Kyrgyz Republic

MDG5/MDG Acceleration Framework for the Kyrgyz Republic

Progress Update and Policy Recommendations

May 2015

GHNDR

EUROPE AND CENTRAL ASIA
MDG 5 Acceleration Framework

Progress Update and Policy Recommendations

Kyrgyz Republic
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<tbody>
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<td>ANC</td>
<td>antenatal care</td>
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<tr>
<td>CEB</td>
<td>Chief Executives Board</td>
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<td>CEMD</td>
<td>confidential enquiry into maternal deaths</td>
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<td>EmOC</td>
<td>emergency obstetric care</td>
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<tr>
<td>EPC</td>
<td>effective perinatal care</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IT</td>
<td>information technology</td>
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<td>JAR</td>
<td>joint annual review</td>
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<td>KAP</td>
<td>knowledge, attitude and practice</td>
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<td>KfW</td>
<td>German Development Bank</td>
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<td>MAF</td>
<td>MDG acceleration framework</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MMR</td>
<td>maternal mortality ratio</td>
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<td>MOH</td>
<td>Kyrgyz Ministry of Health</td>
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<td>NMCR</td>
<td>near-miss case review</td>
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<tr>
<td>RBF</td>
<td>results-based financing</td>
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<tr>
<td>SDC</td>
<td>Swiss Agency for Development and Cooperation</td>
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<tr>
<td>SRH</td>
<td>sexual and reproductive health</td>
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<tr>
<td>SWAp</td>
<td>sector-wide approach</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United National Development Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Executive Summary

The Millennium Development Goals (MDGs) were set at the Millennium Summit in 2000 to accelerate global progress in development. MDG 5 is aimed at improving maternal health with target 5A aiming to reduce maternal mortality ratio (MMR) by three quarters between 1990 and 2015 and target 5B aiming to achieve universal access to reproductive health by 2015.

Progress towards MDGs in the Kyrgyz Republic has been uneven. Even though there has been substantial progress in improving child health, high maternal mortality remains a concern. Kyrgyzstan has followed a Sector-Wide Approach (SWAp) in health since 2006. The Manas Taalimi Health Programme (SWAp I) which ran from 2006 to 2011 put MDGs 4 and 5 as a priority. The current Den Sooluk Health Programme (SWAp II) for 2012-2016 focuses on four priority areas including Maternal and Child Health. There is a strong coordination mechanism among development partners in the health sector and staunch government support to achieve results in maternal and child health. The Kyrgyz Parliament’s ratification of the Results-Based Financing (RBF) project in 2014 is evidence of the government’s support for improving the quality of health services through innovation in health systems strengthening and financing.

Despite the priority accorded to maternal and child health, Kyrgyzstan currently has the highest maternal mortality ratio in the Eastern Europe and Central Asia region. For the past decade, the MMR has virtually never dropped below 50 per 100,000 live births. This figure is much higher than the target number of 15.7 by 2015 and Kyrgyzstan is not on track to achieve MDG 5.

Making progress toward meeting the MDG target of reducing maternal mortality by three-quarters will require accelerated efforts and strong political backing for women and children. In view of this, the Kyrgyz Republic applied the MDG Acceleration Framework (MAF) for MDG 5 in 2013. The MAF is a tool that helps identify and rank the bottlenecks to implementing the main strategic interventions required to achieve MDG targets lagging behind and identify priority acceleration solutions to these bottlenecks. Based on the analysis, a detailed action plan highlighting the need for inter-sectoral and inter-ministerial cooperation was developed. The plan was further refined by the UN country team to prioritize key actions and was integrated into the Den Sooluk national health plan to achieve better coordination and avoid duplication of efforts.

Given the short time frame and significant challenges, the MAF action plan puts aside the overly ambitious target indicators for MDG 5 and focuses instead on actions that will help establish a solid foundation for improving the quality of maternal health services and lead to the emergence of a positive trend in the reduction of maternal mortality.

Previous reports have provided detailed situational analyses, including barriers to implementation and recommendations on ways to strengthen the health care system and pave the way for reducing maternal mortality. This report takes stock of the current situation, prioritizes areas that need the urgent attention of the government and development partners in the short and mid-term and provides concise recommendations to achieve results.
Maternal mortality trends in Kyrgyzstan

When analyzed on a year-on-year basis, Kyrgyzstan shows an unstable trend in maternal mortality without a clear tendency towards decreasing MMR. The most recent full-year data for 2013 show a decline in mortality from 49.1 to 36.0. However, the maternal death surveillance system indicates that the ratio is expected to show an upward trend in 2014\(^1\), underscoring the unstable nature of the indicator and leading to the discussion below on how the trend should be analyzed.

It is important to keep in mind that maternal deaths are relatively rare events. The small numbers often cause unstable national, and especially subnational figures, particularly when mortality levels are low. In countries with small absolute numbers of maternal deaths, changes of even a few deaths in the numerator disproportionately affect the maternal mortality ratio. Therefore, the WHO advises countries to use a 3-5 year moving average to illustrate trends, rather than annual values.\(^2\) The Kyrgyz Republic introduced evidence-based standards of care around 2006 through the Effective Perinatal Care program, a training package designed to upgrade the knowledge, skills and practice of health care workers at all levels in maternity hospitals of the WHO European region. Since then, the trend of moving average of maternal mortality has shown a slight decrease as seen in the figure below, but more needs to be done to institutionalize these changes in practice and accelerate progress.

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\(^1\) Preliminary Ministry of Health data report an MMR of 51.7 per 100,000 for 2014. National Statistical Committee MMR data for 2014 are not available as of January 2015.

### Maternal mortality ratio in Kyrgyzstan

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<tr>
<td></td>
<td>54.1</td>
<td>56.8</td>
<td>56.6</td>
<td>56.5</td>
<td>51.7</td>
<td>46.6</td>
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**Progress on action plan:**

The MAF situational analysis conducted in early 2013 identified health and intersectoral interventions expected to create a strong foundation for improving maternal health. Following the Chief Executives Board (CEB) meeting in November 2013, development partners prioritized actions based on country needs and integrated the health section of the action plan into the work plan of the Den Sooluk national health strategy and agreed upon a common monitoring framework. The health section is supported through the Sector-Wide Approach (SWAp 2) that includes pooled financing from International Development Association (IDA), Swiss Agency for Development and Cooperation (SDC) and German Development Bank (KfW) and parallel financing by other partners, including UN agencies; and the Results-Based Financing Project, funded by the Health Results Innovation Trust Fund.

The intersectoral part of the action plan is being implemented by the respective development partners as per their mandate and available sources of funding. UNDP is in negotiations with the Russian Federation to secure USD 2 million in funding to provide village-level health facilities with renewable sources of energy. A roundtable under the chairmanship of the Vice Prime-Minister for social issues and with the participation of all relevant ministries and development partners is being planned in April 2015 to discuss key non-medical factors affecting maternal health and to prioritize actions to address them. A technical working group with representatives from development agencies and relevant ministries is expected to follow up on prioritized actions on a quarterly basis.

**Key achievements in priority areas of intervention in the health section are as follows:**

**Sexual and Reproductive Health (SRH)**

- Clinical protocol on safe abortions developed and introduced in all provincial/oblast maternity hospitals and maternity hospitals and private clinics of Bishkek and Osh where high-risk pregnancies are concentrated.
- Evidence-based clinical protocols on family planning methods developed and approved.
• Family planning curriculum for nursing schools in line with new protocols developed, approved and introduced.

Antenatal Care (ANC)
• Clinical standards on antenatal care for complicated pregnancies at the primary care level developed and introduced.
• Clinical standards on antenatal care for normal pregnancies updated.
• Support to increase awareness of women on danger signs of pregnancy and nutrition provided through active involvement of 1700 Village Health Committees (84% of villages across the country covered).
• Training in ANC and birth preparedness for primary health care workers in Talas and Issyk-Kul regions and Bishkek.

Effective Perinatal Care (EPC)
• Effective perinatal care programme and improved electronic system of birth registration scaled up to all maternity facilities/wards throughout the country.
• WHO approach to assessing quality of care implemented using standardized tool in all district-level hospitals over the past two years.
• Package of perinatal care services at hospital level with clear criteria for referral approved.
• New infection control standards for maternity hospitals developed and introduced.
• Optimization plan for health care systems (including perinatal services) of Osh, Batken and Jalalabad cities developed. The plan is strategically important for long-term improvement of service delivery in the southern part of the country.
• First national report on confidential enquiry into maternal deaths (CEMD) with recommendations to improve quality of care presented.
• 1232 medical workers in district and regional hospitals trained in near-miss case review to analyze critical cases and improve clinical management of key conditions responsible for maternal deaths.

Emergency Obstetric Care (EmOC)
• Clinical protocols and standards on emergency obstetric conditions developed and introduced in secondary- and tertiary-level maternity hospitals.
• Competency-based training on emergency obstetric care developed and piloted in maternity hospitals of Jalalabad and Talas regions. Capacity of 150 leading specialists, including 40 anaesthesiologists, to provide emergency obstetric care strengthened. This is an important first step towards improving emergency care for women with complicated deliveries.
• Equipment for provincial/oblast maternity hospitals (anaesthesia machines, operating tables, surgical tools etc.) procured.

Other
• Electronic database of catchment population installed in all Family Medicine Centers. The database will allow better tracking of vulnerable populations and provision of targeted services.
• Technical working group trained on monitoring quality of perinatal care using RBF tools.
• Fifty trainers trained on RBF enhanced supervision of quality of care using the Balanced Score Card. In addition, 420 staff of 42 pilot district hospitals (2/3 of all hospitals) trained through cascade training.
The SWAp-2 and RBF work plans include short- and medium-term actions focused on improving the quality of emergency obstetric services, improving infrastructure and equipment in health facilities, enhancing clinical competency of health workers to provide emergency obstetric care and piloting performance-based payment and enhanced supervision of hospitals with a particular focus on maternal and child health.

**Planned short-term and medium-term actions:**

- Provision of IT and office equipment for distance training at nursing colleges and medical institute.
- Strengthening of emergency transport services for pregnant women and newborns including procurement of ambulances with advanced life support capabilities for Batken, Jalalabad, Issyk-Kul, Talas, Naryn, Chui oblasts and National Center for Maternal and Child Health. The total procurement package costs about USD 1 million. Training of 42 specialists on use of advanced life support equipment in ambulances.
- Provision of medical and diagnostic equipment for Bishkek city and Osh city Perinatal Centers at total cost of USD 1.2 million.
- Complete renovation of two secondary level perinatal centers in Jalal-Abad and Batken oblasts (including construction of neonatal annexes).
- Renovation and construction of two tertiary-level perinatal centers (including neonatal annexe) in Bishkek and Osh cities (from bilateral KfW funding).
- Provision of X-ray and diagnostic equipment to 13 Territorial hospitals at total cost of USD 2 million (26 territorial hospitals were equipped with X-ray equipment under SWAp-1).

**Key bottlenecks and recommendations to address them**

A wide range of activities to improve maternal health and quality of health services are planned under the Den Sooluk and MAF integrated work plan. Based on a consensus achieved between development partners and the Ministry of Health, this section highlights the areas that need the most attention and specific recommendations to address each area of need.

**Bottleneck #1: Inadequate preparedness for providing emergency obstetric care**

The first report on confidential enquiries into maternal deaths provides valuable insights into the quality of emergency obstetric care in the country. Over 80% of maternal deaths analyzed were due to direct obstetric causes such as hemorrhage, eclampsia, sepsis etc. Furthermore, the cause of death in the overwhelming majority of cases was inadequate, untimely or improper emergency obstetric care, not in line with the national clinical protocols.

**Recommendation #1: Mandate competency-based in-service training and certification of providers**

Despite the existence of evidence-based national clinical protocols on important emergency obstetric conditions, health workers’ lack of preparedness to provide emergency care and failure
to follow clinical protocols is an important reason for mortality in cases of hemorrhage, eclampsia and sepsis.

The CEMD identified problem areas such as hemorrhage that could have been prevented with proper first aid, uterine rupture due to induction of labor in cases where it was not clearly indicated or even contra-indicated, eclampsia due to inadequate dosages of magnesium sulfate, and absence of blood or blood product transfusion even in cases of massive blood loss of over 2500 ml.

These findings point to the fact that providers’ preparedness to handle emergencies can avert a large number of maternal deaths. Therefore, intensive competency-based training in emergency obstetric care with certification of skills needs to be implemented on a priority basis throughout the country.

Recommendation #2: Facility-based algorithms for EmOC and regular, simulation-based in-service drills

In addition to medications and equipment, each maternity hospital should have facility-based algorithms for management of emergency obstetric conditions with clearly delineated responsibilities for all staff, including midwives and nurses. Preparedness to provide emergency care should be monitored regularly through simulations and role plays.

Bottleneck #2: Gaps in quality of perinatal care

The quality of care in health facilities is a function of a number of processes. These include, but are not limited to, adherence to evidence-based clinical protocols, availability of essential drugs and supplies, effective management systems, functioning referral system etc. A lack of adherence to protocols on clinical care and referral has been identified as a problem in several assessments carried out in Kyrgyzstan and therefore is a priority area for quality improvement efforts.

Recommendation #3: Scale-up implementation of Near-Miss Case Review

Confidential enquiries into maternal deaths provide invaluable information to clinicians and policymakers alike, but maternal deaths are relatively rare events. Near-misses, or life-threatening obstetric morbidities, are far more common and the Near-Miss Case Review (NMCR) is a powerful tool to analyze management of critical obstetric cases and improve clinical practice. Although this tool has been piloted in some facilities, it has not yet been widely implemented across the country. The tool needs to be adapted and scaled-up in other facilities with training of providers to analyze and continuously improve quality of care. Although it might not be realistic to scale up the tool countrywide due to limited capacity, alternative arrangements such as twinning of facilities with those that have already implemented the methodology and are experienced in conducting NMCR should be explored.
Recommendation #4: Introduce innovative financing mechanisms to improve adherence to clinical protocols

Performance-based payments linked to quality of care are being piloted through the RBF project in rayon-level hospitals. If found to be effective, these mechanisms should be further scaled up to oblast-level hospitals and perinatal centers. The idea of using clinical vignettes to test provider knowledge of clinical protocols and linking payments to them is gaining traction and needs to be explored as an incentive mechanism to improve knowledge of and adherence to clinical protocols.

Recommendation #5: Build capacity of referral hospitals

The MOH has developed a detailed plan to improve emergency transport services, including procurement of ambulances with advanced life support systems and training personnel on equipment use and coordination of actions during patient referral between different levels of facilities. However, it is important to remember that a well-functioning referral system is expected to increase the burden of complicated cases attended to by referral hospitals. Therefore, in addition to the above measures to strengthen the referral system, it is critical to build the capacity of referral hospitals with adequate staffing, infrastructure, equipment and training to deal with the influx of high-risk pregnancies and emergency cases.

Bottleneck #3: Low awareness of women on danger signs during pregnancy and the postpartum period

Although good data on population awareness of danger signs during pregnancy are hard to come by, anecdotal evidence suggests that awareness on health and nutrition topics is low.

Recommendation #6: Intensify efforts to increase awareness on danger signs

The CEMD review showed that a number of deaths due to cases of postpartum septic complications could have been averted had the women approached the medical facility in time. This underscores the need to intensify efforts to increase awareness of women and their families on danger signs during pregnancy and during the postpartum period, both through village health committees as well as through counselling during ANC visits, birth preparedness classes and during the postpartum period prior to discharge. In addition, healthcare workers need to be trained to provide effective counseling to explain the risks of pregnancy in case of pre-existing conditions.

Bottleneck #4: Inadequate skills and competencies of medical graduates and post-graduates

The RBF project’s baseline evaluation and other assessments report that young professionals do not receive adequate training in medical and nursing schools and do not have the required level of practical skills before starting work, creating the need to undergo expensive in-service retraining.
Recommendation #7: Reorient medical and nursing education toward competency-based learning

The current medical education system is unable to produce doctors and nurses with the required level of competence to provide emergency obstetric care independently immediately upon graduation. In order to address this shortcoming, the curriculum for nursing students and medical resident’s needs to be reoriented toward competency-based learning and a minimum set of skills and competencies should be a prerequisite for graduation.

Recommendation #8: Conduct KAP survey to build evidence-base for medical education reform

Anecdotal observations by monitoring teams suggest low levels of surgical skills among young obstetrician/gynecologists and reluctance to learn complex surgical procedures. A knowledge, attitude and practice (KAP) survey to research these observations further and to assess the extent of lack of surgical skills, attitude of young doctors toward gaining new surgical skills and bottlenecks to improving the situation, would build the evidence-base required for comprehensive medical education reform.

Bottleneck #5: Inadequate infrastructure for providing basic standard of care

The RBF project baseline evaluation and previous national assessments of primary and hospital level care have reported inadequacy of basic infrastructure as a barrier to effective functioning of facilities and quality improvement.

Recommendation #9: Advocate for phased investment in infrastructure

The lack of running water and sanitation in many facilities does not allow providers to adhere to essential infection control measures and other basic standards of care, leading to poor outcomes including an increase in the number of cases of septic complications. The current condition of maternity facilities highlights the need for capital investment to improve infrastructure in a phased manner.
Summary of priority policy options to improve maternal health in the Kyrgyz Republic

<table>
<thead>
<tr>
<th>Policy Dimension</th>
<th>Policy Options and Recommendations</th>
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<tbody>
<tr>
<td>Improving healthcare service quality</td>
<td>• Mandate competency-based in-service training and certification of providers in emergency obstetric care.</td>
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<td></td>
<td>• Ensure implementation of facility-based algorithms to clearly delineate responsibilities and course of action for emergency obstetric cases.</td>
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<td></td>
<td>• Scale up implementation of near-miss case review.</td>
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<td></td>
<td>• Introduce innovative payment mechanisms to improve adherence to clinical protocols.</td>
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<td></td>
<td>• Improve referral system with emphasis on capacity building of secondary and tertiary referral hospitals.</td>
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<td></td>
<td>• Advocate for medical and nursing education reform focused on competency-based learning.</td>
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<tr>
<td></td>
<td>• Conduct KAP survey to build evidence for need to reform medical education system.</td>
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<tr>
<td></td>
<td>• Advocate for phased investment in infrastructure.</td>
</tr>
<tr>
<td>Improving population awareness</td>
<td>• Improve counseling of women on danger signs of pregnancy and risks of pregnancy in case of pre-existing conditions.</td>
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The maternal health trends analysis approaches and recommendations described in this report were discussed in detail with the Ministry of Health during preparation for the joint annual review (JAR) in November 2014. Based on these recommendations, the Ministry of Health has agreed to analyze the maternal mortality trends using 3-year moving averages as per WHO recommendations instead of the current practice of analyzing and basing policy decisions on annual figures.

During the joint annual review of SWAp II, the Ministry of Health prioritized the following actions for improving maternal health in 2015:

**Human Resources:**

- Initiate medical education reform to make it skills-oriented.
- Strengthen management capacity of health facility managers to monitor and improve quality of care.

**Emergency Obstetric Care:**

- Conduct competency-based training in Emergency Obstetric Care for obstetricians, midwives and intensive care specialists.
- Increase involvement of midwives in providing EmOC.
Referral:

- Develop local protocols in all facilities for referral of women and newborns.
- Strengthen oblast-level health facilities to deal with influx of complicated cases (HR, infrastructure, financing).
- Increase community awareness to reduce delay in seeking care – communication strategy, information materials, and training of village health committee leaders.

In order to strengthen the leadership role of the Ministry of Health and to coordinate the actions of various donors in a systematic manner, it is recommended that the Ministry of Health designate coordinators at the central and oblast level and conduct quarterly meetings with these coordinators to monitor progress made in each specific priority area, including training of medical personnel, and to get timely feedback on implementation bottlenecks and ways to resolve them.