European strategic approach for making pregnancy safer: Improving maternal and perinatal health
### List of Abbreviations

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<th>Acronym</th>
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<tr>
<td>AIDS</td>
<td>Acquired Immunity Deficiency Syndrome</td>
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<tr>
<td>ANC</td>
<td>Antenatal care</td>
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<td>CARK</td>
<td>Central Asian Republics and Kazakhstan</td>
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<td>CIS</td>
<td>Community of Independent States</td>
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<td>EBM</td>
<td>Evidence-based medicine</td>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HRH</td>
<td>Human Resources for Health</td>
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<td>IMR</td>
<td>Infant mortality rate</td>
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<td>MCH</td>
<td>Mother and child health</td>
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<td>MMR</td>
<td>Maternal mortality ratio</td>
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<td>MNH</td>
<td>Maternal and Newborn Health</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MPS</td>
<td>Making Pregnancy Safer</td>
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<td>NICU</td>
<td>Neonatal intensive care unit</td>
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<td>NNR</td>
<td>Neonatal resuscitation</td>
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<td>PEPC</td>
<td>Promoting Essential Perinatal Care</td>
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<td>PHC</td>
<td>Primary health care</td>
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<td>PRSP</td>
<td>Poverty reduction strategy paper</td>
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<td>SanEpid</td>
<td>Sanitary-epidemiology</td>
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<td>SES</td>
<td>Sanitary Epidemiological Service</td>
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<td>SWAp</td>
<td>Sector-wide approach</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>Acronym</td>
<td>Full Form</td>
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<td>IMCI</td>
<td>Integrated Management of Childhood Illnesses</td>
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<td>ICD10</td>
<td>International classification of disease</td>
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<td>ICPD</td>
<td>International Conference on Population and Development</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>CAR</td>
<td>Central Asian Republics</td>
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<td>HFA</td>
<td>Health for all database</td>
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<td>ILBD</td>
<td>International Live Birth Definition</td>
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Acknowledgment

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1 Introduction

1.1 Why is a regional strategic approach important?

A regional strategy for Making Pregnancy Safer (MPS) provides the opportunity to call attention to the maternal and perinatal ill-health situation in the region and creates a means to unite efforts to accelerate actions needed to improve maternal and perinatal health in the European region.

This strategy was developed in response to requests from some of the 53 European Member States based on their needs. It hinges on the commitment by Member States to improve quality of maternal and newborn care, and draws on lessons learnt in the region. An extensive assessment of the situation in countries and an analysis of the barriers and challenges to skilled care in the region were first developed and form a comprehensive background document to this strategic approach. The background document called the MPS country profiles is available on the EURO website. It is recommended that national strategies take existing government health and development strategies and plans as a starting point, using this strategic approach as a tool for identifying gaps and planning for focused action.

1.2 What do we expect to achieve with this strategic approach?

The goal of this regional strategic approach is to increase awareness, commitment and action towards improving maternal and perinatal health in the region. It is hoped that this document will provide broad guidance to countries wishing to develop or update their own national and local strategies for the improvement of the health of mothers and babies. The intermediate result that this strategy aims to achieve is to ensure safe pregnancy and childbirth through equitable and efficient provision of, access to, and use of quality skilled care for all women and their newborn babies, with special attention on poor and vulnerable groups. The strategy does not only depend on the health system, but requires a multi-sectoral approach, because of the complex set of interactions between many factors that influence maternal and perinatal health outcomes.

1.3 Who is this strategic approach for?

This document is intended for a broad audience of policy-makers within government, international agencies, professional associations, non-governmental organizations and other institutions. It is work in progress and will be updated as and when new evidence becomes available or best practices are identified.

Why should we invest in the health of mothers and babies

Because there is a problem. Women and babies are in many countries in the European Region still dying an unfair and unnecessary death and suffering unnecessary illness and disabilities. Evidence-based interventions are well known and yet many countries have stagnated or even regressed in their efforts to reduce maternal and perinatal mortality.

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1 The WHO European Region includes 53 Member States, including the EU countries, the Balkans and all the countries from the former Soviet Union.
**Because obtaining the highest attainable standards of health is a human right.** According to internationally agreed upon human rights and global consensus declarations all women and newborns, regardless of their socio-economic status, culture, race or origin, have the right to the highest attainable standards of health. In order to ensure that these rights are respected, policies, programmes and interventions must be based on gender equality.

**Because women play an irreplaceable role** as citizens, mothers, caretakers and frequently the family’s breadwinners. Therefore, if a woman dies from complications of pregnancy, or becomes ill or disabled, the whole family’s health and well being are often severely affected. The process of improving maternal health involves empowerment of women, giving them a voice and a choice where they previously had neither.

**Because investing breaks the vicious cycle between ill-health and poverty.** Investment in maternal health is a powerful way of improving the lives of poor and marginalized women. Although the improvement of maternal-newborn health cannot end poverty it can ease the way towards the escape from poverty. Investment in maternal and newborn health (MNH) not only improves the health of women, their babies and families and stabilizes the social welfare safety net, but guards against unnecessary depletion of the labour force, ensuring the productive capacity and economic well being of society. Pregnancy and childbirth places a strain on family income and resources and meeting the additional costs associated with pregnancy and childbirth, especially unexpected costs of dealing with emergency or health complications, can lead many families into financial difficulties and debt.

**Because the solutions are well-known** - MNH services are evidence-based, reliable, cost-effective and feasible to sustain in resource-poor settings. The Making Pregnancy Safer Regional Strategy encompasses interventions that are well known and evidence-based, reliable, cost-effective and feasible even in resource-poor settings. Experience over the past decade has shown that it is possible to improve maternal and newborn health outcomes even in the most resource limited settings; *however, no single intervention is by itself sufficient*. Maternal and newborn deaths can be significantly reduced using low cost and effective interventions and even countries with limited resources have succeeded in doing so. The health of the newborn is directly linked to the health of the mother. Avoiding complications that affect the mother will also improve perinatal outcomes and avert the majority of neonatal deaths.

**Because it is cost-beneficial.** Although strengthening health systems to provide optimal maternal and newborn health care is costly, the benefits that follow are impressive. Furthermore, the costs saved by addressing preventable conditions (such as post partum haemorrhage) would result in savings to the health sector estimated at up to 10% of maternal and newborn health budgets, which could then be reallocated to strengthening other sectors of the health system. Investment in quality maternal and newborn health care leads to saving, lives, as well as savings in efforts and costs to the health sector in terms of averted obstetric and neonatal complications, often costly to treat. It is also cheaper to prevent women and newborns’ health problems than to treat them later or to face the consequences of not treating them at all.

**Because strengthening MNH services will benefit entire health systems.** Maternal and newborn care services are a cornerstone of public health services, as care for pregnant women can effectively be the entry point for health services to the family and community to prevent and treat, for example,

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STI, HIV and malaria, introduce family planning, ensure immunizations, provide nutritional advice, as well as other health programmes and interventions. Strengthening health services through upgrading facilities (such as outreach services, clinics and hospitals), providing essential medicines and staff, effective referral systems, transportation and communications ensuring that mothers and babies receive the care they need, especially in relation to pregnancy-related complications, will benefit other areas of the health system.

1.4 How does the strategic approach relate to other global and regional strategies?

The strategic directions in this document are at the core of the Global Making Pregnancy Safer Strategy and the World Health Report 2005, as well as the wider Global Reproductive Health strategy endorsed by Ministers of Health at the fifty-seventh World Health Assembly in 2004. It takes into account the global and regional Child and Adolescent Health strategies, the regional Strategic Framework for Prevention of HIV Infections in Infants and the global and regional Reproductive Health Strategy, as well as on other existing regional initiatives, such as Promoting Effective Perinatal Care (PEPC). The strategic approach embraces the WHO health systems performance framework in its methodology in developing key strategies to improve maternal and newborn health in the region.

The key components to Making Pregnancy Safer are not new but have evolved over several decades. The notion that mothers and children are vulnerable groups was central to the primary health care movement launched in Alma-Ata, Kazakhstan, in 1978. This first major attempt at massive scaling-up of primary health care coverage in rural areas boosted maternal and child health programmes by focusing on initiatives for dealing with malnutrition, diarrhoea and respiratory diseases, and widening immunization coverage.

The Primary Health Care (PHC) movement, with its commitment to addressing the social, economic and political causes of poor health, developed a strategy to respond equitably, appropriately and effectively to basic health care needs. Inter-sectoral action for health was combined with community involvement and self-reliance, and PHC came to represent universal access and coverage based on need and comprehensive care, with emphasis on disease prevention and health promotion.

In the eighties, the importance of a functioning health system was recognized. Increasing emphasis was not only placed on skilled health professionals but also on the availability at all times of essential medicines and supplies, with assured quality and adequate information, and at a price the individual and community could afford. The concept of essential medicines was developed further to satisfy priority health care needs of the population with due regard to public health, evidence of efficacy and safety, and comparative cost-effectiveness.

The need for accelerated action to make pregnancy and childbirth safer has been clearly set out in internationally agreed goals and targets, such as the International Conference on Population and Development (Cairo, 1994), the Fourth World Conference on Women (Beijing, 1995) and the United Nations Millennium Development Declaration, adopted at the Millennium Summit in Geneva in 2000.

The Millennium Development Declaration represents common values to achieve peace and decent standards of living for every man, woman and child, and includes eight goals (MDGs). Goals 4 (reduction of child mortality) and 5 (improving maternal health) are directly relevant to mothers and children, but all eight are relevant to mother and newborn health (see Annex 1). Reducing child

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mortality is directly dependent on reducing neonatal deaths, which account for from one-third to half of all infant deaths. Reducing neonatal deaths can be achieved by increasing and improving maternal health services.

After the successful initiatives for perinatal care (Safe Motherhood, the Baby Friendly Hospital Initiative), in the late 1990s, WHO Regional Office for Europe decided to promote a systematic, coordinated approach to perinatal care and launched the PEPC initiative. PEPC focused on the crucial perinatal period which is defined by WHO, to extend from 22 weeks of gestation to seven days after birth. PEPC represented WHO Regional Office for Europe’s commitment to giving children a healthy start in life by reducing maternal and perinatal morbidity and mortality and promoting reproductive health and safe motherhood, with special emphasis on the primary care level in order to improve the quality of care, as well as promoting community and family involvement.

In 2000, recognizing the need to make further progress in improving maternal and perinatal health, and building on the experience of over a decade of the Safe Motherhood movement, WHO launched a global initiative, Making Pregnancy Safer, to support worldwide efforts to reduce maternal and perinatal mortality. This initiative builds on the latest evidence and adopts a health systems approach in ensuring the equitable and efficient provision of, access to, and use of quality skilled care for all women and their newborn babies, with special attention on poor and vulnerable groups. The initiative contributes to achieving the UN MDGs as it is widely recognized that existing efforts will not be sufficient to reduce mother and child mortality at a rate that will achieve these goals. This sense of urgency is at the heart of this regional MPS strategy. In the European Region, the PEPC initiative was incorporated into MPS in 2001, as both the PEPC principles (Annex 2) and the PEPC framework continue to be relevant to the region.
2 The maternal and perinatal health situation in the European Region today\(^3\)

Maternal and perinatal health continues to be a problem in the European Region. The maternal mortality ratio (MMR) in the European Region was between 15 and 200 per 100,000 live births in 2002. Often, the health of the mother is closely connected with perinatal health outcome, as maternal mortality and morbidity can have a negative impact on the survival chances of the new baby. The perinatal mortality rate for the Region was approximately 9 per 1,000 births in 2002. There is furthermore a case of underestimation - underreporting in official statistics is estimated to be anything up to 67% in European Union and Nordic countries – and unknown in other countries. Reports also show that the true perinatal and neonatal rates can be more than 2-3 times higher than official data in CIS countries. Underlying these surprising levels of inaccuracy is the fact that the quality of vital registration systems, hospital monitoring systems and surveys is so low that many deaths of mothers and their babies are simply not counted.

**Figure 1** Maternal deaths per 100,000 live births by group of countries in the region, 1970-2002

and **Figure 2** Perinatal deaths per 1000 births by group of countries in the region, 1970-2002

Figure 1 shows that hidden behind these averages for maternal mortality are significant differences between the groups of countries in the region. The MMR in the Central Asian Republics remains at least double the regional average and although the disparities between the European Union, Nordic countries and other groups of countries have narrowed in recent years, there are still large differences between countries. In terms of progress – although encouraging downward trends can be seen from Figure 1, in some countries maternal deaths have decreased significantly but continue to be too frequent (for example one Eastern European country has seen a decline of 84 per 100,000 in 1985 to 34 in 2002) and in other countries there is little or no change (for example some Central Asian countries have moved only from 34 per 100,000 in 1995 to 33 in 2002). More worryingly, there are some countries where mortality has begun to rise (for example, in Caucasus from 10 per 100,000 in 1995 to 20 in 2002). It should also be remembered that the MMR gives a measure of the risk faced at each birth, and that in high fertility situations women face the risk repeatedly across their lifetimes. Figure 2 shows that the situation for neonatal deaths is also not uniform across different parts of the Region. Neonatal mortality rates in CAR are almost three times those of the Nordic countries, and the upturn since 2000 in these Asian Republics is a cause for great concern. To summarise, the European

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\(^3\) All data in this section without footnotes comes from the WHO Regional Office for Europe, European Health For All Database (HFA Database), Maternal Deaths, October 2007
situation, although encouraging on average, is characterised by huge inequalities and not all countries are seeing an improvement in survival for mothers and children.

Differences between countries are only part of the story – within a country too, there can be staggering imbalances in mortality rates. Within the European Region today, there are subgroups and districts that suffer mortality rates for mothers and babies that are just as serious as those seen in sub-Saharan Africa or southern Asia. Almost universally, rural populations have higher mortality than urban ones, rates vary widely by ethnicity or wealth status, and remote areas bear a disproportionate burden of deaths. In the United Kingdom where there is a consolidated effort to thoroughly collect and analyse data to identify challenges, although maternal mortality levels are low, women from black African ethnic groups are seven times more likely to die than white women⁴. Within urban areas, the risk of maternal and perinatal death often differs significantly between women in slum settlements and those in wealthy suburbs. Recently arrived migrants, refugees and asylum seekers in countries of the Region also suffer more in terms of care and sometimes conceal their pregnancies from services.

Death is not the only problem. Figures describing women’s disabilities and illnesses resulting from pregnancy and childbirth are still unknown but are far greater than those for mortality. Statistics on maternal morbidities in European countries, e.g. eclampsia vary from 0.3 to 3.0, hysterectomies from 0.1 to 0.9 per 1,000 births, while severe postpartum haemorrhage is around 4.4 and sepsis is 0.7 per 1,000 births⁵. For newborns, there are also severe consequences for those who manage to survive, but suffer illnesses and impairments.

What are the reasons for poor health and survival among pregnant women, mothers and babies?

The determinants of good perinatal and maternal health and survival are multifaceted. The primary cause for failing health and excess mortality lies with health systems themselves – they are simply not coping well enough with the existing health problems. But there are problems outside the health sector too – poor educational levels, poverty, underdeveloped transport networks, lack of security, law and order are also important determinants of health. Finally, there are problems within women’s households and in the communities in which they live – there is a lack of self-care at home, and there are delays in seeking care where women are not empowered to do so. Often, the links between services and the communities that they aim to serve are just not strong enough for effective care-seeking to break down the barriers between the home and medical spheres.

2.1 Health systems are not strong enough

2.1.1 Stewardship for health systems is not adequate or effective

In some countries of the region, especially those where maternal mortality is highest, political commitment is not galvanised for the improvement of maternal and newborn health and there is no long-term comprehensive approach or policy vision⁶. Opportunities to prioritise maternal-newborn

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health occur during health sector reforms, the poverty reduction strategy paper (PRSP) and Sector-wide approach (SWAp) discussions where these exist. Moreover, in countries where there are stark inequalities, there is often too little political will to redress the situation if those that are excluded do not represent important or influential parts of the electorate. The health sectors in these countries can suffer from ineffective leadership and a lack of collaboration with key partners. There is often a rapid turnover of political and technical leaders in Ministries of Health and related agencies resulting in considerable volatility. In some areas there is a limited tradition of participatory decision-making process, and the old model of command and control does not work any more. In such settings there is also little public confidence in the health sector, and people do not believe that health administrators have the capacity and goodwill to make the necessary improvements. In Albania, for example, health sector reform has been implemented in a context of political instability, consecutive and severe crises, and economic difficulties that include extreme poverty. In such challenging environments, health system reform can be plagued by inappropriate initiatives and inadequate implementation\(^7\).

Although regulation and the legislative environment in many countries of the region is supportive of maternal-newborn health – this is not the case right across the region. In some countries unnecessary restrictions in current laws and regulations are in force which constrains the improvement of services. Primary among these are limits to the licensing and functioning of midwives and other health professionals who are not currently allowed to provide the full scope of their services. Regulatory agencies enforcing scope-of practice rules to establish standards do not always have the protection of patients as their primary goal\(^8\). Health professionals are also often not protected against excessive legal claims of malpractice. In terms of infrastructure there are also quality constraints which rely on legislation. Regulations and standards are often not in place to guarantee that the necessary medicines, equipment and supplies that meet international quality standards are available on a consistent and equitable basis. This can be problematic at national, regional as well as at local levels.

For women and their families legal and policy barriers exist in some countries to full and equitable access to reproductive health information, education and services, including family planning, STI treatment and, where legal, abortion care. A supportive legal environment for care of pregnant young women and their newborns, as well as for working women, needs specific attention. Universal coverage is still not a reality in many countries and often non-registered migrants cannot exercise their right to health care and women are often not protected from rape and sexual abuse, or able to access treatment and supportive care for the consequences. Partnerships between health system managers and ministries of labour and ministry of social affairs often don’t ensure conditions that allow women to combine maternity with work.

2.1.2 Critical shortages and shortcomings exist in health workforces and health infrastructures

Weak and poorly skilled workforces are too often a reality in the countries of the European Region: and this is the health system constraint which is seen by many as the key barrier to the improvement of services. Knowledge, skills, attitude, performance and motivation of health professional teams at all levels of the health care delivery system are, in too many situations, not optimal. In many countries the underlying problem is the insufficient numbers of health care professionals trying to deliver essential services at each level of care. Based on the current stock of health care workers in


the Region, it is apparent that countries in all parts of the region have a shortfall of midwives who are responsible for providing women and newborns with appropriate care at primary health care level. Also lacking in some countries are family doctors, health care professionals with obstetric and neonatal skills, as well as other specialities such as anaesthesiologists, nurses, and lab technicians. Additional managers and related professionals are also required in many settings to ensure effective planning and management of services. Structural rigidities that inhibit flexible work patterns often hinder the continued participation of women in the workforce and their career progression9.

An important factor causing human resource shortages is the substantial migration of the health workforce and a corresponding brain drain10. Virtually all countries in the Region suffer from a geographical unbalanced distribution of human resources for health, and the primary area of concern is usually the physician workforce. In all countries, urban areas almost invariably have a substantially higher concentration of physicians than rural areas11. Today’s health workers live in a global labour market where turnover is affected not only by movement between the public and private sectors and between rural and urban areas, but also by international migration12.

Added to the problems of supply and distribution of the health workforce, inefficient skill-mix, inappropriate communication, lack of cultural and interpersonal skills, inadequate knowledge and technical skills, are also major challenges in many of the countries in the Region. Often health professionals dealing with pregnancy and birth do not have an adequate understanding of the gender dynamics that can condition the behaviour of women and men in their communities. Health professionals in some countries have studied an inappropriate or outdated curriculum omitting key disciplines13. The work environment and conditions of employment and supervision are also inadequate in some settings. The resulting poor motivation means that retention of skilled health personnel can be a problem. Currently, remuneration levels are inadequate in many countries of the Region.

Health staff in some of the Region’s countries is not able to rely on functioning health infrastructures that ensure suitable facilities, continuous availability of essential medicines, equipment and medical supplies. In too many countries the physical infrastructure is poorly maintained such that equipment often does not function and supplies of drugs or consumables are unreliable. In some countries the national essential drug list does not even include basic obstetric pharmaceuticals, or the list is out of date. Poor layout of buildings, poor structural conditions and maintenance; and shortage of functioning equipment restrict the activities that health facilities can undertake.14 Many deaths occur

10 WHO Regional Office for Europe (2005) Maternal and newborn health in the WHO European Region: the challenges and the way forward - Fact sheet EURO/03/05 Copenhagen, Denmark online at http://www.euro.who.int/document/Mediacentre/ilo305e.pdf cited 19/07/06
because the appropriate care infrastructure remains unavailable, unused, inaccessible or of poor quality, thereby placing women and their babies in great danger. Ongoing problems with electricity supply also hamper work in secondary and tertiary levels of some countries, and deaths on operating tables have reportedly occurred during power cuts.

Furthermore – the ability to monitor and improve services is hampered by weak information systems. Existing data sources are often not fully utilised, data collection not undertaken well and statistical expertise is lacking especially to facilitate tracking of improvements among subgroups of the population. Vital registration and country Health Management Information Systems need improvement in most countries. Under-reporting of maternal deaths in official statistics is estimated to 22% in France and 67% in Finland. It is similar for perinatal and neonatal mortality where several reports show 2-3 times, or more, higher mortality than official data in CIS countries. The limited validity of available data and birth or death registrations can lead to maternal and perinatal deaths going unnoticed in many countries in the region. Many births may not be registered, due in part to the burden of payment for registration. Thus, newborns whose birth would otherwise be recorded as a preterm birth, perinatal death, or home birth, are simply not counted.

2.1.3 Health service delivery is poorly organised

Each country in the region has its own problems in service provision. One common experience is that existing resources are not well organised, and that service configurations could be more effective. Often the allocation of resources within health sectors is heavily skewed, with major regional disparities and with most resources spent on inpatient care. In the worst cases systems are technically inefficient, with excess and inappropriate provision of health care including over-medicalisation, poor health education, and fragmentation of services, underpinned by insufficient inter-professional and multidisciplinary collaboration. In particular, the role of hospitals can be over-emphasised and the primary health care level neglected. Even uncomplicated maternal and neonatal conditions in some areas can result in long hospital stays that are not cost-effectiveness and deny patient satisfaction.

In some countries the full package of essential evidence-based interventions for maternal and newborn health is not available to everybody. Elements are missed out from the package which should include skilled care during pregnancy, birth, the postnatal period for both mother and newborn, family planning services, and, where legal; abortion and post-abortion care. Updated

15 WHO Regional Office for Europe (2005) Maternal and newborn health in the WHO European Region: the challenges and the way forward - Fact sheet EURO/03/05 Copenhagen, Denmark online at http://www.euro.who.int/document/Mediacentre/fs0305e.pdf cited 19/07/06
18 How high is infant mortality in Central and Eastern Europe and the CIS? Innocenti working papers N95, 2003.
20 WHO Regional Office for Europe (2005) Maternal and newborn health in the WHO European Region: the challenges and the way forward - Fact sheet EURO/03/05 Copenhagen, Denmark online at http://www.euro.who.int/document/Mediacentre/fs0305e.pdf cited 19/07/06
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Evidence-based standards and protocols are often not developed or implemented that apply to the whole range of services. Indeed in too many cases there is not a culture of evidence-based decision-making at all among policy-makers, managers, educators or clinicians\(^1\). The global evidence base - now increasingly accessible and comprehensive – is in many countries not used for the development of standards of clinical care and the appropriate use of interventions. Neither is it used for the effective management, configuration and organization of services into cost-effective models of care. Instead inappropriate procedures are still used on women, and the development of the health care system in many countries has been ineffective and wasteful of resources. Where system development has been driven by quantitative norms, such as beds, physicians or facilities per head of population, the result has been an excessively high hospital capacity, high admission rates, unnecessary hospitalization, long hospital stays and a large number of health personnel, but a low quality of services\(^2\).

A very basic part of the ineffective provision of care in some areas is the poor functioning of the referral system. Where there is no effective, 24 hours-7 day per week, referral system for those women -estimated to be at least 7-15% of every population - who encounter complications during pregnancy, labour or after birth, women’s lives and those of their newborns are clearly at risk. The missing link may be within a facility, between facilities, or between women’s homes and facilities. In areas where such a system is functioning, there is often a lack of timeliness, poor responsiveness to health or social problems (such as violence at home), and inequitable treatment – and sometimes no feedback mechanism to the original referring point or health professional.

Experience shows that many professionals, particularly older doctors, are uncomfortable with the changes that might be required to improve care and care configurations – especially those that might involve patient empowerment, peer review, team working, and the sharing of both information and power\(^3\). Quality improvement mechanisms are not in place in some countries, and are not functioning in others. Criteria for appropriate referral and for rational use of drugs and appropriate use of technology are often in need of quality improvement – and even in the richest countries there are facilities that suffer a quality stagnation or even deterioration. Audits are often poorly managed, or non-existent. Results of quality audits can also be poorly disseminated, or key actors omitted from information sharing. Openness, confidence, motivation and commitment are the foundations of a quality culture. But often, traditional practices and attitudes towards authority, mutual support and individual responsibility actively resist improvement. These create a culture of low expectations (from public and professions), vertical command structures, restricted information and a negative view of accountability and responsibility. Errors are covered up or blamed on individuals, rather than used as an opportunity to improve the system and reduce harm; quality management is seen as a type of inspection, controlling rather than encouraging improvement of the system\(^4\).

A key problem area in many health systems is the lack of collaboration between maternal-newborn services and other health programmes. Health education, environmental health, immunisation,

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\(^{3}\) Shaw, C.D., & Kalo I. (2002) A background for national quality policies in health systems WHO Regional Office for Europe Copenhagen, Denmark online at http://www.euro.who.int/document/e77983.pdf cited 10/08/06

\(^{4}\) Shaw, C.D., & Kalo I. (2002) A background for national quality policies in health systems WHO Regional Office for Europe Copenhagen, Denmark online at http://www.euro.who.int/document/e77983.pdf cited 10/08/06
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nutrition, family planning and child survival, as well as prevention and treatment of STIs (with special regards to syphilis) and HIV and malaria, can be more effectively and efficiently addressed by using maternal and newborn care services as the entry point. Pregnancy may be the only time that women of reproductive age access health care. For example tuberculosis re-emerged in the Region during the 1990s after 40 years of steady decline, and today it is a large and growing problem, with Kazakhstan, Romania, the Russian Federation, Ukraine and Uzbekistan the countries most affected, accounting for more than half of the tuberculosis cases in the Region. Ineffective approaches to diagnosis and treatment, poor coverage of effective treatment and protocols, and lack of collaboration across weak, deteriorating health systems have been cited as major contributors to the increase. Effective collaboration with programs working on gender, young people’s health, violence prevention, migrant and displaced populations, as well as crisis and emergencies, are often not pursued, and training, health education, reporting and monitoring are often fragmented across these related public health programmes.

2.1.4 Budgets and financial protection are not adequate or sustainable

Often a sufficient proportion of the gross domestic product (GDP) is not made available for expanding the availability of maternal and newborn services. Adequate financing, and efficient management of those resources is not seen in those countries where maternal and neonatal death rates are the highest. In the era of health sector reforms, SWAps and other financing mechanisms such as poverty reduction strategies, cost-sharing and direct budget support - maternal and newborn health can be forgotten or not specifically addressed – and the corresponding expenditures and allocations are often not tracked.

This shortfall in central funding is passed on to women and their families, for whom out-of-pocket payments in cash or in kind are often necessary at the point of service. For example in Georgia free prenatal care covers only four antenatal visits after the third month of pregnancy, with two possible additional visits requiring some co-payment. Any additional or earlier visits needed must be paid for by the patient. In some countries where insurance systems are available, the organisation of insurance payments is often not accountable, the distribution of health fund contributions across rich and poor is often grossly unfair; and administrative cost-effectiveness of financial cover is often not optimum. Indeed, out-of-pocket payments tend to contribute to distributional inequities, since they impose a disproportionate burden on socially weak and financially less solvent groups. In some countries out of-pocket payments have become the predominant means of financing, amounting to 50–80% of total health revenue. The minimum funding through prepaid sources and the high out-of-pocket payments explain the low scores in attaining fairness in financial contributions in these countries. In essence, health financing has become less equitable since the early 1990s in most of the countries in transition.

2.2 Some women’s lives are not conducive to good health

Many underlying determinants of ill health in women and newborns lie beyond the reach of health sectors. These root causes of ill-health remain largely unaddressed, particularly in the poorest nations and among the poorest population groups. Low income, inadequate schooling, problems with food security, unclean water supplies, pollution, inadequate sanitation, lack of good transport networks, and security concerns, can all contribute substantially to poor maternal and newborn health outcomes. Many of these factors can increase exposure to risks and vulnerability to disease. They can also depress demand for health services through their associations with low levels of care seeking, coverage and compliance. An unbalanced emphasis on improving only the supply side of health interventions will reduce the effectiveness of efforts to improve maternal and newborn health because of inadequate demand for services, or poor collaboration with services, and will not therefore lead to the desired impact.

A thorough understanding of the determinants of the health of women and newborns is crucial to the development of effective public health strategies. A wealth of studies, and new evidence shown in the World Health Report 2005, has clearly identified the role that social factors such as poor education, lack of transport and ethnicity play in determining the health outcomes of women and children in the Region. These influences are illustrated in Figure 3 below. Evidence that quantifies the success of demand-side interventions is, however, sparse – especially in countries of the European region.

Figure 3 Factors influencing the health of mothers and newborns

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31 Thompson, R. , Miller, N. and Witter, S. (forthcoming) Health seeking behaviour and urban/rural differences in Kazakhstan, Health Economics
Although the role of social determinants is clear, they remain largely unaddressed in many countries, and this is one of the main reasons for the stagnation or slow improvement of health status of mothers and newborns, particularly among the poorest and most marginalized population groups. Maternal and newborn health can not be improved in a sustainable and equitable way without developing and implementing policies aimed at improving social and environmental conditions that negatively affect the health outcomes of mothers and babies.

2.3 Some women, their families and their communities are not empowered to be healthy

Women, their families and those that live around them sometimes do not have adequate capacities to provide appropriate care in the home either during pregnancy or when the new baby has arrived, neither are they able to make healthy decisions and act upon those decisions, including the decision to seek care when needed. Especially where women are from poor or marginalised communities, this lack of empowerment manifests on a number of levels. Gender constraints may prevent some women from expressing the need for and obtaining care from their own household members. Men’s involvement in care may be minimal, but very much needed. In situations where other family members are not engaged or informed, care seeking may also be impaired, especially where resources are required.

At another level, the links between local services and the communities that they are meant to serve may be so tenuous, that women and their families are simply not able to seek care in the facilities that

are closest to them. This may be because of discrimination, or lack of resources, or simply down to insensitive care or poorly attuned service configurations. In many such cases, the involvement of local civil society groups, such as women’s groups in designing and monitoring services has been minimal, and service delivery is culturally distant from the people that it should be serving. In other cases, there may be groups with special needs such as adolescents, whose particular concerns are not addressed, or actively ignored by local services (for example where services are only supplied to married women). In other cases, where services are making attempts to improve and to become more responsive, the results of audits and monitoring evaluations are often not publicly available or well disseminated, or there may be inadequate effort or research expertise to ascertain the specific problems that the local population may be having in accessing or accepting services.
3  Goal, objectives and principles

3.1  The goal and objective of the European strategic approach on MPS

The goal of the MPS strategy for the European region is to improve maternal and perinatal health.

The objective is to ensure safe pregnancy and childbirth through equitable and efficient provision of, access to, and use of quality skilled care for all women and their newborn babies, with special attention on poor and vulnerable groups.

3.2  Guiding principles

The following core values and operational principles underpin the philosophy and form the basis from which the regional strategic approach was developed.

3.2.1  Core values

Internationally agreed upon human rights and global consensus declarations have been considered in the development of the strategic approach which promotes the rights of women and newborns to the highest attainable standards of health. In order to ensure that these rights are respected, policies, programmes and interventions must promote gender equality as the basis of maternal and newborn health programmes.

The core values are: universal coverage to ensure equity in access to quality care, regardless of socio-economic status, with special attention to the poor and populations that are currently underserved, ensuring that all women survive and are healthy during pregnancy and childbirth and that newborn babies have a healthy start in life. These values should also ensure responsiveness by governments to the needs of all their citizens, especially guaranteeing that the poor and marginalized have access to health, including healthy reproduction; and that the improvement of maternal and newborn health is also emphasised and not only the reduction of maternal and perinatal deaths.

3.2.2  Operational principles

Evidence has shown that it is not always possible to predict which woman or newborn will develop complications; many complications occur among women and infants who are not considered to be at high risk. Therefore, in order to reduce deaths due to pregnancy and childbirth, it is essential to ensure an effective continuum of care that stretches from the household to referral centre, and includes all maternal and newborn care including timely and appropriate management of pregnancy-related complications. These services must be available to all women and their newborns, wherever they live, whatever the circumstances of their pregnancy and birth, regardless of their socio-economic situation.

The need for a continuum of care calls for a health systems approach in order to ensure sustainable development of maternal and newborn health. The continuum must cover all levels of the health system, from the household to the first service level, to the highest level, as appropriate for each woman’s or newborn’s needs. Pregnant women, women who have recently given birth and
particularly women in childbirth require the involvement of a chain of caregivers and care settings, especially when a complication arises for themselves or their newborn. The connections in this chain must be strong enough to effectively manage life threatening complications. The continuum also includes the transfer of appropriate information between care givers.

The package of services provided should include evidence based cost-effective interventions that have proven feasible to implement even in resource poor settings. These interventions should be implemented according to high standards and norms to effectively manage both routine cases and complications. There is a great need to eliminate the overuse of non-evidence-based interventions that have no added value and or pose a safety issue. Evidence based interventions must replace existing non-evidence-based practices, and not merely be added to them. Addressing providers’ needs and community views, particularly those of women, on the quality of service provision is key to ensuring improved quality and increased access and utilization.

Since the inception of the primary health care movement, maternal and child health has formed the backbone of health services that should be integrated, comprehensive, reaching out to all parts of the population. To meet primary health care objectives, health care for women and newborns should be underpinned by reproductive health programmes (such as family planning) and strongly linked with other key primary health care components (immunization, environmental health, nutrition, hygiene, emergencies and child survival), as well as to prevention and treatment of tuberculosis, malaria (in endemic areas), STIs and HIV. All of these services can be effectively and efficiently addressed by using maternal and newborn health services as the entry point.

Inter-sectoral action that addresses the fundamental determinants of health should be adopted when devising policies and plans to improve the health and conditions of women and newborns during pregnancy, childbirth and the postpartum period. Making pregnancy safer does not depend only on the health system, but requires a multi-sectoral approach, because of the complex set of interactions between many factors that influence maternal and perinatal health outcomes.

Partnerships should be set up in order to increase the availability of resources and maximize their effective use, reducing unnecessary duplication of activities for improving maternal and newborn health. Partnerships between governments, civil society, community groups, professional groups, international agencies and donor groups have been shown to bring down mortality rates in a range of contexts.

Special efforts should be made to build on existing initiatives and activities to maximize use of resources and synergies while avoiding duplications. The regional strategic approach promotes building on the successful PEPC initiative (PEPC principles LIST ref to Annex 2), with strong ties to commitment by all stakeholders to reduce maternal and perinatal mortality and morbidity, taking into account exchange of information on successful activities and lessons learnt by Member States.

Good governance, peace and security are also vital components of a sustained effort to improve the health and survival of mothers and their newborns.
4 Strategic priorities

Maternal mortality has been considered a good indicator of functioning health systems. Identifying the trigger points in the health systems that are crucial to the improvement of health outcomes for women and newborns is not an easy task as the determinants and underlying causes stretch not only to all parts of the health systems but also go beyond it. This chapter identifies the key trigger points within the health system; beyond the health systems; and lastly within households that need to be addressed in order to reduce maternal and perinatal morbidity and mortality.

Priority actions needed to improve maternal and newborn health will ultimately depend on the local situation, context and available resources. Each country will need to identify key components that need strengthening, the basis for setting priorities and developing strategies for optimal action through consultative processes involving all key stakeholders. Drawing from lessons learnt, the following priority actions have proved to be highly effective in ensuring safe pregnancy, childbirth and healthy newborns.

4.1 Improving the performance of health systems

In addressing the performance of the health systems to improve maternal and perinatal health, the WHO 2000 Framework for Strengthening Health Systems, as illustrated below, has been adopted.35

![Diagram showing the framework for strengthening health systems]

As seen in the diagram there are three functions in a health system that are crucial to improving its performance. These are resource provision, service delivery organisation and financing. To oversee these three vital functions, effective stewardship is also required. The priority improvements that are needed within each of these functions that are specifically relevant to making pregnancy safer are described below. The country-specific adaptation of the above framework will require at the very least that:

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a situation analysis is carried out where current performance is measured in terms of indicators for the MPS goal and objectives.

- the root-causes of poor performance are identified and improvement opportunities are expressed in terms of performance objectives.

- ideas for changes are generated which address the way that the vital health systems functions are currently implemented.

4.1.1 Ensuring effective stewardship

Galvanizing political commitment

High-level political commitment and governance is crucial to meeting the objective of universal access to skilled care. Governments are central to generating long-term policy commitment across a wide spectrum of stakeholders. Sustained demand for action from local political and community leaders is also necessary to ensure continued momentum at all levels, essential for allocation of adequate resources for maternal and newborn care. Maternal and newborn health needs to be adequately considered during development of health sector reforms, which can significantly influence the provision of quality care, as well as access to and use of these services by all women and their newborns.

Building strong partnerships

Effective partnerships among stakeholder and joint action by all concerned sectors are critical for activities that are sustainable in the long-term to improve maternal and perinatal health. All key stakeholders: government, academic institutions and non-governmental organizations, media, community and women's groups have a key role to play in supporting efforts to raise awareness to maternal and newborn health. It is also opportunistic that other health care programmes (e.g. HIV/AIDS, STI, malaria, etc.) that target pregnant women and newborns contribute to strengthening maternal and newborn health services. Strategies to involve men in supporting women during pregnancy and delivery should be considered, including men’s own needs as future fathers. Involving father’s and fathers groups that can enhance family approaches to maternity and birth without hampering women’s empowerment is also important.

Promoting a supportive legislative and regulatory environment

Removal of unnecessary restrictions from current laws and regulations in order to create a supportive framework to ensure skilled care for all women and newborns should contribute significantly to improved access to and quality of maternal and newborn health services. A comprehensive human resources policy should regulate all health professionals, allowing them to provide quality and timely care. It is also crucial that health professionals are protected against malpractice-related litigation.

An effective regulatory environment is critical to ensure public and private sector accountability for providing high quality care for all women and newborns. Laws and policies may need to be reviewed and even modified to facilitate full and equitable access to reproductive health information, education and services, including family planning, STI treatment and, where legal, abortion care. A supportive

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36 Concerned sectors include: the health sector; education, finance and planning, transport and works, law and regulations, local government, public service management, etc.).
Improving maternal and perinatal health: European strategic approach for making pregnancy safer

Ensuring that regulations and standards are in place is important to guarantee that the necessary medicines, equipment and supplies that meet international quality standards are available on a consistent and equitable basis. These aspects of a supporting policy environment are relevant at national, regional and local levels. The integration of policy measures and initiatives across levels and across sectors can ensure that supportive regulatory framework is co-ordinated and monitored.

4.1.2 Producing adequate and sustainable resources to deliver services

Building a strong skilled work force

The health service delivery system needs to be equipped with sufficient numbers of health care professionals to deliver essential services at each level of care. These include midwives, family doctors, and health care professionals with obstetric and neonatal skills, as well as anaesthesiologists, nurses, lab technicians, and management staff. In some countries, legislation may be required that authorizes health professionals e.g. midwives and ‘feldshars’ to be trained in, and engage in providing effective services, such as life-saving practices, prescribing contraceptives, and providing antenatal care (ANC).

It is crucial that each country determines essential requirements at all levels of care for adequate numbers and distribution of staff with the skills needed to perform maternal and newborn health services. It is also crucial to ensure that the workforce has key competencies related to caring, including appropriate communication, cultural and interpersonal skills necessary to provide women-centred care, as well as being able to partner with other providers, with the women and with the communities.

The key constraint in most countries is the provision of enough midwives to provide appropriate care at primary health care level in a woman's home or a facility: birthing centre, birthing home, midwifery-led unit, and health post or health clinic. Services provided at this level include care required for pregnancy, birth and the postnatal period, as well as essential first-line management (including referral where necessary) of obstetric and neonatal complications. It is also important that health professionals have the competence to work with women and the community on key health issues. The secondary and tertiary levels of care will in addition to midwifery services encompass obstetric and neonatal services for complications.

Improved management and enhancement of skills and capabilities can maximize existing human resources. It is important to promote policies that enable health professionals to use their skills to the full. The curricula for health professionals need to be updated, ensuring that disciplines such as epidemiology and public health, health promotion, and theory and practice of counselling skills are included. It is important that health professionals dealing with pregnancy and birth understand gender dynamics in their communities, be able to identify gender inequalities and empower women.

Work environment and human resources management, including conditions of employment and supervision are also crucial to enhancing skilled care. Special attention needs to also be focused on efforts to motivate and retain skilled health personnel. Remuneration levels need to be reconsidered

37 Russian equivalent of nurse practitioner
in many countries of the Region. Furthermore, critical thinking and autonomous planning for improvement among health care providers should be encouraged, and the enforcement of outdated standards of care relaxed or replaced with current evidence-based norms.

**Strengthening infrastructure and supply system**

To be optimally effective, maternal and newborn health staff needs functioning health systems that ensure suitable facilities, continuous availability of essential medicines, medical supplies and equipment38, and a referral system that provides high quality care39. In some countries the physical infrastructure needs upgrading, in terms of buildings, layout, electricity and water supply.

**Strengthening monitoring, evaluation and operations research for better decision-making**

Access to reliable data and information is crucial so that interventions can be monitored and evaluated for effectiveness. Countries will need to strengthen their monitoring and information systems, as well as their capacities to undertake operations research. Tracking progress is also a useful tool for strengthening political commitment to improving maternal and newborn health. Improved monitoring of maternal and neonatal deaths is a priority, especially where registration is faulty. Approaches should be tailored to country contexts, but the application of facility-based case reviews, special surveys for women of reproductive age, verbal autopsies and even special questions administered by census have all been used successfully. However, the ultimate aim should be strengthening of vital registration and improvements in country Health Management Information Systems. These systems can effectively be tied to maternity registers within facilities and can be the basis for effective and responsive decision-making at all levels.

Tracking of process indicators, particularly in relation to utilization and quality of services and the coverage of skilled health professionals at birth, is also important for policy. Indicators recommended during ICPD and by MDGs must be assessed. Especially where efforts are being made to improve health, programmes should be evaluated and results disseminated as strategic lessons for the future. Efforts should particularly focus on use of existing data sources as well as maximizing ongoing data collection. This implies the development of statistical expertise at all levels, and the regular dissemination of indicators, analyses and assessment of data quality surrounding maternal and newborn health, survival and care. Recent progress in the estimation of wealth status should also be applied as widely as possible to facilitate tracking of improvements among poor and other subgroups, where data allows.

4.1.3 **Organizing and strengthening health service delivery**

Improving the provision of quality care requires:

a) establishing evidence-based packages of interventions as well as developing quality standards of care in-line with international guidelines,

b) ensuring availability of the right type and numbers of human resources that are skilled and motivated,

c) adequate infrastructure and supply system,

39 Graham, Bell and Bulloch 2001
d) well functioning referral system,

e) implementing quality improvement mechanisms (such as maternal and perinatal mortality and morbidity case reviews), and

f) ensuring integration of mother and newborn health care services with other primary health care programmes.

**Establishing an evidence-based and quality controlled package of care**

An essential package of evidence-based interventions for maternal and newborn health, especially for emergency care, needs to be available to all women and their newborns regardless of their ability to pay. This package must include skilled care during pregnancy, birth, the postnatal period (for both mother and newborn), family planning services, and, where legal; abortion and post-abortion care.

Maternal-newborn health services should be organised to ensure appropriate integration of care for both mother and baby and should be family-friendly, with special attention to the needs of adolescents and disadvantaged groups. The bulk of the services should be provided at the primary health care level in a woman's home or in a facility, or in a birthing centre, birthing home, midwifery-led unit, health post or health clinic, and should include the basic essential skilled care required for pregnancy, birth and the postnatal period, as well as essential management of obstetric and neonatal complications including referral where necessary. Shifting the emphasis from hospital to first level care will be a key to successful reform and to the establishment of appropriate maternal and newborn health services. Provision of alternative, more appropriate and cost-effective care settings are encouraged with simple interfaces. Gender considerations need to be taken into account when organizing services so that women’s access to resources and power relations within families that facilitate or hamper women’s mobility are understood.

To ensure provision of quality of services, it is important to identify and implement evidence-based standards for delivery of a national essential package for maternal and newborn health care. For some countries in the region, this may entail revision of the present essential package, or some of its components, to ensure that care provided includes identification and addressing of non-pregnancy-related conditions (e.g. STIs, HIV/AIDS, tuberculosis, malaria in endemic areas, etc.) that can influence pregnancy outcome.

**Strengthening the referral system**

The 9-15% of women who encounter complication related to pregnancy (some studies have made even higher estimates) must be referred as soon as possible to a health facility with the necessary skilled health professionals who have the necessary equipment. In approximately 5% of cases, women will require highly specialized, high-dependency care, and additional equipment and resources (for example for caesarean section or hysterectomy for uncontrolled uterine bleeding, 40 WHO standards for maternal and neonatal care: http://www.who.int/making_pregnancy_safer/publications/standards/en/index.html

41 Expert opinion and studies vary on the proportion of women who need medical care in pregnancy, childbirth and the postnatal period. The MOMA study from seven urban sites in West Africa showed that 3%-9% of pregnant women experience some form of morbidity, but other studies showed higher levels. Pittrof R, Campbell O, Filippi VGA What is quality maternity care? An international perspective. Acta Obstet Gynecol Scand 2002; 81: 277-283
management of eclampsia, severe hypertension or coagulation defects, safe blood transfusions and so on).

In addition, between 10%-20% of newborns will need special care, with approximately 5%-10% needing surgery or higher level care. Although not all facilities will be able to provide high level referral care, all referral facilities must have effective mechanisms for access to such care. Due to high costs and high risks of sick newborns referral, a strong effort has to be made to reinforce the practice of in-utero referral whenever a high suspicion of critical neonatal problem is arisen.

There needs to be an effective referral system between all levels and, where these exist, between higher levels of care within the same facility. Such a system must include feedback to the original referring point or health professional, in order to foster reflective practice and strengthen continuity and quality of care. Key to a good referral system is timeliness, speed and the ability of all women to be able to access effective referrals, regardless of their socio-economic status. Given that there is a growing body of evidence to suggest that violence against women may increase during pregnancy, there needs to be an effective referral system with social and legal services so that the health professional can help pregnant women that may be suffering violence from their intimate partner or other member of the family.

The need for effective, 24 hours-7 day per week, referral system is common among other health care programmes, such as trauma and emergency care, essential surgery, medicine specialties, etc, a such collaboration between these programmes will be essential.

**Implementing quality improvement mechanisms**

Implementing quality improvement mechanisms is also vital to ensure the provision of quality services. These mechanisms must include criteria for appropriate referral and for rational use of drugs and appropriate use of technology. These activities will require a strong data management system, so that remedial action can be taken and evaluated for effectiveness.

**Collaborating with other public health programmes**

Achieving universal coverage to quality maternal and newborn care, especially in low-resource settings, requires effective planning especially with other public health programs at district, sub-national and national level. Planning must involve all stakeholders, especially women and communities. Health education, environmental health, immunization, nutrition, family planning and child survival, as well as prevention and treatment of STIs (especially syphilis) and HIV and malaria, are more effectively and efficiently addressed by maximising on care contacts during pregnancy, birth and afterwards. Effective collaboration with programs working on gender, young people’s health, violence prevention, migrant and displaced populations, as well as crisis and emergencies, are also important in order to improve maternal and newborn health. In general, to be successful, all of the above requires effective planning involving all stakeholders throughout the process.

**4.1.4 Financing health systems and ensuring financial protection**

An essential priority is that political commitment sets aside a sufficient proportion of GDP for expanding the availability of maternal and newborn services. In addition, it is vital to reallocate resources and re-orient practices to evidence-based and cost-effective models of care. This will effectively prevent a large proportion of current morbidity and death. Financing a system which enables poor and under-served groups to access care should be a key element. Where domestic
resources are not sufficient to meet these costs, the assistance of international donors should be made available.

A system ensuring continuum of care for all women and their newborns depends on adequate financing, and efficient management of those resources. If sustainable financing mechanisms are not in place, actions to strengthen the health system will not result in healthier mothers and babies. The reasons for improving health financing are to (a) reduce the extent of out-of-pocket payments at the point of service; (b) increase accountability of institutions responsible for managing insurance and health care provision; (c) improve distribution of health fund contributions across rich and poor; and (d) increase availability of funds through greater administrative cost-effectiveness.

With these principles in mind, and based on successful country experiences of alternative financing models, appropriate arrangements that provide basic insurance and social protection for all can be designed consistent with national contexts. Central to all financing models is the mobilization of funding sources that do not derive from out-of-pocket costs, including general and earmarked taxes, social insurance contributions, private insurance premiums and community insurance prepayment. As evidence becomes available, it should be used to assess the effectiveness of the models in increasing service utilization and ensuring that mother and newborn health services are within reach of the poor. Health sector reforms, sector wide approaches and the implementation of other financing mechanisms (such as poverty reduction strategies, cost-sharing and direct budget support) should also be monitored to ensure that they benefit the poor and marginalized groups and that they contribute to strengthening maternal and newborn health.

Estimating the need for maternal and newborn health services is straightforward: all women and their infants must have access to a continuum of care. Improving the coverage of quality skilled care will not only require extra financial investments but, more importantly, reallocation of existing resources to implement cost-effective and evidence-based interventions that are known to improve maternal and newborn health. It is predicted that universal coverage of quality skilled care will prevent the majority of maternal and perinatal deaths, as well as many more cases of morbidity and disability in the Region.

Each country should make its own cost estimates\(^{42}\), which need to be explicit, and systems must be set up to track both funding and expenditures. Increasing knowledge of the finances required for delivery of an essential package will be useful for advocating for maternal and newborn health care in national health and development plans, for example, during PRSPs and SWAp discussions.

\section*{4.2 Addressing issues beyond the health systems - improving the contribution of other sectors}

Income gains for the poor, schooling, food security and water and sanitation are contributing factors that can improve maternal and newborn health outcomes. Countries that have been more successful in reducing maternal mortality have achieved this result by adopting, in addition to clinical interventions, a combination of policies addressing all the above issues. Maternal and newborn health can not be improved in a sustainable way without interventions aimed at improving social and environmental conditions that negatively affect the health outcomes of mothers and babies. There is a need in all countries of the region to deal directly with the primary determinants of maternal and newborn health. Interventions beyond the health systems will have an important and sustained effect

\(^{42}\) Different costing tools exists among which the “mother-baby package costing spreadsheet”; WHO/FCH/RHR/99.17
on health by reducing exposure to risks and vulnerability to disease but also indirectly by increasing demand. Demand should also be increased by a participatory approach in which communities set their own goals and priorities, analyse obstacles and problems, find and implement solutions, and monitor results.

Building on the existing evidence about underlying factors influencing maternal and newborn health, the situation analysis in a country should be able to identify in each country what the main underlying factors are that should be addressed in order to reduce risks for the health of women, as a basis for identifying issues which need to be addressed beyond the health sector and the relevant policies to be developed. These may include legislation, regulations, welfare schemes, health education, curricular development and so on.

### 4.3 Empowering women, families and communities

A number of coordinated strategies are required to work effectively with women, their partners, families and communities to increase their understanding of maternal and newborn health needs and to engage them as partners in looking for solutions. It is important to strengthen their capacities to: a) provide appropriate care in the home for the woman and the newborn; b) make healthy decisions and act upon those decisions, including the decision to seek care when needed; and c) assume their full role as partners in improving maternal and newborn health.

Key issues leading to the empowerment of women, families and communities as it relates to improving maternal and newborn health should be integrated into mainstream education, as well as be part of targeted activities during their reproductive years, particularly during pregnancy and the early postnatal period. Developing links between health services and the community and strengthening civil society and local organizations is also vital so that woman and their communities can become full partners in designing, implementing and evaluating effective mother and newborn care programmes and services.

To develop capacities in working with women, family and communities, health education interventions and linkages with the education sector will need to be improved. Many programmes have developed health education activities but in general they have not been strategic in the approach to working with women and communities, and have not analysed how to ensure synergies between these different areas. These programmes need to integrate a gender approach that can make their empowerment strategies effective. Men’s involvement as partners, fathers and carers is crucial in the success of these programmes. Effective participatory processes and interventions for individuals, families and communities to improve health needs to be identified and implemented. Partnerships between health service delivery and the community should be developed to respond to maternal and newborn health needs and to increase the use of care. These should be facilitated by improving health planning processes to include important stakeholders – including women and community groups – and by establishing quality improvement mechanisms that take account of women and community perspectives. Finally, health service capacity to interact with the community should also be developed, including health workers’ inter-cultural and inter-personal competencies.

Although it is usual to that different levels of care are provided at different types of facilities, the way services are now being organized and delivered make this increasingly difficult. For example, many large urban hospitals are trying to increase access and utilization by making their services more women-friendly. For some, this means offering low intervention care in small units within or close to large traditional hospitals for easy referral. These smaller units offer less institutional settings,
furniture more closely resembles traditional homes and women are encouraged to adopt different practices and positions during labour.
5 Taking action

5.1 Taking steps towards improving health systems

ENSURING EFFECTIVE STEWARDSHIP

➢ Actions for optimal political commitment

- Ensuring appropriate prioritization, a long-term comprehensive approach to maternal and perinatal health, focus on continuum of care in national strategies, in health sector reforms and in PRSP, SWAp discussions where these documents exist.
- Consolidating advocacy efforts among donors, international standards bodies, and key influential players within the government infrastructure to build a constituency that can model and promote political and social commitment.

➢ Actions related to building strong partnerships

- Establishing or revitalizing high-level national or district multidisciplinary taskforces or committees, with the responsibility to take action and influence policy change, as well as coordinate and oversee stakeholders’ efforts towards improving maternal and perinatal health.
- Working with private health providers to expand and improve their services, ensuring these contribute to the national strategies and meet national standards.
- Developing evidence-based strategies for creating awareness and building broad-based support among all key stakeholders in government, academic institutions and non-governmental organizations, as well as community and women's groups of the scale of and consequences to maternal and perinatal mortality.

➢ Action related to supportive legislative and regulatory framework

- Review of and, if necessary, modification of laws and policies so these will protect women and newborn health interests (e.g. universal coverage including non-registered migrants' right to health care; protection from, or treatment and supportive care for rape and sexual abuse, and the right to maternity leave and reproductive choices). Review/update of protective laws and their application should be collaboration between key ministries (e.g. health, labour, families, social affairs).
- Review of and, if necessary, modification of laws and policies to facilitate universal and equitable access to quality skilled care, as well as to maternal and newborn health education and information. A human rights perspective should be embedded in national constitutions and international conventions to advance safe motherhood (e.g., by requiring states to take effective preventive and curative measures to reduce mortality and to treat women with respect and dignity).
- Ensure that regulations and guidelines meet international quality standards and facilities/supplies are available on a consistent and equitable basis.
• Set performance standards and monitoring and accountability mechanisms for provision of health services, ensuring collaboration and complementary action among the public and private sectors, as well as international and nongovernmental agencies.

• Ensure legal support for health professionals (definition of tasks, litigation, etc.).

**PRODUCING ADEQUATE AND SUSTAINABLE RESOURCES TO DELIVER SERVICES**

➢ **Action related to building a strong skilled workforce**

• Develop, review or update policies that enable health professionals to use their skills to the full.

• Determine essential requirements at all health care levels for numbers and distribution of staff with the skills needed to provide maternal and newborn health services. Maximize existing human resources, including improved deployment, supportive supervision, management and strengthening skills and capabilities of existing staff.

• Address imbalance of skill mix (especially midwives / doctors), as well as gender inequalities in the workforce. This will require training and recruitment of new health professionals, especially new midwives. Develop a national HRH plan and collaborate with the education sector to ensure a steady supply of new entrants.

• Meet the needs of areas where midwives are currently in short supply. Until new staff is trained to take positions in such areas, existing staff from other regions may be called upon to work in such areas on a rotational basis.

• Ensure that training activities are coordinated and that key interventions from different primary health care programmes are integrated in pre-service and post-basic education programmes. Strengthen health workers’ intercultural and interpersonal capacities and skills for interacting and working with women, their families and communities.

• Integrate training and education on youth friendly health service approaches within the education curricula for health service providers.

• Ensure possibility for permanent training (certification and re-certification) and up-dating of the knowledge of health professionals involved in maternal and perinatal health care.

• Update curricula for health professionals to include disciplines such as epidemiology and public health, health promotion, and theory and practice of counselling skills, as well as appraisal of practices and skills and cost-effectiveness of care. Professionals should also be trained to detect and address symptoms of violence during pregnancy.

• Strengthen training in maternal and perinatal health at pre-service and post-graduate teaching institutions.

• Assess and improve work environments and human resources management including conditions of employment and supervision.

• Put in place efforts to motivate and retain skilled health personnel.
Action related to strengthening infrastructure and supply system

- Ensure that basic equipment and medicines for maternal and newborn health are included in the general health investment plan of the Government.
- Ensure a supply system of medicines, consumables and equipment to guarantee continuous replenishing and adequate maintenance of equipment at all levels of the health care system.
- Ensure the regular review and update of national essential drug list and standards related to facility and equipment acquisition and maintenance.

Action related to strengthening monitoring for better decision making

- Identify appropriate sets of indicators on which to monitor progress, and strengthen capacity for collecting and analyzing data on maternal and newborn health status, its underlying determinants and the functioning of health services at local, district and national levels. Ensure that attention is paid to equitable access especially for poor and marginalized women and babies.
- Ensure that monitoring and reporting systems are coordinated and streamlined.
- Monitor health-sector reforms, sector-wide approaches, national health accounts and the implementation of other financing mechanisms (such as poverty reduction strategy papers, cost-sharing and direct budget support) in order to ensure that these benefit the poor and other socially or economically marginalized groups, and contribute to strengthening maternal and newborn services at all levels.
- Conduct ad hoc surveys when needed (qualitative quantitative) and link to operational research.

ORGANISING AND STRENGTHENING HEALTH SERVICE DELIVERY

Action for establishing an evidence-based package and quality standards of care

- Establish an essential package of maternal and newborn health care and ensure that it is available to all regardless of their ability to pay, especially as regards emergency obstetric and neonatal care.
- Develop or update and implement evidence-based standards and protocols for the delivery of the national essential package for maternal and newborn health care.
- Promote an ethos of evidence-based decision-making to change practices of policy-makers, managers, educators and clinicians—for example, by using The WHO Reproductive Health Library (RHL) and WHO clinical and managerial guidelines and tools.
- Strengthen capacities within the health system to carry out operations research in order to identify best practices for programme development, planning, implementing and evaluating interventions, including identification of subpopulations with special needs.

43 Several sets of indicators exist among which the listed in, accelerating progress towards the attainment of the international reproductive health goals; WHO/RHR/06.3
• Health services should be organized to ensure appropriate integration of mother and newborn care and should be women friendly, with special attention to the needs of adolescents and disadvantaged groups.

➢ **Action related to strengthening the referral system**

• Define levels of care, roles and responsibilities, as well as standards and protocols for referral care.
• Design and establish transportation schemes to ensure effective referral, especially during obstetric and neonatal emergencies, ensuring that these facilitate universal and equitable access to the referral system, especially among poor and marginalized groups.
• Ensure reporting and recording of referrals, as well as effective communication, including feedback.

➢ **Action related to implementing maternal and perinatal quality improvement mechanisms**

• Strengthen data management systems and implement clinical maternal and perinatal audits, as well as rational use of drugs and appropriate use of technology as part of all quality improvement schemes.
• Strengthen monitoring and information systems, including surveillance systems, for maternal and newborn health status. These must include identification of appropriate indicators on which to monitor progress.
• Integrate evidence based standards of care and quality improvement mechanisms in social health insurance schemes whenever these exist.
• Strengthen dissemination strategies to assure that information is shared and analyzed with key actors at all levels so as to assure that information is used for increasing awareness and decision-making.

➢ **Action related to collaboration with other public health programmes:**

• Actively involve all stakeholders (including programme managers from other primary health programmes) in decision-making and identifying priorities throughout the development, planning, implementation and evaluation stages.
• Ensure that there is a clearly identified and transparent mechanism for coordination of all efforts, including, and especially, reporting.
• Ensure that training activities are coordinated and that key interventions from different primary health care programmes are integrated into pre-service and post-basic education programmes.
• Ensure that health education messages are consistent and coordinated.
• Ensure that monitoring and reporting systems are coordinated and streamlined.
FINANCING THE HEALTH SYSTEM AND ENSURING FINANCIAL PROTECTION

- **Action related to securing adequate and sustainable financing**
  - Increasing budget allocations and their efficiency for and investments in improved maternal and newborn health, especially in poor and under-served areas.
  - Maximizing investments, including reallocation of financial and human resources, to ensure equitable provision of maternal and newborn services to the poor and under-served population groups.
  - Identify resource gaps and ensure that adequate funding is identified and secured for maternal and newborn health activities. Achieving this will require ensuring that maternal and neonatal health is adequately addressed in national planning and strategy development processes, including national health-sector plans and poverty reduction strategy papers (PRSPs).
  - Ensure that maternal and newborn health is included in essential service health-sector reforms packages and sector-wide approaches (SWAp).
  - Design and set up financing mechanisms that facilitate universal access to skilled care, especially among the poor and other vulnerable groups (e.g. adolescents, refugees, etc.).

5.2 **Taking steps towards improving cross sector collaboration for health**

A framework for cross sector policy development: The following table may be useful to identify existing gaps and help formulating policies in sectors other than health that should be considered as components of a comprehensive strategy aimed at improving maternal and perinatal health.

<table>
<thead>
<tr>
<th>Other sectors’ determinants</th>
<th>Relevant interventions and policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available income</td>
<td>◦ Health insurance schemes</td>
</tr>
<tr>
<td></td>
<td>◦ Targeted benefits</td>
</tr>
<tr>
<td></td>
<td>◦ Maternity leave</td>
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<tr>
<td></td>
<td>◦ Pro-poor taxation and subsidies</td>
</tr>
<tr>
<td>Education</td>
<td>◦ Access to secondary education for girls</td>
</tr>
<tr>
<td></td>
<td>◦ Health curriculum development</td>
</tr>
<tr>
<td></td>
<td>◦ Extra-curricular adolescent-friendly services</td>
</tr>
<tr>
<td>Nutrition</td>
<td>◦ Support to primary food production</td>
</tr>
<tr>
<td></td>
<td>◦ Food fortification</td>
</tr>
<tr>
<td></td>
<td>◦ Food pricing policy</td>
</tr>
<tr>
<td>Social and legal status</td>
<td>◦ Legislation on reproductive rights</td>
</tr>
<tr>
<td></td>
<td>◦ Family legislation</td>
</tr>
<tr>
<td></td>
<td>◦ Legislation on violence against women</td>
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<tr>
<td>Environment</td>
<td>◦ Housing standards</td>
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<tr>
<td></td>
<td>◦ Water and sanitation regulations</td>
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<tr>
<td></td>
<td>◦ Legislation on protection from hazardous exposure during pregnancy</td>
</tr>
<tr>
<td>Transport</td>
<td>◦ Road infrastructure</td>
</tr>
<tr>
<td></td>
<td>◦ Public transport</td>
</tr>
</tbody>
</table>
5.3 Taking steps towards empowering women, their families and their communities

➢ Action related to empower women, families and communities:

- Review and revise national plans to assure the inclusion of the appropriate array of strategies and interventions to contribute to empowerment of women and communities and to increase use of services.

- Implement interactive gendered health education interventions for women, families and communities and assure coordination of activities and information with other key public health programmes.

- Improve linkages with the education sector to assure inclusion of key information in adult education programmes as well as assure key information in basic education programmes throughout the reproductive years.

- Link with activities to review core competencies of health professionals and assure that the skills needed for providing care, for interpersonal and intercultural communication, for using a gender approach and for partnering are considered.

- Establish mechanisms to assure women and community involvement in quality improvement processes, and that their participation is ensured throughout the entire planning and programme process. Involve groups with special needs (adolescents) links with other programmes (child and adolescent health, reproductive health), as well as links to the media.

- Develop partnerships between health service delivery and the community in order to respond to maternal and newborn health needs and increase the use of care.

- Establish mechanisms to ensure male involvement in improving maternal and newborn health.

- Ensure that audits and monitoring evaluations should include dissemination strategies that consider the importance of discussing the information at the community level with key actors to assure communities have the information to respond to maternal and newborn health needs.

- Ensure that gender inequalities are also address when empowering health care providing MNH care.

- Conduct qualitative research to focus messages on actual issues and create a behaviour change strategy which addresses barriers to behaviour changes as well as reinforcing support mechanisms. This qualitative research should consist of a) a focus groups of women, men, mothers-in-law, and youth to ascertain current positive and negative practices related to program themes (including the multiple sub-practices for each theme) and b) doer/non-doer interviews to learn why people do or do not adopt the new practices.
6 Roles and Responsibilities

6.1 From women to policy makers

Key partners working together to implement this strategy at country level should instigate a national movement to create the necessary commitment and unlock essential resources required to obtain the goal and objectives of improving maternal and perinatal health.

It is important to identify the key partners who can help push forward the MPS strategic approach in the country. Further, recognizing that there is a need for accountability, the following accountability framework has been developed that defines possible roles and responsibilities of other key stakeholders in the national action movement. The framework also identified key actions needed at different levels by the different actors.

6.2 The role of the World Health Organization and partners

WHO has a UN mandate to provide guidance to Member States on all public health issues, of which maternal and newborn health remains one of the major challenges in this millennium.

Following this mandate the WHO will:

- Work at regional and country level to assist Member States to identify and implement appropriate strategies and polices to make available to all women an essential package of evidence-based maternal and newborn health care;
- Provide technical support to Member States and partners to increase country capacity and to improve quality, access and utilization of skilled health care, especially for care at and around birth and access to timely management of maternal and newborn complications;
- Advocate for increased national commitment and resource allocations (both financial and human) to given to maternal and newborn health, and to strengthen the continuum of care;
- Contribute to the strengthening of partnerships to maximize funding, synergies, co-ordination and collaboration among different programmes and organizations in order to assist countries in the implementation of maternal and newborn health programmes;
- Contribute to the monitoring of programmes and global targets and burden of ill-health related to pregnancy and childbirth to provide feedback on progress on the achievement towards international maternal and newborn health goals and targets, through capacity building data management systems and statistical expertise in countries; and
- Generate and disseminate new knowledge on emerging issues and technologies in the field of maternal and newborn health.

WHO will also ensure that making pregnancy safer is addressed within the organization’s Country Co-operation Strategies.
Annex 1: United Nations Millennium Development Goals

Goal 1: Eradicate extreme poverty and hunger
Goal 2: Achieve universal primary education
Goal 3: Promote gender equality and empower women

Goal 4: Reduce child mortality

Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability
Goal 8: Develop a Global Partnership for Development

Source: http://www.undp.org/mdg/basics.shtml per 07.10.2007
Annex 2: The of MPS/PEPC principles

The mission of MPS is to ensure safe childbirth, through the availability, access and use of high-quality, skilled care for all women and their babies.

Making Pregnancy Safer Fundamentals:

- Care for pregnancy and childbirth calls for a holistic approach
- Pregnancy and childbirth is an important personal, familial, and social experience
- In pregnancy and childbirth there should be a valid reason to interfere with the natural process
- Medical interventions for pregnant women, mothers and newborns, if indicated, need to be available, accessible, appropriate and safe

Making Pregnancy Safer Principles:

Care should:

- be based on scientific evidence and cost/effective
- be family centred, respecting confidentiality, privacy, culture, belief and emotional needs of women, families and communities
- ensure involvement of women in decision-making for options of care, as well as for health policies
- ensure a continuum of care from communities to the highest level of care, including efficient regionalization, and multidisciplinary approach

These fundamentals and principles of MPS/PEPC in the European Region were developed at PEPC/MPS Task Force meetings in Venice (1998), Verona (2003) and MPS Experts Meeting Catania, Italy (2007).

Promoting Effective Perinatal Care (PEPC) was the former European initiative which has now been integrated into MPS.