Reduction of Maternal Mortality and Morbidity

Interagency Strategic Consensus for Latin America and the Caribbean

Regional Interagency Task Force for the Reduction of Maternal Mortality

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Executive Summary

The Regional Interagency Coordinating Committee (RICC) convened a Task Force on Maternal Mortality to address the pressing issue of maternal mortality in the Region. The RICC Task Force on Maternal Mortality is comprised of the Pan-American Health Organization, United Nations Population Fund, United Nations Children’s Fund, United States Agency for International Development, Family Care International, Population Council, Inter American Development Bank and the World Bank, and wholly endorses the recommendations within this document. The added value of this document is that it represents a joint and common vision on how to address maternal deaths in a cohesive and unified manner in order to optimize technical cooperation and collaboration within countries and amongst agencies. The Task Force has discussed at length and received feedback from countries as to the strategies that would work most effectively in the Region. This unified vision will assist greatly in reaching a common goal of significantly reducing maternal deaths in Latin America and the Caribbean (LAC).

Maternal mortality is a critical problem. Every year, approximately 23,000 women die as a result of complications from pregnancy and childbirth. The vast majority of these deaths are preventable. They are evidence of a failure to assure every woman’s human right to safe childbearing. Maternal death has significant emotional and material impacts on families and communities. Moreover, maternal death has profound social and economic implications, because it reduces the survival of the newborns; diminishes school performance of surviving children; and represents a loss of economic productivity and family income.
The World Health Organization (WHO) estimated the maternal mortality ratio (MMR) in LAC for 1995 at 190 per 100,000 live births. However, there are large variations in MMR between and within countries. Differences in maternal health outcomes are due to inequalities in access to affordable, quality, and culturally appropriate maternal health services that affect women differently, depending on their age, income, ethnicity, literacy, and geographic area of residence. As a result, maternal mortality is higher among less educated, poor, rural, and indigenous women.

Since the late 1980s, LAC countries have made important achievements in improving maternal health, yet significant challenges remain for the next decade. Lessons have been learned globally and regionally at both the policy level and the service delivery level. This document builds on those lessons and presents strategies that can guide efforts to reduce maternal mortality in LAC countries during the first decade of the 21st century.

Policies and health systems can enable or hinder efforts to reduce maternal mortality. Effective policies and legal frameworks protect and promote women’s basic human rights. Governments that have strong, articulated safe motherhood policies and that have committed sufficient resources to implement this policy have seen reductions in the level of maternal mortality.

The availability of comprehensive reproductive health care remains an unrealized goal in most of the LAC Region. Progress in access to modern family planning methods has been uneven. Antenatal care coverage has increased, but in most cases expectant mothers do not receive the minimum number of visits needed to promote a safe pregnancy and childbirth. Most maternal deaths occur around the time of delivery and, therefore, assuring skilled attendance at childbirth is a key strategy. Although in LAC countries 79% of deliveries are attended by a health provider, the quality of these services varies enormously (15). Women, in particular low-income, less educated, rural and indigenous, have less access to family planning, antenatal care, and skilled attendant at birth. Some of the greatest disparities in having a skilled attendant at birth between rich and poor women are in LAC countries. Increasing the presence of a skilled attendant will require aggressive strategies to develop or to strengthen a cadre of professionals to serve in these areas.

Skilled attendance, however, is more than just the presence of a qualified provider. It means that the provider has an "enabling environment" that includes drugs, equipment, supplies, a supportive policy and regulatory framework, a communication and referral system, and community outreach. WHO has identified the resources needed for facilities offering basic essential obstetric care (EOC), where the majority of births can be safely monitored. For serious complications and high-risk pregnancies, comprehensive EOC facilities should be accessible via rapid referral and an affordable emergency transportation system.

Monitoring and evaluation at local and national levels are important for tracking progress in efforts to reduce maternal mortality. Accurate maternal mortality statistics are still not readily available in most LAC countries, and this must be rectified. In addition, process indicators are needed in order to evaluate maternal health services at the local level and national levels.

Many different agencies, organizations, and civil society groups have been involved in reproductive health advocacy, financial support, capacity-building,
and program implementation and analysis. These groups can greatly assist efforts to promote safe motherhood and reduce maternal mortality.

Based on the lessons learned over the past 12 years, 5 priority action areas have been identified to create or strengthen the legal and institutional frameworks necessary to implement interventions at national and local levels; provide comprehensive maternal health services, with an emphasis on the provision of EOC and skilled attendance at birth; increase public demand for high quality, affordable, and accessible services; build community capacity; support national and municipal actions; develop partnerships at international and national levels; and create financial mechanisms and monitor them to ensure cost-effectiveness and sustainability. Finally, the reduction of inequities in maternal health outcomes depending on income, rural residence, and ethnicity is an overarching issue that must be a focus within each of these priority areas.

The five priority areas will:

**Support national and municipal actions** that promote: (a) policies and laws that protect the human rights of women, including access to health, nutrition, family planning, and education; (b) financial commitment to secure needed human and material resources; (c) responsiveness of health systems to the needs of the population; (d) integration of reproductive health care; and (e) use of outcome (mortality) and process indicators to monitor the adequacy of maternal health services;

**Make available quality maternal health services** by providing: (a) integrated reproductive health care that include the provision of prenatal and postnatal care, family planning and diagnosis and treatment of sexually transmitted infections (STIs); (b) skilled attendance at birth; (c) EOC networks; and (d) geographic and cultural access to obstetric care;

**Increase public demand for services that are high quality, affordable, and accessible** by facilitating: (a) widespread health promotion and education; (b) community capacity and involvement in the health of pregnant women; and (c) active maternal mortality committees at the national, subnational and municipal level;

**Build partnerships** to advance maternal health at international, regional, national, and local levels that: (a) are characterized by coordination, collaboration, and cooperation; (b) strengthen capacity-building; and (c) promote sustainability; and

**Assure financial support and economic sustainability of maternal health care by:** in order to: (a) developing a methodology to evaluate the economic impact of maternal mortality reduction in LAC; (b) designing a reproductive health accounts model to quantify financial needs and identify available financial resources for reproductive health; (c) utilizing this data to strengthen negotiations with Governments on the financing of a sustainable reproductive health package; and (d) targeting public financing to cover the reproductive health needs of the poorest populations.
The purpose of the Latin American and Caribbean (LAC) strategy for the reduction of maternal mortality\textsuperscript{1} is to advance the issue as a public health priority within the Region and to provide directives for action over the next 15 years. Approximately 23,000 women of reproductive age in LAC countries die every year as a result of complications arising from pregnancy and childbirth. Although the number of women dying from pregnancy-related causes in the Region has decreased over the past 10 years due to targeted interventions, complications of pregnancy and childbirth are still among the leading causes of death for women of reproductive age (19). This is particularly true in LAC countries that have high fertility rates, high levels of poverty, and deficient health care coverage and quality. For example, the lifetime risk of death from the complications of pregnancy and childbirth is one of every 130 women in the Region whereas in Canada the risk is one in 7,750. It is estimated that as we enter the 21st century, 15\% of expectant mothers in the Region (1.6 million women) will suffer potentially fatal complications during pregnancy, birth, and the postpartum period (1). As is evidenced by progress made in other countries, most of these deaths are preventable.

\textsuperscript{1} A maternal death is “the death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the site or duration of pregnancy, from any cause related to or aggravated by the pregnancy or its management” (1).
The average Maternal Mortality Ratio (MMR) in LAC countries is 190 per 100,000 live births (2). It is important to note, however, that some country ratios are reported to be below the target maximum of 100 per 100,000 live births, while others are estimated to have national ratios as high as 500 per 100,000. The variation in MMR also exists within countries, with some ratios ranging from 10 per 100,000, among populations with greater access to maternal health services, to ratios higher than 800 per 100,000, in poorer and more isolated areas. Most of these maternal deaths are preventable if complications are diagnosed early and treated appropriately.

In the LAC Region, maternal death is caused primarily by hemorrhage (20%), toxemia (22%), other complications post partum (15%), and other direct causes (17%), abortion related deaths account for at least 11% of maternal deaths. Fifteen percent of deaths are due to pre-existing diseases, such as tuberculosis, heart disease, and influenza, which are exacerbated by pregnancy or its management.

In addition to saving lives, improved maternal care decreases the number of women experiencing long-term problems resulting from pregnancy and/or delivery. In LAC countries, approximately one-half million women experience such preventable chronic health problems as uterine prolapse, fistulas, incontinence, or pain during sexual intercourse (3).

Maternal death is a tragedy not only for individual women, but also for their families and communities (4). It has several social and economic implications: reduced possibility of survival of other children in the family during early childhood; diminished school performance of surviving children; and loss of economic productivity and family income, given that most of the women of reproductive age belong to the economically active population. Maternal mortality is more than a health issue – it is first and foremost a human rights issue (13). Every woman has the fundamental right to a safe pregnancy and childbirth, and the right to safe motherhood. This right is reflected in international human rights treaties and conventions, as well as in United Nations conference agreements. All LAC countries are signatories of these conventions and agreements.

Human rights issues related to safe motherhood include (13):

- Rights relating to life, liberty, and security. Upholding these rights requires Governments to ensure access to appropriate health care during pregnancy and childbirth, and to allow a couple the right to decide on the number and spacing of their children;
- Rights relating to health information and education. This includes information on reproductive health, including family planning; and
- Rights relating to equality and nondiscrimination. Health care services must be provided as needed, without distinction on the basis of age, sex, race, marital status, socioeconomic class, or pre-existing health conditions or experiences.

All countries in the Region, regardless of their national MMR, have unacceptable inequities in maternal health outcomes, which are associated with income, ethnicity, literacy, and geographic area of residence. Poor women and indigenous groups in the Region most frequently receive inadequate and/or discriminatory health treatment. Their social and economic conditions are associated with excessive mortality and morbidity. Another important determinant is culture. Indigenous populations are isolated in terms of both cultural and geographic territory. In addition to improving reproductive health care and policies, long-term gains in reducing maternal mortality will need to address underlying social, gender, and economic inequities.

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2 Based on PAHO data (1995-2000) for reported maternal deaths in 20 countries, using various sources, primarily vital statistics, surveillance, and special country studies. Under-reporting is still a problem in many countries (1).
2. GUIDING LESSONS FROM THE PAST DECADE (1990-2000)

2.1 POLICIES AND SYSTEMS THAT ENABLE OR HINDER MATERNAL MORTALITY AND MORBIDITY REDUCTION

Historical evidence in both developed and developing countries has demonstrated that maternal mortality can be reduced through the synergistic effect of combined interventions, including education for all; universal access to basic health and nutrition services before, during, and after childbirth; access to family planning services; skilled attendance at birth; access to good quality care in case of complications; and policies that raise women’s social and economic status, including their ability to own property and their access to the labor force. For the health of women and their children to be promoted, it is important that each of these areas be addressed.
2.1.1 Education, Health, and Social Status as Enabling Factors

Literacy is an important factor associated with maternal mortality. Literacy rates in the LAC Region are high, thereby providing a situation that favors the reduction of maternal mortality. According to UNESCO, however, "functional literacy" is low in many LAC countries, especially in rural areas and in indigenous areas where Spanish is not the women's native tongue. This lack of education creates barriers in access to health information and services. Inadequate schooling decreases the likelihood that women and their families will utilize and support evidence-based health services. In addition, women who are illiterate are often unaware of their basic human and legal rights and the options these afford them.

Many women in the LAC Region experience nutritional and biological stress throughout their life cycle, which increases the risk of maternal mortality. Such program initiatives as nutrient supplements and promotion of good nutrition help decrease complications due to nutritional deficiencies. (5,22) Prevention of diseases through such vaccinations as tetanus and Hepatitis B, and treatment of such underlying conditions as parasitic infections, HIV, STIs, diabetes, and malaria also improve the outcomes for both maternal and infant health.

Sexual or physical assault during pregnancy is also a contributing factor to maternal death and disability. Domestic violence affecting pregnant women is estimated to be as high as 13% in the LAC Region (7). The prevalence is even higher among adolescent mothers, and in some areas the figure has been reported at 38% (7). Sexually and physically abused women are three times more likely to have low-birthweight babies or babies with fetal growth retardation. Babies born to women who are abused during pregnancy have a six-fold increased risk of dying before the age of five (5).

2.1.2 Integration of Reproductive Health Care

Many difficulties have occurred in the implementation of integrated reproductive health systems. This is due in part to vertical rather than comprehensive programming. In addition, in some cases where integration has occurred, important reproductive health care, such as family planning, treatment of STIs, and post-abortion care, were not included as part of the package.

In the LAC Region, national percentages of women receiving at least one prenatal visit range from 50% to over 90% (1), and the number of women receiving hospital care has been increasing. Therefore, excellent opportunities exist for health promotion, disease prevention, and quality curative care. Women, especially the poor, illiterate, and those residing in rural areas, are more likely to take advantage of expanded health services and education when offered during a prenatal visit or following delivery (19).

In the LAC Region, use of modern family planning methods by married women is estimated to be 69%. Among adolescents, however, it is estimated to be less than 10% (6). The low utilization rate results from the poor availability and access to family planning methods, and lack of knowledge concerning their correct use. Most adolescents receive family
planning services only when they have had a first pregnancy and a first child (18). As a result, many women experience mistimed or unwanted pregnancies. Use of family planning methods increases the spacing between pregnancies and lowers the number of unwanted children.

Abortion-related deaths account for 11% of maternal deaths in the LAC Region (based on PAHO data from 1995-2000). In some countries, abortions are the leading cause of maternal death. Access to family planning for all women, and quality and timely treatment of complications from abortions (spontaneous or induced), reduce the number of maternal deaths and disabilities. In LAC countries, about one-third of women between the ages of 20 and 24 have had their first pregnancy by age 20. In addition, an unwanted pregnancy is more likely to result in health problems for young mothers, because it may lead to unsafe abortion, or because young women are less likely to have access to, or seek, appropriate care (23).

2.1.3 Monitoring and Evaluation Infrastructure

Program monitoring and evaluation are essential to the continuation and improvement of efforts to decrease maternal mortality and should occur at local, national, and regional levels. A World Bank assessment of the reduction in maternal mortality in Honduras concluded that measuring maternal mortality was an important step toward change and reduction (14).

Although it is important to continue to improve the collection of vital statistics and the reporting of maternal mortality rates and ratios (impact indicators), additional measures are needed, as current statistics are often inaccurate due to underreporting and misclassification (19). MMRs are not accurate at the local level, where there are smaller populations and the actual number of maternal deaths is low. Process indicators are therefore increasingly being recognized as monitoring tools, especially at the local level (7). One of the process indicators, "skilled attendance at birth," is being used as a global benchmark to monitor progress toward the goal of maternal mortality reduction. (See Appendix for a list of recommended process indicators.)

Surveillance of maternal mortality is improving, and measuring maternal mortality, particularly at national levels, should be feasible in the LAC Region. Hospital maternal mortality committees are increasingly carrying out the identification and investigation of maternal deaths (such as audits) and, based on findings, recommending actions to be taken. Such committees are important because the poor quality of hospital care contributes to avoidable maternal mortality in the Region (19). Almost all LAC countries have maternal mortality committees at the national level, although functions and activity levels vary. PAHO has recommended the creation of committees at the intermediate (state, province) and municipal level as well (24). However, their presence and level of activity vary from solid and well established in the health care system, to marginalized or nonexistent. (1)

2.2 PROVISION OF, AND DEMAND FOR, MATERNAL HEALTH SERVICES

2.2.1 Affordable, Acceptable, and Appropriate Health Services

Poor women have a higher incidence of maternal mortality than those with higher incomes (16). Inequities in income, education, and accessibility are barriers to effective health services. Data show that there are large disparities in the utilization of health care services between those in the bottom economic quintile and those in the top economic quintile (8,17). Many of those in the lower economic quintile live in rural areas, have minimal schooling, and are members of minority groups.

Geographic accessibility often determines service utilization. In many cases, urban women have more access to delivery care than those living in rural areas. Many pregnant indigenous women suffering from complications must travel long distances, often carried on foot, to access a health service. For women living in rural areas, travel to attend appointments is often expensive, both in terms of transportation and in time away from family and work. These costs may
threaten a family’s economic sustainability and often discourage women and their families from seeking care. Poor women do not have access to health insurance coverage or to social security coverage. In remote areas, the most feasible health services are those provided by the public health system or by private non-profit organization, which are sometimes free of charge, or those that are subcontracted by the public health system. Nonetheless, due to high costs in providing these services, many subcontracting health providers are reluctant to provide services in remote areas unless they are very well remunerated. Lack of health insurance coverage or insufficient coverage is an issue reflecting and contributing to inequity.

In general, indigenous women in the LAC Region have a disproportionately high rate of maternal mortality. Culturally appropriate care is missing in many service areas. Ethnic minority groups are often reluctant to go to hospitals because of reports of substandard care and of physical and emotional abuse at the hands of service providers (10). Language is also an issue for some minority groups who do not understand or speak the official language. Integrated reproductive health care that are sensitive to the cultural traditions of indigenous persons are more likely to be utilized by these populations (9).

2.2.2 Provision of Essential Obstetric Care Services

Basic and Comprehensive EOC

The provision of EOC, both basic and comprehensive, is emerging as one of the most effective strategies in the reduction of maternal mortality, since the majority of complications and deaths occur during and immediately after delivery, or from complications of induced abortions (2). WHO has identified the key components. Basic EOC services should be accessible to all women. Requirements include birthing centers with a skilled attendant, necessary supplies, and the ability to quickly transport a woman to a comprehensive EOC facility if necessary. Key components in a basic EOC facility are: management of problem pregnancies (e.g., anemia, diabetes); medical treatment of complications related to pregnancy, delivery, or abortion (e.g., hemorrhage, sepsis, eclampsia); manual procedures (e.g., removal of placenta, repair of tears or episiotomies); monitoring of labor (including the partograph); and special care for neonates (4). These interventions are known to make a difference in assuring the health of both mother and child. Basic EOC can be provided by a professional midwife.

Comprehensive EOC provides the necessary interventions for high-risk pregnancies and complications during delivery, and includes all of the basic EOC services, plus surgical interventions, anesthesia, and blood replacement (4).

The provision of EOC in virtually the entire Region is hospital-based. However, it should be noted that there has been success in reducing maternal mortality by focusing on basic (non-hospital-based) EOC and by improving referral systems (14). Nonetheless, many countries in the LAC Region are deficient in basic EOC facilities. This leaves women with few choices for childbirth. They can either deliver at home or travel to a distant hospital. Many of the tertiary hospitals in the Region are very overcrowded, to the detriment of quality of care, and contribute to higher costs of delivery services that could
be more efficiently offered by basic EOC facilities. In some countries, waiting homes (casas de espera or hogares maternos) attached to EOC facilities have been successful in improving access to EOC for women who live in distant communities (10). When obstetric emergencies occur, effective referral systems are key to assuring timely access to comprehensive EOC.

**Skilled Attendant at Birth**

Historic evidence has demonstrated that having a skilled birth attendant can effectively reduce maternal mortality (11). A skilled attendant refers exclusively to people with midwifery skills (for example doctors, midwives, nurses) who have been trained to proficiency in the skills necessary to provide competent care during pregnancy and childbirth. Skilled attendants must be able to manage normal labor and delivery, recognize the onset of complications, perform essential interventions, start treatment, and supervise the referral of mother and baby for interventions that are beyond their competence or not possible in the particular setting (3). In the LAC Region, 79% of all births are attended by a skilled health person (15). However, two problems remain in the Region: inequality of access to skilled care, and lack of effective care provided by some health personnel. In some LAC countries, there are very large inequities in the distribution of skilled attendants at birth (12).

Health and education systems have failed to develop a strong cadre of professional practitioners to assist women in childbirth, especially among the poor and those living in rural areas (19). There is a lack of incentives to attract skilled professionals to stay and work in poor or rural communities, where the rates of maternal mortality are the highest. Although training of traditional birth attendants (TBAs) has taken place in many countries, research shows that mainly due to inadequate training and poor support and referral systems, these efforts have not had a significant impact on the reduction of maternal deaths (2).

**Quality Care / Skilled Attendance at Birth**

Quality care includes the adequacy and appropriateness of care provided, and the level of satisfaction
expressed by women. Care provided by skilled attendants must be of high quality if maternal mortality is to be reduced. Many LAC countries, especially those with MMRs of less than 100 per 100,000 live births and high rates of skilled attendance at birth, have been unable to reduce mortality during the past decade, and hospital MMRs often remain unacceptably high (13). In the LAC Region, the skills of professionals attending births vary greatly, and many do not have the basic skills necessary to resolve or provide adequate initial treatment for obstetric emergencies (12).

Resources necessary for deliveries (e.g., instruments, medication) are also required for skilled attendants to be able to carry out their functions appropriately and adequately. The lack of a safe blood supply is a problem in many areas of the Region and contributes to the high number of women who die. Skilled attendance refers to the process wherein the skilled attendant has the necessary skills and is supported by an enabling environment that includes adequate supplies, equipment and infrastructure, efficient communication system, and referral and transport (12).

Such practices as routine episiotomies contribute to increased morbidity among women. A high rate of cesarean section in some countries and among certain subgroups of women is also an emerging problem in the LAC Region (21). Inappropriate and unnecessary use of technology and obstetric practices increases risks for women and infants and shifts resources (limited in all countries) away from areas of greater need. In addition, poor health provider communication skills, associated with disrespectful behavior, are cited by women as a factor in their not using health services. This has led to a call for "humanizing birth".

Reduction of Maternal Mortality and Morbidity Interagency Strategic Consensus for Latin America and the Caribbean
3.1 INTERNATIONAL CONTEXT OF MATERNAL MORTALITY AND MORBIDITY REDUCTION

A number of consultations have been held in an effort to develop strategies to reduce the number of women dying from complications related to pregnancy. In 1997, government representatives, donors, nongovernmental organizations (NGOs), and technical experts taking part in the Safe Motherhood Technical Consultation agreed on key interventions for reducing maternal mortality globally (13). These interventions, described in the Safe Motherhood Action Agenda, include the advancement of safe motherhood through human rights, social and economic advances for women, delay of marriage and first birth, and improvement of health sector interventions (12). In 2000 at its Millennium Summit, the United Nations adopted the Millennium Declaration, which identifies a set of development goals for sustainable development and poverty eradication by the year 2015. One of the eight Millennium Development Goals aims at reducing MMR by three-quarters between 1990 and 2015. Indicators to measure progress in reducing maternal mortality include skilled attendants present at 80% of births globally by the year 2015. With an average coverage of 79%, the challenge for the LAC Region is to increase the access of underserved populations (1), decreasing intra-country (including urban-rural) disparities, and improving the effectiveness of skilled attendance (15).
3.2 GOALS

Broadly, the goals to promote safe motherhood are: to protect and promote reproductive and human rights by reducing the global burden of unnecessary illness, disability, and death associated with pregnancy, childbirth, post-partum and the neonatal period; to increase conditions for safe and healthy childbirth for women; and to ensure an equal start for children.

3.3 PRIORITIES IN THE LATIN AMERICA AND CARIBBEAN REGION

Maternal mortality in LAC countries has many similarities to the issues and contexts internationally. However, there remain unique characteristics both in terms of the overall issue and in the approaches taken to reduce the incidence of maternal mortality. Building on international experiences, and based on the lessons learned in the LAC Region, a number of priorities for the first decade of the millennium have been identified.

3.3.1 Supporting National and Municipal Efforts

Maternal mortality reduction as a public health priority should be reflected at national and municipal levels through: policies and laws that protect the human rights of women, including access to health, nutrition, and education; financial commitment to secure necessary human and material resources; integration of reproductive health care; and responsiveness of services to the needs of the population.

The majority of countries in the LAC Region have policies emphasizing the importance of safe motherhood. Overall reduction in maternal mortality during the 1990s was uneven across the Region, however, and has not kept pace with changes in economic indicators in many countries (20). Analysis of countries that have made significant advances in reducing maternal mortality indicate that strong, articulated, and sustained safe motherhood policies are necessary for progress to be made.

Reduction of maternal mortality needs to be a priority at both national and local levels. A review of national laws and policies is necessary to ensure that human rights of women are respected, and barriers to accessible, affordable, and appropriate care are removed. In addition, an analysis of the factors that contribute to or inhibit the application of such laws, policies, and health-related norms is required. Laws and policies directly affecting women’s health include rights to health, family planning, nutrition, and education, and the establishment of a minimum age for marriage. A gender perspective needs to be incorporated in these laws and policies, and women must be included in the decision-making process (20). It is important that an awareness of these rights and laws be made known so that women and their families can take the steps necessary to ensure that women receive the services that will protect and promote their health and the health of their children. In addition, legislation needs to be enacted that allows health workers to perform specific life-saving interventions, including during post-abortion complications.

Resources must be committed and necessary actions taken in order to make significant progress in reducing maternal mortality. Some countries will need to mobilize substantially more resources, while others will need to increase the efficiency of their current expenditures and/or shift resources toward basic maternity care at the local level to improve health. Funding women’s health care must be appropriate and sustainable over long periods of time in order to achieve results. Furthermore, countries must promote increased transparency in the use of resources and create a mechanism for monitoring.

Reproductive health care at the local level must provide care that meets established norms and guidelines. To accomplish this, adequate human and material resources are required. Health services must also be appropriate and responsive to the population they serve. Capacity-building at local and national levels must be strengthened and accountability mechanisms put in place. In communities where decentralization of services is a part of health system reform, local administrators and community committees must take responsibility for delivery of health services.
Promotion of the integration of a collection of reproductive health care (e.g., maternal and infant care, family planning, including access to and availability of all modern contraceptives, maternal and infant care, treatment of STIs, and post-abortion care) should be an essential component of health sector reform, and access to these services should be ensured for all women. In addition, increasing attention should be given to the provision of youth-friendly adolescent reproductive health care. Provision of adolescent health services is essential, given the current rate of adolescent pregnancies and the increasing rates of HIV/AIDS in LAC countries among this population. To improve their effectiveness, these services must be provided to all adolescents, including out-of-school youth.

3.3.2 Providing Comprehensive Maternal Health Care and Services

Maternal mortality reduction as a public health priority will be reflected in the provision of maternal health services through integrated reproductive health care that include the provision of prenatal and postnatal care, family planning, and diagnosis and treatment of STIs; skilled attendance at birth; the establishment of an EOC network; and geographic and cultural access to obstetric care.

The health care sector should address the needs of women seeking to avoid becoming pregnant, by providing accessible and affordable family planning services. These services must be client-centered, offer a range of appropriate contraceptive methods and counseling, and, where possible, develop links to other reproductive health care that women may need, such as the screening and treatment of STIs. Governments also need to guarantee a comprehensive and cost-efficient package of quality antenatal care.

The provision of EOC, as defined by WHO, is a key strategy that directly addresses the medical causes of maternal mortality. Facilities (hospitals and health centers) with limited capacity can become capable of providing EOC. A system should be established to ensure that staff is available to manage obstetric emergencies 24 hours a day and that the necessary supplies are available. Obstetric emergencies should have priority access to the operating rooms, and safe blood transfusion needs to be available at all times (19).

All pregnant women should have access to a skilled attendant for prenatal, intrapartum, and postpartum care. Incentives should be offered to skilled attendants working in rural and semi-rural areas, including the provision of housing and distance learning opportunities, career prospects through rotation systems, and, where applicable, the ability to practice in both public and private facilities (12).

Comprehensive maternal care, which includes the provision of EOC, antenatal and postpartum care, with a rights and gender approach, and which addresses interpersonal and clinical quality, needs to be a fundamental curriculum component in schools of medicine, midwifery, and nursing. In addition, it is important that health care administrators understand the role of EOC and the components of an effective EOC system. Continuing education, including supervised training for physicians, midwives, and nurses according to evidence-based practice standards, is essential for ensuring quality care.

Training and deployment of professional midwives and nurses as primary birth attendants is a key
intervention that has been shown to be effective, particularly in underserved areas. This can be facilitated by establishing national regulatory frameworks to allow practice in a variety of settings; reviewing regulations governing the scope of practice of each category of birth attendant; allowing the practice of lifesaving interventions such as the manual removal of placentas; upgrading professional midwifery and nursing education programs; offering continuing education for practicing midwives and nurses; and developing strong professional associations.

While the ultimate goal is skilled attendance at birth for all pregnant women, this is impossible to achieve overnight. One successful interim strategy is for the formal health system to partner with traditional births attendants (TBAs), particularly in the provision of culturally acceptable ways of caring for women. Recognition of the role TBAs can play in identifying and referring women with emergencies during childbirth, referring women for prenatal care, and providing essential support services (such as emotional support during labor and assistance with childcare) will help to build positive relationships and facilitate utilization of EOC. In addition, health care providers can facilitate women's access to skilled birth attendance by ensuring that TBAs are welcome when accompanying women to health centers or hospitals.

Building effective referral systems is essential in ensuring that women who are identified as high risk, or who experience an obstetric emergency, are able to access appropriate care in a timely manner. Teams of professionals with clearly identified roles and responsibilities can facilitate the referral process. TBAs and auxiliary nurses can provide the first line of referral by identifying high-risk pregnancies and unexpected complications. Skilled attendants (midwives, nurses, and physicians) can provide basic EOC and refer clients to comprehensive EOC as needed. Effective and affordable transportation should be in place in order to facilitate transfers to higher-level care facilities. Preventive evacuation plans should be defined well ahead of the expected delivery date.

3.3.3 Increasing Public Demand

Maternal mortality reduction as a public health priority will be reflected in an increase in public demand for quality, affordable, and accessible services; through strategies of widespread health promotion and education; and in the development of community committees responsible for advancing the health of women at the local level.

The availability of basic and comprehensive EOC does not ensure its use by women. An important step in increasing demand for services is raising awareness of the problem of maternal mortality and building community capacity to enable women to take action. As such, advocacy for safe motherhood is a key strategy for increasing public demand for EOC. In order for communities to participate, the health system must be seen as necessary, of good quality, and appropriate. Education on the importance of health promotion, identification of complications, and appropriate interventions is required in order to achieve improved maternal health and decreased maternal mortality.

Communities need to become actively involved in the delivery of services, thus developing a sense of ownership and responsibility in promoting maternal health. In addition to women, key stakeholders in the community include husbands and fathers, adolescents, leaders and decision-makers, and community practitioners (e.g., TBAs). Each of these groups has an influence on whether women seek formal maternal health services.

National, state, and municipal safe motherhood committees should be established in locations where they will be most effective. These committees can help identify and implement strategies for improvement in such areas as referral, emergency transport, deployment and support of health care providers, and cost sharing. By fostering community involvement in service design, implementation, monitoring, and evaluation, maternal health programs can become more responsive to local needs and ensure increased accountability for expenditures. Communities that actively contribute to maternal health programs develop a sense of ownership and a vested interest in their success. Community partnerships can also help to ensure program demand and sustainability.
3.3.4 Building Partnerships

Maternal mortality reduction as a public health priority will be reflected in the building of partnerships that: advance maternal health at international, regional, national, and local levels; are characterized by coordination, collaboration, and cooperation; strengthen capacity-building; and promote sustainability. Creating a supportive environment for safe motherhood requires collaboration and coordination through horizontal partnerships across sectors, such as health and education, and vertical partnerships between different levels of the health and social systems (19). Stronger national capacity and long-term political commitment are needed to create this supportive environment.

In the past, such partners as NGOs and civil society organizations have played important roles in advocacy, financial assistance, capacity-building, and implementation of programs. Improved collaboration, cooperation, and coordination among partners are advocated to maximize efforts to improve maternal health. Advocacy tools, educational activities, training of skilled attendants, policy-making, and development and implementation of monitoring and evaluation tools are examples of collaborative efforts that contribute to efforts to reduce maternal mortality.

In many countries, civil society groups, including local community groups, women's groups, and other NGOs, provide a range of health services and often reach out to and represent underserved groups (women, ethnic minorities, and adolescents). They have frequently spearheaded innovative advocacy and activities to protect and promote sexual and reproductive health rights.

Partners at all levels need to work toward the development and maintenance of programs that reduce the number of women dying from pregnancy. Mutual trust, transparency, and capacity-building should characterize partnerships. Strategies for developing sustainable programs that address the health needs of women should be explored. Examples include incentives to private businesses for health-related programs and services, advocacy of international organizations for debt relief, and the building of local capacity to decrease dependency on foreign sources.
aid. The role of the community with local and national Governments, with health services, and with civil society and NGOs must also be recognized as key in the efforts to reduce maternal mortality.

### 3.3.5 Financing Maternal Health Services

In order to assure financial and economic sustainability, it is necessary to: (a) develop a methodology to evaluate the economic impact of maternal mortality reduction in LAC countries; (b) create a common set of indicators to demonstrate the burden of economic and welfare losses associated with maternal mortality; (c) design a reproductive health accounts model to quantify financial needs (promotion, prevention, and service provision) and identify available financial resources for reproductive health; (d) utilize data produced in the areas above to strengthen negotiations with Governments on the means to finance a reproductive health package on a sustainable basis; and (e) target public financing to cover the reproductive health needs of the poorest populations.

Globally, the mobilization of resources for maternity care from Governments and the international community is inadequate to the established goals for 2015, and even though regional data are not available, this seems to be the case in most LAC countries. High maternal mortality rates indicate that spending adjustments are necessary to meet unmet needs, especially among the poor.

Maternal health services and related expenses like transportation are financed through government funding, individual savings or loans, and/or external assistance. External assistance finances about half of reproductive health spending in the LAC Region. However, recent trends indicate a decline in this source of funding.

At national and local levels, one of the challenges in the fight against maternal mortality is the lack of information on the costs of achieving this goal. The reduction of maternal mortality involves investments in infrastructure, medical equipment, drugs, health supplies, human resources development, and social communication. It also involves recurrent costs, such as salaries and medical supplies, to guarantee sustainability. It will be difficult to reduce maternal mortality without an adequate estimate of costs and a clear commitment of government to finance the necessary activities. Most countries have not developed budgeting systems that permit the collection, retrieval, and analysis of economic data in this area. They also do not have sufficient capacity to develop the management tools needed to finance and implement health programs.

Governments should take the lead in the development and provision of a reproductive health accounts model that facilitates programming and enhances budgeting systems. This will also assist in establishing linkages between the goals, technical needs, and financial support required to reduce maternal mortality. The methodology needed to build the accounts model will also facilitate the identification of necessary resources required to achieve maternal mortality reduction in the public, private, and nonprofit sectors, as well as personal expenditures.

Some countries, most notably, Bolivia, Ecuador, and Peru, are implementing universal maternal health care coverage within their health sector reforms, through provision of health insurance for maternity care. It is too soon to determine the effectiveness of these schemes in reducing maternal mortality, but it is evident that cost is a deterrent, if one considers the increase in institutional births since the implementation of these measures.
1. Total fertility rate: Total number of children a woman would have by the end of her reproductive period if she experienced the prevailing age-specific fertility rates throughout her childbearing life.

2. Contraceptive prevalence rate (any method): Percentage of women of reproductive age 3 who are using (or whose partner is using) a contraceptive method 4 at a particular point in time.

3. Maternal mortality ratio: Annual number of maternal deaths per 100,000 live births.

4. Antenatal care coverage: Percentage of women attended, at least once during pregnancy, by skilled health personnel 5 for reasons relating to pregnancy.

5. Births attended by skilled health personnel: Percentage of births attended by skilled health personnel 6 for reasons relating to pregnancy.

6. Availability of basic EOC: Number of facilities with functioning basic EOC 7 per 500,000 population.

7. Availability of comprehensive EOC: Number of facilities with functioning comprehensive EOC 7 per 500,000 population.

8. Perinatal mortality rate: Number of perinatal deaths 8 per 1,000 total births.


10. Positive syphilis serology prevalence in pregnant women: Percentage of pregnant women (15-24) attending antenatal clinics whose blood has been screened for syphilis, with positive serology for syphilis.

11. Prevalence of anemia in women: Percentage of women of reproductive age (15-49) screened for hemoglobin levels with levels below 110 g/l for pregnant women, and 120 g/l for nonpregnant women.

12. Percentage of obstetric and gynecological admissions due to abortion: Percentage of all cases admitted to service delivery points, providing in-patient obstetric and gynecological services, which are due to abortion (spontaneous and induced, but excluding planned termination of pregnancy).

13. Reported prevalence of women who have undergone female genital mutilation (FGM): Percentage of women interviewed in a community survey reporting having undergone FGM.

14. Prevalence of infertility in women: Percentage of women of reproductive age (15-49) at risk of pregnancy (not pregnant, sexually active, not using contraception, and not lactating) who report having tried for a pregnancy for two years or more.

15. Reported incidence of urethritis in men: Percentage of men (15-49) interviewed in a community survey reporting episodes of urethritis in the previous 12 months.

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3 Women of reproductive age refers to all women aged 15-49, who are at risk of pregnancy, i.e., sexually active women who are not infecund, pregnant, or amenorrheic.

4 Contraceptive method includes female and male sterilization, injectable and oral hormones, intrauterine devices, diaphragms, spermicides and condoms, natural family planning and lactational amenorrhea where cited as a method.

5 Skilled health personnel refers to doctor (specialist or nonspecialist) and/or persons with midwifery skills who can manage normal deliveries and diagnose or refer obstetric complications. Both trained and untrained TBAs are excluded.

6 Basic EOC should include parenteral antibiotics, oxytocics, and sedatives for eclampsia and the manual removal of placenta and retained products.

7 Comprehensive EOC should include basic EOC plus surgery, anesthesia, and blood transfusion.

8 Deaths occurring during late pregnancy (at 22 completed weeks gestation and over), during childbirth and up to seven completed days of life.