and Newborn Health in Chui Province & Kyrgyzstan: Assessment and Implications for Interventions. UNICEF, 2009.
Building on the activities in 2009-2010, a project Ensuring Access to Affordable Health Services in the Affected Areas of the Country for Women of Reproductive Age and Newborns was implemented by UNICEF during 2010-2013. The project was part of Kyrgyzstan’s One UN Programme funded through the Expanded Delivering as One (DaO) funding window and implemented jointly with UNFPA and in some extend, with WHO in Batken and Osh provinces. The aim of the project was to enhance the quality of antenatal and perinatal care by increasing the professional knowledge and skills of medical workers through trainings and supervision based on WHO standards (modules such as Effective Perinatal Care, Antenatal Care, neonatal care STABLE). In addition, the hard component of the project aimed at improving the infrastructure and medical equipment in health facilities. The project covered 20 facilities where over 35% of all deliveries of the country took place with very good results: in the pilot areas, decrease in perinatal and early neonatal mortality was almost two times greater than national figures; newborns needed three times less intensive care compared to previous years; postpartum hemorrhage decreased by 10% and women’s awareness of obstetric risks and complications increased by 35% enabling them to seek emergency care in time.52 This so-called DaO project implemented by UNICEF jointly with UNFPA for 2010-2013 will form the core of the evaluation.

**Overall objective** of the project is to reduce perinatal mortality in the Kyrgyz Republic

**Specific objectives** are to enhance equitable access to health care services of the poor and vulnerable groups by improving the quality of maternal and newborn care and monitoring data in selected maternity hospitals

**Expected results:**

- Continuous Quality Improvement process demonstrated, institutionalized in maternity hospitals
- Enhanced capacity of medical experts on the national level
- Improved quality of antenatal and perinatal care through critical lifesaving equipment, infrastructure
- Improved practical skills of medical workers for antenatal and neonatal care in target primary health care clinics and 20 selected maternity hospitals (introduction of Making Pregnancy Safer, Effective Perinatal Care, neonatal resuscitation, Baby Friendly Hospital Initiative)
- Effective registration and monitoring system in place including analysis of critical cases (i.e. pregnancy registration, Newborn Register, The Near Miss Cases Review)
- Adequate referral and remote consultation system in place
- Improved accessibility and utilization of maternal and newborn services especially in rural and remote areas through increased level of awareness among the population

**Activities:**

- Advocacy for Quality Improvement, organization of local and national round tables, workshops, clinical conferences
  - Trainings for Trainers (ToT) on antenatal care, perinatal care, newborn resuscitation
  - Trainings for medical workers on antenatal and perinatal care, newborn resuscitation
  - Regular monitoring and supervisory visits in health facilities
  - Support for the newborn registration system
  - Establishment and support for birth preparedness schools
  - Procurement of medical supplies, improvement of infrastructure
  - Development and printing of communication materials

**Key indicators:**

- Percentage of the hospitals trained on resuscitation of newborns and equipped with Ambu bags and mannequins for trainings
- At least 60% of maternities certified as Baby Friendly Hospitals based on the WHO/UNICEF criteria

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• Percentage of medical staff trained on Effective Perinatal Care technologies
• Percentage of health facilities introduced with electronic registration system
• Number of established birth preparedness schools in primary health care facilities
• Percentage of health providers trained on antenatal care

**Partners:** MoH including Mother and Child Health Department, National Center of Mother and Child Health, National Health Promotion Center, Kyrgyz Medical Academy, Postgraduate University, UNFPA, WHO, GIZ, University Murcia in Spain, Kyrgyz Association of Perinatologists, Kyrgyz Midwives Association, Hospital Association in KR.

In addition to two projects described above, the Equity project (2012-2015) was initiated in Osh, Batken and Jalal-Abad provinces after the civic conflict in June 2010. As the previous UNICEF projects have enhanced perinatal care on the secondary hospital level, the ongoing Equity project operates mainly on the primary health care level. High maternal and newborn mortality rates are being tackled by improving equitable access to health care services through capacity building of medical workers and procurement of lifesaving equipment as well as increasing the demand through community mobilization. Some activities, for example investments in temperature management of maternity wards and improvement of water and sewage systems have been implemented on the territorial hospitals that are pilot sites of the Dao project and therefore, should be included in the evaluation.

**3. Objectives of the Evaluation**

1. Overall objective of the evaluation is to support Kyrgyzstan in its efforts to reduce perinatal mortality and to meet the targets of MDGs and beyond by strengthening the implementation of the National Perinatal Care Programme for 2008-2017

2. Specific objective is to generate knowledge: to reflect achieved results and shortcomings of the UNICEF programme on perinatal care hitherto as well as to have specific recommendations so as to set out further priorities, strategies and interventions.

In 2014, UNICEF will conduct a Mid-Term Review as the Country Programme for 2012-2016 is reaching the midpoint. The evaluation gives an opportunity to look in more detail the relevance of the UNICEF perinatal care programme and weight the achieved results as well as specify remaining challenges so as to take any necessary corrections for the remaining three years of the Country Programme. The purpose of the evaluation is to document and increase the knowledge of results, good practices and lessons learnt in perinatal care with specific recommendations. It also specifies UNICEF’s contribution to enhancing maternal and child health care system, quality of care and maternal and child survival in the country as well as determines whether UNICEF pilot projects have been effective and should be scaled up countrywide. In addition to UNICEF Country Office, other UN Agencies and development partners as well as the Ministry of Health will benefit from the evaluation in planning, implementing and coordinating perinatal care. The antenatal component of the evaluation serves especially UNFPA in further programming.

**4. Scope of the Evaluation**

The programme evaluation is required to sum up achievements and shortcomings of the perinatal care projects in the wider context of Mother and Child Health in the Kyrgyz Republic. Analysis looks at the project interventions conducted in 2010-2013 within the project Ensuring Access to Affordable Health Services in the Affected Areas of the Country for Women of Reproductive Age and Newborns aka DaO Project and to some extent, activities implemented on the hospital level within the ongoing Equity Project. Outcomes of those interventions are weighted vis-à-vis national priorities such as the Perinatal Care Improvement Programme for 2008-2017.

In addition to national decision-making level (MoH), the perspective of sub-national level (regional health authorities in Osh and Batken provinces), service providers (doctors, feldshers, midwives, nurses) and final beneficiaries (mothers, children and families) should be taken into account. The geographical coverage is Osh and Batken provinces.

The evaluation focuses on four criteria defined by OECD/DAC: relevance, efficiency, effectiveness and sustainability. However, specific cost-effective analysis is not necessary. To serve the interest of UNICEF, these criteria
should be viewed in the framework of Equity-based Approach\textsuperscript{53}, Human Rights Based Approach as well as Results Based Management. The evaluation is expected to identify good practices and lessons learnt in the implementation of the perinatal care programme as well as determine barriers and bottlenecks with recommendations to improve the programme in future. Good practices and barriers that influence on equal access of vulnerable groups to perinatal care services should be specifically emphasized.

Following questions should guide the evaluation:

- **Relevance and the design of the programme:**
  - How the project fits to wider context of MCH in the Kyrgyz Republic?
  - To what extent the project objectives and achievements are consistent with the national priorities?
  - To what extent the project objectives and achievements are consistent with the MDG4 and 5?
  - To what extent the project objectives and achievements respond to needs of the service providers and final beneficiaries?
  - In what extent the project outcomes address key issues, their underlying causes and challenges?
  - What is the appropriateness of the design, are the targets and indicators relevant?
  - How has the project been implemented? How does it take into account other projects in the region?
  - How the equity gap within different population groups (rural/urban, poverty, ethnicity) is addressed? To what extent the equity aspects are included in programming? Did the project reach the most vulnerable groups in the region?
  - How realisation of human rights and gender equality are taken into account?
  - How the result-based management is taken into account?

- **Efficiency:**
  - Were the available resources adequate to meet project needs?
  - Were the resources (funds, time, expertise) used in the most economical and simply manner to achieve the results? What solutions were efficient? Are there more efficient alternatives?
  - Were the planned activities conducted on time?

- **Effectiveness:**
  - To what extent the project succeed to reach its targets and goals?
  - What were the main enabling/hindering factors in achieving the targets and goals?
  - How the project supported national priorities in MCH?
  - How the project strengthened the national and sub-national capacity?
  - In what extent the local administration was strengthened, empowered?
  - How the project improved the capacity of service providers in line with evidence-based WHO standards?
  - How the project changed medical or administrative practices of service providers?
  - How the project changed health outcomes of beneficiaries?
  - How the project changed seek for care among beneficiaries? Any barriers removed?
  - How many stakeholders benefitted from interventions in the region?
  - What was the contribution of the project to improvement of the quality of care in perinatal care?
  - What was the contribution of the project to improvement of the rational use of resources (e.g. optimization of wards, reduced use of unnecessary medication, treatment, hospitalization)?
  - In what extent the monitoring and evaluation system was in place? How was monitoring used for

\textsuperscript{53} Please see guidelines at http://mymande.org/content/how-design-and-manage-equity-focused-evaluations
further planning and adjustment of the project?

- **Sustainability:**
  - To what extent MoH and regional health authorities demonstrate ownership in the project?
  - How the project influenced in national decision-making and policies?
  - How sustainability of the project is ensured on the national/subnational/facility level? Will the benefits be maintained?
  - What are the possible factors the enhance/inhibit sustainability (e.g. commitment, finance, institutional/technical capacity)? How the project has taken these factors into account?
  - To what extent possible positive changes in final beneficiaries is expected to last? What are the enablers and bottlenecks that can enhance/inhibit sustainability of that change?

### 5. Sources of Information

**General project documents:**
- Project proposal, inception, progress and final reports
- UNICEF CPD, CPAP, work plans, annual reports, global/regional strategies on MCH
- Training modules and materials, guidelines and medical protocols, narrative reports from IPs
- Press releases, press tour materials, briefing notes, trip reports

**Monitoring and assessment reports:**
- Situation assessment of maternal and newborn health
  (conducted by independent consultant for UNICEF Z. Bhutta in 2009)
- Situation assessment of children in the Kyrgyz Republic
  (conducted by independent consultant for UNICEF; a basis for the Country Programme in 2011)
- Assessment of Quality of Maternal and Neonatal Services at Hospital and Primary Health Care Levels.
  (conducted by WHO consultant A. Bacci in 2012)
- Rapid Assessment of FGPs and FAPs with Maternity Beds in Target Oblasts.

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<tr>
<th>Description</th>
<th>Responsible</th>
<th>Timeline (Prelim.)</th>
<th>Days</th>
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<tr>
<td>Preparatory phase:</td>
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<tr>
<td>Development of ToR</td>
<td>UNICEF</td>
<td>September</td>
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<tr>
<td>Approval of TOR by RO</td>
<td>UNICEF</td>
<td>September</td>
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<tr>
<td>Revision of TOR according to recommendations of RO</td>
<td>UNICEF</td>
<td>End of September</td>
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<tr>
<td>Selection of an external evaluator</td>
<td>UNICEF</td>
<td>Beginning of October</td>
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<td>Evaluation:</td>
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<tr>
<td>Desk review of the existing documents</td>
<td>Contractor</td>
<td>First week of November</td>
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<tr>
<td>Development of the evaluation instruments and work plan based on the preliminary methodology</td>
<td>Contractor</td>
<td>Second – third weeks of November.</td>
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<tr>
<td>Logistics (arranging meetings / interviews)</td>
<td>UNICEF/Contractor</td>
<td>Third week of November</td>
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Field visits (meeting/interviews with UNICEF, MoH, health facilities with staff, families, other key partners and stakeholders) in Bishkek and Batken & Osh Provinces  
Contractor with the support of UNICEF  
End of November – Mid December

De-briefing meeting with UNICEF and MOH  
Contractor  
December

| Reporting: |  |
|-----------------|-----------------|-----------------|
| Inception report (including evaluation work plan, presentation of methodological approach, instruments to be used, annotated outline of final report), to be presented and approved by UNICEF | Contractor | By 12 November | 10 |
| Interim (draft) evaluation report (draft findings, conclusions and recommendations from all data sources used in the evaluation) | Contractor | By 5 December | 20 |
| Final evaluation report (including summary), subject of approval by the UNICEF and MoH in Russian/English language | Contractor | By 10 January | 15 |
| Incorporation of recommendations from UNICEF and MoH | Contractor | By 15 January | 1 |
| Presentation of the Evaluation report at a final conference |  | 16 January (tbc) | 1 |

<table>
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<tr>
<th>Use of evaluation findings:</th>
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<tr>
<td>Dissemination of the final report to all partners and stakeholders</td>
<td>UNICEF</td>
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<tr>
<td>Agreement reached with MoH on how to translate key finding into activities and integrate them into a) future implementation of UNICEF programme b) design of new project/activities under new RWP</td>
<td>UNICEF</td>
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(baseline for activities on the primary health care level within the Equity project in 2013)

- Newborn Register, official annual statistics  
  (data disaggregated by health facility, gestational age, diagnosis etc.)
- Baseline assessment of perinatal care in Batken Province 2010

Baseline data exists for the majority of the activities, particularly in the Batken province. The statistical data is generally reliable. In recent years the capacity of medical workers to fill in medical records has been increased, however, the risk of poorly completed records cannot be fully excluded. Triangulation of data from different sources increases the reliability.

6. Evaluation Process and Methods

An international evaluator team will conduct the evaluation with support from national experts. The team is expected to conduct in-depth desk review of available related documentation that will be mainly provided by UNICEF. Also detailed design and methodology with relevant and high-quality tools for data collection and analysis is expected to be developed. Approval of the UNICEF team is required prior implementation. The key stakeholders and informants will be identified within the design. The evaluation should follow the evaluation criteria mentioned above with appropriate additions to cover the scope of the evaluation. The approach should be participatory, gender and human rights responsive with a special focus on equity.

During the data collection phase, the team will organize and conduct in-depth interviews, focus group discussions or other relevant measures, such as structured observations and review of medical records in health facilities to gather needed information for the evaluation from the key stakeholders (MoH, National Center for
Mother and Child Health, medical academy, national implementing partners, relevant donors and other UN Agencies, local administration, health managers, health personnel, families).

Analysis and reporting include a draft and the final reports that are expected to be shared and validated with key partners (e.g. MoH). Findings, conclusions and recommendations are presented and discussed in a final conference for UNICEF and key stakeholders with the release of the written final report. The evaluation process should be in compliance with the UNEG norms and standards.

Below a preliminary evaluation schedule that is subject to change during the process.

7. Accountabilities, Reporting

The international evaluator team will lead the evaluation process in all its stages and coordinate with national experts, stakeholders, especially with the MoH. The members of the evaluation team are responsible for provision of deliverables listed below in time and with good quality. The international evaluator will report to UNICEF team consisting of Health Specialist Cholponlmanalieva, M&E Officer MuktarMinbaev as well as to Health and Nutrition Officer Susanna Lehtimaki.

The evaluator team should act with integrity and respect to all stakeholders according to UNEG Ethical Guidelines. In the report, the evaluators should not refer to any personal data that shows during the evaluation. The evaluators should not share any findings with media in Kyrgyzstan or abroad concerning individual children, families, medical workers or individual institutions.

UNICEF staff will review and approve the deliverables listed below and provide relevant reports and documents. UNICEF will assist with logistics and provide a vehicle for field-visits. Air travel to Kyrgyzstan and back as well as within the country are covered by using the most direct and economical route. Office space, laptops are not included. Daily Subsistence Allowance (DSA) is provided as per UNICEF rules.

8. Qualification Requirements

- Proven expertise in evaluation of development programs/projects in the area of antenatal and/or perinatal care
- Proven knowledge on the health care system, programmes in Kyrgyzstan, with particular attention to the area of antenatal and/or perinatal care
- Knowledge of policies and practices of UNICEF in the area of MCH and Equity-based Approach
- Excellent analytical report writing skills
- Good communication and presentation skills
- Excellent written and spoken Russian and English
- Ability to keep with strict deadlines

9. Duty station and Official Travel Involved

During inception and final reporting periods, the international evaluator team will work through telework. During 15 days of fieldwork duty stations are Bishkek, Osh and Batken including travels within the provinces.

10. Duration

Total 48 days during 1 November – 16 January 2013.

11. Deliverables and Performance Indicators:

- Inception report (including evaluation work plan, presentation of methodological approach, instruments to be used, annotated outline of final report), to be presented and approved by UNICEF – 12 November 2013
- Interim (draft) evaluation report (draft findings, conclusions and recommendations from all data sources
used in the evaluation) – 5 December 2013


The final report should include the following: executive summary, description and short assessment of methodology, findings, analysis, conclusions, lessons learnt, recommendations and references. The ToR, data collection instruments and other relevant information should be added to annexes. The report should be provided in both hard copy and electronic versions in Russian/English. In addition, complete database should be provided to UNICEF.

Criteria for performance are quality of work, timeliness, accuracy, initiative, responsibility, competence and communication.

12. Estimated cost (optional)

Lump sum payment per deliverables.

Source of funding/PBA reference (date of expiration of the PBA):

| Grant SC100158 | Exp. 31.12.2013 |

Note: In all cases, consultants may only be paid their fees upon satisfactory completion of services. In such cases where payment of fees is to be made in a lump sum, this may only be payable upon completion of the services to UNICEF’s satisfaction and certification to that effect, and any advance on the lump sum may not exceed 30% of the fees. In such cases where payment of fees is to be made in installments, the final installment may not be less than ten per cent (10%) of the total value of the contract, and will only be payable upon completion of the services to UNICEF’s satisfaction and certification to that effect.

Drafted: Susanna Lehtimaki, Health and Nutrition officer
Reviewed: Muktar Minbaev, M&E Officer
Cleared: Raoul de Torcy, Deputy Representative
Approved: Jonathan Veitch, Representative
Date: 01 October 2013