



**SKILLED CARE  
DURING CHILDBIRTH**  
INFORMATION BOOKLET >>

>> Saving Women's Lives, Improving Newborn Health



- 1 **Skilled Care During Childbirth: An introduction**
- 5 **Historical and Epidemiological Evidence in Support of Skilled Care During Childbirth**
- 11 **Essential Competencies of Skilled Attendants: Clinical, Cognitive, and Attitudinal**
- 17 **Access to Skilled Care: Availability, Affordability, and Accessibility**
- 23 **The Enabling Environment for Skilled Care, Part 1 Laws, Policies, and Infrastructure**
- 27 **The Enabling Environment for Skilled Care, Part 2 Training, Continuing Education, and Supportive Supervision**
- 31 **Monitoring and Evaluating the Impact of Skilled Care During Childbirth**



## An Introduction

**E**ach year, out of an estimated 120 million pregnancies that occur worldwide:

- › **More than** half a million women die from the complications of pregnancy and childbirth.
- › **More than** 50 million women suffer from a serious pregnancy-related illness or disability.
- › **At least** 1.2 million newborn infants die from complications during delivery.

### DEFINITIONS

“The term ‘**skilled attendant**’ or **provider** 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 labour and delivery, recognise 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.”

(Based on *Reduction of maternal mortality*, A Joint WHO/UNFPA/Unicef/World Bank Statement. Geneva: WHO, 1999.)

The global Safe Motherhood Initiative was launched in 1987 to address this major public health problem. The Initiative, led by the Safe Motherhood Inter-Agency Group (IAG)<sup>1</sup>, works to raise awareness and stimulate action at the global and national levels to make pregnancy and childbirth safer for women and newborn infants. In 1997 the Inter-Agency Group convened an international conference to review key lessons learned from the Initiative’s first decade, identify the most effective strategies, and mobilise country-level action to implement these strategies.

A clear consensus emerged from the 1997 conference that ensuring skilled care during childbirth is a critical intervention for making pregnancy and childbirth safer. Current data indicate that only 53% of women in developing countries deliver with a skilled health care provider present. In order to improve this situation, the IAG has developed a multi-step strategy, which includes publication of this booklet, to assess the importance and potential impact of skilled care in reducing maternal mortality.<sup>2</sup> The IAG is focusing primarily on the process of skilled care (or attendance) at delivery, as compared to individual **skilled attendants or providers**<sup>3</sup>, as a way to ensure that attention is paid to the environment in which health professionals provide maternal care (*see sidebar*).

## What this booklet contains

This information booklet outlines the main issues that need to be considered when designing and implementing policies and programmes to expand skilled care during childbirth. The six sections, based on a forthcoming publication *Skilled Care During Childbirth: A Review of the Evidence*, cover the following topics:

*A Review of the Evidence*, cover the following topics:

- › Historical and epidemiological evidence in support of skilled care during childbirth
- › Essential competencies of skilled attendants: clinical, cognitive, and attitudinal
- › Access to skilled care: availability, affordability, and accessibility
- › Creating an enabling environment for skilled care, part 1: laws, policies, and infrastructure
- › Creating an enabling environment for skilled care, part 2: training, continuing education, and supportive supervision
- › Monitoring and evaluating the impact of skilled care during childbirth

The booklet is intended primarily for programme managers in governments (e.g., ministries of health), NGOs, and training institutions; representatives of technical assistance, research, and funding agencies working in the field; and associations of health professionals dedicated to improving maternal health and advancing safe motherhood. In addition, policy-makers in governments and donor agencies, the global and national media, and grassroots organisations with particular interest in safe motherhood will find the cards informative and instructive.

Several international and national bodies have set specific goals for reducing maternal mortality and expanding skilled care. The 1994 International Conference on Population and Development (ICPD) defined targets for the proportion of deliveries with skilled attendants, which were reaffirmed and expanded in the five-year review of ICPD in 1999. More recently the U.N. system and its

## Skilled care or atten-

**dance** refers to the *process* by which a pregnant woman and her infant are provided with adequate care during pregnancy, labour, birth, and the postpartum and immediate newborn periods, whether the place of delivery is the home, health centre, or hospital. In order for this process to take place, the attendant must have the necessary skills **and** must be supported by an enabling environment at various levels of the health system, including a supportive policy and regulatory framework; adequate supplies, equipment, and infrastructure; and an efficient and effective system of communication and referral/transport.

Skilled care therefore includes care for women with life-threatening complications, but is not limited to that care. The skilled care approach is based on the premise that **all** women are entitled to good quality care during childbirth. It assumes that such care can prevent some complications (e.g., through hygienic practices and active management of the third stage of labour); increase the likelihood of immediate, appropriate treatment when complications do develop; and encourage prompt, timely referral as necessary.



members have endorsed the Millennium Development Goals, which include the reduction of maternal mortality as one of eight goals, with proportion of births attended by skilled health personnel as an indicator.

While some progress has been made toward meeting these goals, much more remains to be done. Ensuring safe motherhood for all women—and making skilled care during childbirth universal—will require sustained, long-term commitments and inputs from a range of partners, including governments, NGOs, international assistance agencies, and donors, among others.

---

1 The current members of the Safe Motherhood Inter-Agency Group are: Unicef, UNFPA, the World Bank, the World Health Organization, the International Confederation of Midwives, the International Federation of Gynecology and Obstetrics, the International Planned Parenthood Federation, the Population Council, the Regional Prevention of Maternal Mortality Network (Africa), and the Safe Motherhood Network of Nepal. Family Care International serves as the secretariat.

2 Other components of this strategy include: an April 2000 technical consultation that assessed the evidence and developed strategies for expanding skilled care during childbirth; a November 2000 international conference in Tunisia, *Saving Lives: Skilled Attendance at Childbirth*; publication of a paper on which this information booklet is based *Skilled Care During Childbirth: A Review of the Evidence; Skilled Care During Childbirth: Policy Brief; and Skilled Care During Childbirth: Country Profiles*.

3 Traditional birth attendants (TBAs) are not defined as skilled attendants because they lack the capacity to manage obstetric complications. See sections on *Essential Competencies* and *Access to Skilled Care* for additional discussion on the abilities and roles of TBAs.



### in Support of Skilled Care During Childbirth



**H**istorical and epidemiological evidence suggests that skilled care during childbirth and immediately afterwards can have a significant impact on reducing maternal deaths. Countries that have prioritised expanding skilled care have generally achieved substantial reductions in maternal mortality. These experiences, and the specific political and policy changes that made them possible, offer potentially valuable lessons about the role of skilled care in reducing maternal deaths.

#### What the Historical Evidence Shows

##### The “first phase” of maternal mortality reduction:

In late 19th century Europe and the US, maternal mortality was as high or higher than it is in much of the developing world today. Around 1870, more than 600 women died for every 100,000 births in most of what is now the industrialised world. But by 1900, the maternal mortality ratio (MMR)<sup>1</sup> in Sweden had dropped by half, MMRs in England and Wales had fallen by nearly 25%, and similar reductions were taking place across much of the Western world (see *Figure 1*). All of these declines came about before the advent of modern obstetrics, i.e., the development of antibiotics, blood transfusions, Caesarean sections, and better anaesthesia (*discussed below*).

Several factors contributed to these initial reductions in maternal mortality in Western Europe between 1870 and 1910, including:

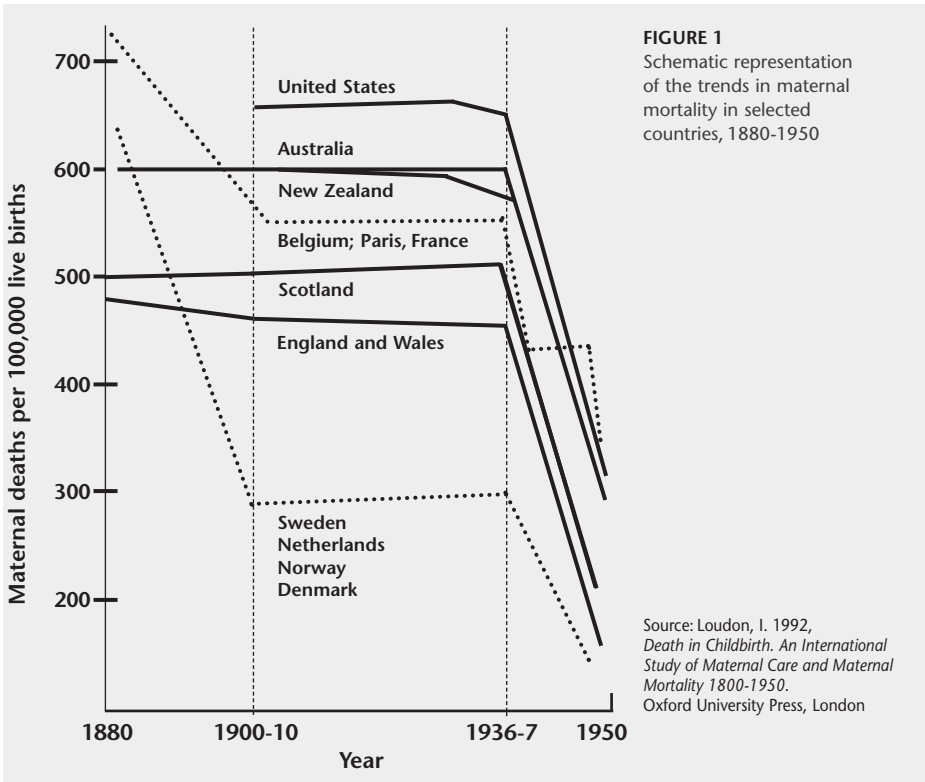
- › The availability and analysis of reliable vital statistics, which led to an awareness of the extent of the problem of maternal mortality and the causes of maternal death, and created pressure for action;
- › The adoption of legislation that required or promoted skilled care during childbirth;
- › The implementation of national programmes to train and deploy adequate numbers of skilled attendants;
- › The professionalisation of midwifery care and the development and enforcement of standards of care.

---

<sup>1</sup> The maternal mortality ratio or MMR is the number of women who die from complications of pregnancy and childbirth per 100,000 live births.

In Sweden in the late 19th century, for example, each parish was required by the government to select a candidate for professional midwifery training, and to support her work after her return. Between 1860 and 1890, the proportion of home births in Sweden at which a midwife assisted rose from 30% to 70%. Legislation adopted in Sweden in 1881 helped promote skilled care at delivery by replacing traditional birth attendants (TBAs) with trained and certified midwives. England and Wales passed similar laws in 1902. Indeed, researchers suggest that reductions in maternal mortality were achieved most quickly in those European countries where midwives were first recognised and respected by policy-makers and the public as health professionals who provided good quality maternity care.

**The “second phase”:** After the first phase of declining maternal mortality in European and other Western countries, little or no progress was made for another four decades. However, between 1937 and the end of the 1960s, rapid reductions in maternal death figures occurred in all industrialised countries, falling to their current level of about 10 maternal deaths for every 100,000 births (*see Figure 1*). This progress coincided with advances in medical technologies and the development of antibiotics and other modes of treatment (e.g., blood transfusions)—methods that helped reduce maternal deaths from sepsis and haemorrhage. In addition, subsequent improvements in obstetric services (e.g., improved anaesthesia, less interference in normal births, and appropriate use of Caesarean sections) had a further positive impact on maternal mortality, reducing MMRs to current levels.



### Actions Needed

Evidence from the historical record suggests that the following are effective strategies for increasing skilled care during childbirth and reducing maternal mortality. Each can be adapted to local as well as national settings, and additional interventions (such as strengthening referral systems) may also be necessary.

› **Recognising the magnitude of the problem of maternal mortality** and acknowledging that most maternal deaths are avoidable;

› **Making a political commitment** to reducing maternal mortality, and putting in place legislation that facilitates skilled care during childbirth for all women;

› **Professionalising midwifery practice** and ensuring that midwives are (and are seen by the public as) competent professionals, through adoption of effective systems of supervision and accountability;

- › Incorporating key life-saving medical skills into midwives' scope of practice; and
- › Ensuring availability of funding for skilled care at all births, along with needed supplies and equipment.

The experiences of Malaysia and Sri Lanka, two countries that have successfully reduced maternal mortality significantly in the last few decades, confirm the lessons outlined above. Both Sri Lanka and Malaysia built on the solid foundation of a functioning, accessible health system by (*see Skilled Care During Childbirth: Country Profiles*):

- › Improving access to effective maternal care, particularly for the rural and the poor, by placing skilled attendants (primarily midwives) at community health facilities, establishing partnerships between these midwives and TBAs, ensuring an effective system for referral of complications, and providing free maternity care to the client;
- › Improving the quality of available services through better management and empowerment of clients and communities.

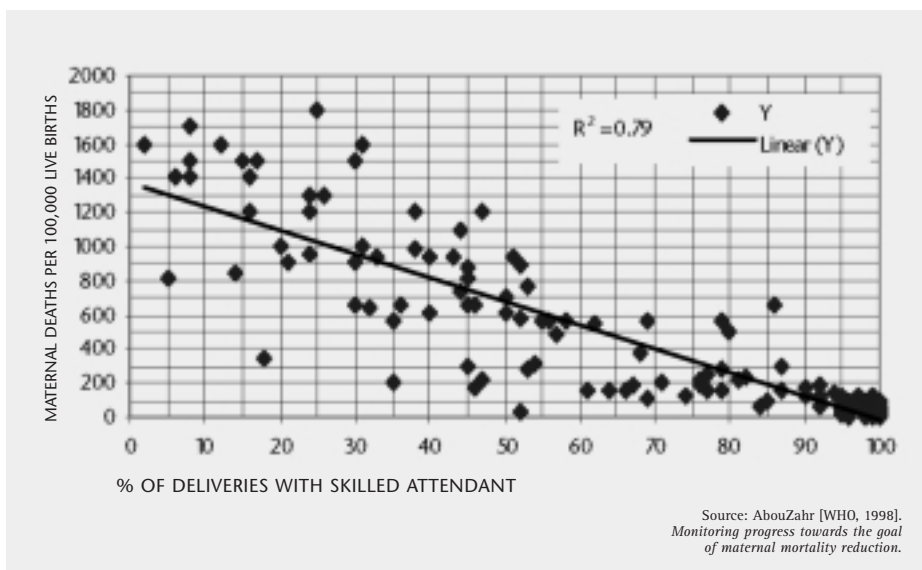
### The Epidemiological Evidence

In addition to the historical evidence from the now-developed world, recent epidemiological evidence from a range of developing countries suggests that skilled care during childbirth may help prevent maternal deaths. As *Figure 2* illustrates, country-level data show an inverse association between the maternal mortality ratio (MMR) and the proportion of deliveries attended by skilled attendants—countries with higher rates of skilled care generally have lower MMRs, and vice versa.

While this relationship appears strong, *Figure 2* must be interpreted cautiously for a number of reasons:

- › The fact that the data are strongly correlated does not imply causality, i.e., that increasing coverage rates by skilled attendants causes reductions in maternal mortality, since there may be other hard-to-measure factors that are impacting both indicators.

FIGURE 2 Relationship Between Proportion of Deliveries with Skilled Attendant and Maternal Mortality Ratio



› The reliability of the data is questionable, and its interpretation is problematic. The difficulties of estimating maternal mortality are well known; in addition, figures for coverage by skilled attendants suffer from problems with the way survey data are gathered and interpreted. These problems include lack of clarity about who is defined as a skilled attendant and questions about the ability of survey respondents to accurately recall and identify who provided care during their delivery. In addition, data on coverage by skilled attendants lack information on the “enabling environment” factors, such as supplies, equipment, infrastructure, and a functioning referral system; thus it is impossible to determine from survey data whether skilled attendants are, in fact, able to provide skilled care.

› Aggregating all “skilled attendants” together may mask important differences. For example, when the data in *Figure 2* are disaggregated by type of provider (doctor and nurse/midwife), the correlation remains strong for doctors but is not as strong for nurses and midwives. This phenomenon most likely reflects the variation in skill levels among those labelled as nurses/midwives, as well as the lack of an enabling environment as outlined above.

These problems make it difficult to conclude definitively that having a skilled attendant present is the only, or most important, factor in reducing maternal mortality. Nevertheless, there is also clinical evidence that appropriate management of labour, delivery, and the immediate postpartum period by skilled attendants can avert some complications, such as postpartum haemorrhage, or prevent death from other complications, such as retained placenta—even without modern obstetric techniques such as surgery and blood transfusion.

Experts therefore recommend a holistic approach to reducing maternal mortality that comprises all or most of the factors associated with the near universal coverage of skilled care in countries with low maternal mortality. Among these are:

- › Working with communities to create knowledge on maternal health issues, and strengthening their ability to make and act on decisions regarding their health, including the use of health services;
- › Ensuring effective, community-based systems of transport, communication, and referral; and
- › Establishing and maintaining a well-functioning, well-equipped, and extensive health care system.

### Actions Needed

Further epidemiological research is needed to assess the impact on maternal mortality of increasing the proportion of deliveries with skilled care under a variety of conditions. Such studies should also attempt to determine the relative costs and impact of the programmatic elements of skilled care, for both normal and complicated deliveries.

## Clinical, Cognitive, and Attitudinal

**T**o provide good quality, effective care during pregnancy and childbirth, skilled attendants<sup>1</sup> (whether midwives, nurses, or doctors) must have a range of specific skills and perform them competently. It is also critical that skilled attendants be authorised to perform all the procedures in which they are trained—so they can keep their skills current and to offer care that meets the needs of the women they serve. For this to occur, skilled attendants need a supportive context in which to provide care (see sections on *Enabling Environment*). This includes a supportive legal and regulatory framework, access to essential equipment and drugs, a functioning referral system, and education and health systems that foster critical thinking, clinical proficiency, and development of effective interpersonal and communication skills.

---

<sup>1</sup> “Skilled attendant” (see definition in *Skilled Care During Childbirth: An Introduction*) refers to an individual with the ability to provide the full scope of childbearing care from pre-pregnancy through the postpartum period, including essential and emergency obstetric care as specified. A number of countries have also deployed health care workers with more limited training and skills in midwifery care, often called auxiliary midwives, maternal and child health aides, or other titles. Utilisation of such cadres, and their promotion to fully qualified skilled attendants, may be part of a broader strategy for achieving skilled care. The ultimate goal should continue to be to ensure coverage by fully-qualified skilled attendants.

In addition, at the community level there are often individuals who have a long tradition of working with women during childbearing, generally called traditional birth attendants or TBAs. These cadres have varying levels of understanding of pregnancy and birth, varying preparation to care for women, and limited or no experience with emergency obstetric care. Most of them have learned by doing and watching others, and are valued and trusted members of the community. As discussed in the section *Access to Care*, in settings where TBAs play a major role in providing care or information to women in the community, the health system should work with TBAs as part of a strategy to improve access to and quality of care.

### Essential Competencies

A wide range of interventions effective in decreasing maternal and neonatal death and illness during pregnancy, delivery, and the newborn period can be provided by, and should be expected from, health care providers trained as skilled attendants. During pregnancy, a skilled attendant should be able to

- › Monitor the health of the woman and fetus;
- › Provide preventive and curative care for common illnesses such as anaemia, sexually transmitted diseases, urinary tract infections, and malaria, as well as provide tetanus toxoid immunisation;
- › Educate clients about danger signs and offer guidance in planning for the delivery.

In addition, the skilled attendant should be able to: offer counselling and assistance in dealing with an unwanted pregnancy.

During labour and delivery, a skilled attendant should:

- › Perform general and abdominal examinations,
- › Observe and monitor the woman’s physical status,
- › Conduct a normal delivery, and
- › Recognise and respond to signs of distress in the woman or fetus.

The skilled attendant should provide the basic elements of supportive care, including encouraging a woman to move about during labour, appropriate methods of pain relief, and the provision of fluid and food intake during labour.

Key components of **immediate postpartum care** include:

- › Care of the umbilical cord,
- › Appropriate management of the third stage of labour,
- › Provision of a safe and warm environment for the mother and infant,
- › Encouraging early and exclusive breastfeeding, and
- › Counselling about appropriate family planning methods.

Skilled attendants at the domiciliary (home) or primary (health centre or health post) levels should also be able to manage the clinical situations that pose major threats to the lives of mothers and newborns (*discussed below*). Skilled attendants in referral facilities need additional skills to provide life-saving emergency obstetric care (*discussed in a following section*), and all skilled attendants, wherever they are working, must be backed up by and linked to well-equipped, well-supplied referral facilities that can provide life-saving care.

What follows are the essential skills and competencies needed by skilled attendants working at the domiciliary or primary level (e.g., Basic Essential Obstetric Care) in order to effectively manage the main causes of maternal mortality and morbidity. This list has been derived from two key documents, *Provisional Essential Competencies for Basic Midwifery Practice*, produced by the International Confederation of Midwives (ICM), and the *Essential Care Series for Integrated Management of Pregnancy and Childbirth*, produced by the World Health Organization (WHO). The following obstetric emergencies should be managed or transferred based on agreed protocols.



### Skills for Management of Complications at Domiciliary/Primary Levels

**Maternal haemorrhage:** A skilled attendant should be able to diagnose various causes of antepartum and postpartum bleeding, including abortion (*see below*), as well as recognise the possibility of internal haemorrhage due to ectopic pregnancy. For antepartum and internal haemorrhage, a skilled attendant should stabilise and transfer the woman immediately. Skilled attendants can reduce the likelihood of postpartum haemorrhage by promoting the normal mechanisms of placental delivery and by using active management of this stage when appropriate (including administration of a prophylactic oxytocic with or immediately after delivery of the infant, early cord clamping and cutting, and controlled cord traction). Manual removal of placenta, uterine massage, and aortic or bimanual compression are also options. When the bleeding requires emergency care, skilled attendants can stabilise the woman by giving IV fluids and can transfer her to a referral facility.

**Sepsis:** A skilled attendant should prevent infection by ensuring that the woman gives birth in a safe, clean environment, maintaining the highest possible standards of hygiene and infection control, and using clean or sterile equipment, including gloves. For women who develop an increased risk of sepsis during delivery (e.g., if membranes have been ruptured over a prolonged period, or the woman has been exposed to an infectious substance/situation), skilled attendants can administer antibiotics. Skilled attendants can also monitor women after delivery, educate women and their families on the signs of infection, and, if sepsis develops, administer antibiotics. Skilled attendants can also recognise sepsis due to unsafe abortion.

**Pre-eclampsia and eclampsia:** Skilled attendants can identify elevated blood pressure and proteinuria as signs of pre-eclampsia. Such cases should be provided with emergency care and referred for higher-level care. If eclampsia occurs during delivery, skilled attendants can provide potentially life-saving care: administering anti-convulsant drugs, inducing labour by rupturing membranes, and correctly positioning an unconscious


woman for delivery. Skilled attendants should also be able to administer anti-convulsant drugs and stabilise a woman to prevent her condition from worsening, and refer her for higher-level care.

**Prolonged or obstructed labour:** A skilled attendant can use a partograph to monitor the progress of labour, identify prolonged or obstructed labour, and take appropriate and timely action. If labour is long or difficult, skilled attendants provide supportive care throughout the process. If prolonged labour is due to ineffective contractions, careful augmentation with oxytocin is an option. For other causes, such as shoulder dystocia or prolapsed cord, skilled attendants can provide emergency care. In some cases, experienced providers can use a vacuum extractor to save the lives of both mother and infant. In all cases of prolonged and obstructed labour, skilled attendants must be able to refer severe cases promptly to higher-level care.

**Addressing abortion complications:** A skilled attendant can play an important role in facilitating women's access to the appropriate measures for managing unsafe abortion. These include providing treatment for or referring women who present with signs of inevitable, incomplete, and septic abortions, according to the attendant's level of skill. In circumstances where abortion is not against the law, skilled attendants have a role to play in protecting women's health. While not promoting abortion as a method of family planning, they may advocate to ensure that services are safe and accessible. Family planning counselling and methods should be provided in the postabortion period, as well as other reproductive health counselling as needed.

**Preventing neonatal deaths:** A skilled attendant can take appropriate measures to prevent neonatal death: tetanus toxoid immunisation during pregnancy, assessing the baby's condition at birth and resuscitating if necessary, preventing neonatal hypothermia, taking appropriate measures to prevent nosocomial infection, and supporting early and exclusive breastfeeding. The skilled attendant can identify and provide initial





care for sick and/or low birth weight infants, and refer them safely. Skilled attendants can also support the mother in providing appropriate care of a moderately pre-term or low birth weight infant who does not have a life-threatening condition.

**Conditions that can complicate pregnancy and childbirth (e.g., anaemia, malaria, HIV/AIDS):** Skilled attendants can take a range of appropriate measures to prevent these conditions, including: providing routine iron and vitamin supplementation; providing prophylactic malaria treatment and antihelminthic drugs; and providing nutrition education. In addition, skilled attendants with access to laboratory facilities can diagnose and treat anaemia, malaria, and sexually transmitted infections; they can also provide counselling to encourage women to seek voluntary HIV testing, as well as advise mothers who have or suspect they have HIV/AIDS on infant feeding options. Skilled attendants can administer antiretroviral therapies, where available, to women with HIV, before or during delivery.

#### **Additional Skills at the First Referral Level**

In addition to those outlined above, there should be an attendant at the first referral level with the following skills:

- › Induction of labour
- › Surgical intervention (i.e., Caesarean section, laparotomy in case of ectopic pregnancy, emergency hysterectomy, dilatation and curettage)
  - › Destructive operations (e.g., craniotomy)
  - › Diagnosis and management of diabetes, chronic hypertension, cardiac disease, kidney disease, and other common chronic conditions during labour and birth

### Attitudinal and Cognitive Skills

Along with technical competency in clinical care, skilled birth attendants need to understand local customs so that they can work with communities in making healthy choices—i.e., promote practices that are benign or beneficial and explain why other practices are harmful, and discourage their use. In order to support women and their families in making decisions about health, skilled attendants must have the ability to communicate effectively with women and their families (i.e., listen as well as speak, and speak clearly, simply, and respectfully). Indeed, in some contexts these communication and interpersonal skills can be the determining factor in whether skilled attendants are accepted in communities and their services utilised.

In addition, it is important for skilled attendants to use cognitive skills that facilitate problem-solving and quick, decisive action. In the context of identifying essential competencies for skilled attendants, the International Confederation of Midwives has developed a “framework for decision-making.” This framework calls on skilled attendants to take the following actions to ensure high-quality care:

- › Gather information—through interviews, dialogue, observation, and clinical examination—and decide what is relevant to the situation(s);
- › Identify signs and symptoms of serious and/or life-threatening conditions and develop a plan of care, balancing speed with attention to details; and
- › Evaluate the effectiveness of actions taken and modify or adapt the plan of care when needed, in individual cases and when a similar situation arises in the future.

### Availability, Affordability, and Accessibility



**I**ncreasing the proportion of births that take place with a skilled attendant is an internationally agreed health and development goal. Yet shortages of skilled attendants persist throughout the developing world. Coverage by skilled attendants remains low in many countries because of problems with:

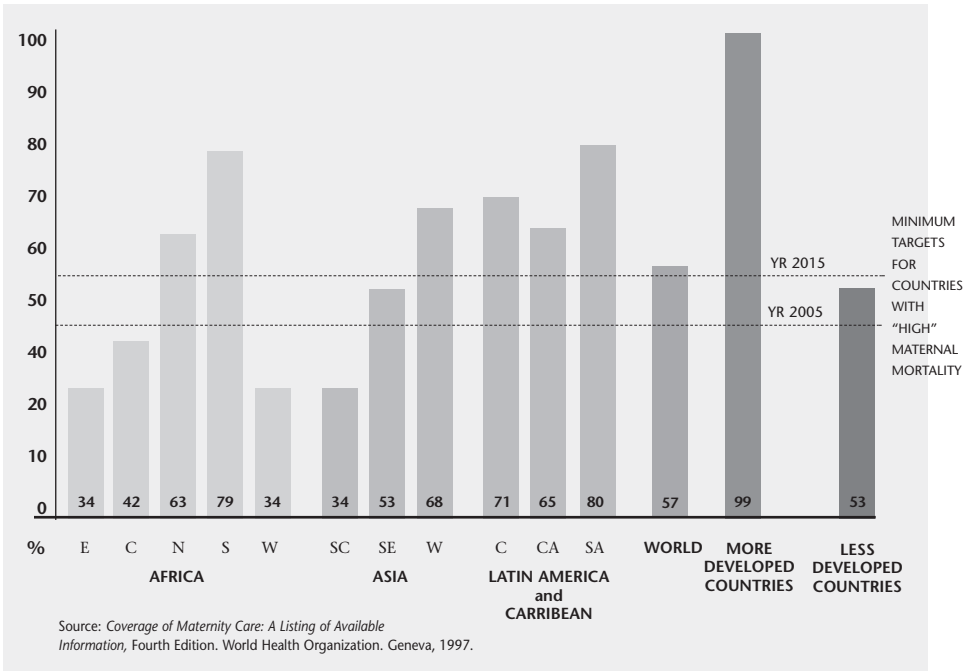
- › Availability, due to insufficient numbers of skilled attendants and inappropriate deployment of existing personnel;
- › Affordability, due to insufficient financing of skilled care and health system infrastructure; and
- › Accessibility of care, the result of household, community, financial, and structural barriers women continue to face.

#### **Still Too Common: Unassisted Births**

In September 2000, the members of the United Nations system adopted the Millennium Development Goals, which include the reduction of maternal mortality by 75% between 1990 and 2015, and identify the proportion of births attended by skilled personnel as an indicator for this goal. This effort drew on the July 1999 Special Session of the United Nations General Assembly, which called on all countries to: “...continue their efforts so that globally, by 2005, 80% of all births should be assisted by skilled attendants, by 2010 85%, and by 2015, 90%.”

Currently, however, just over half—53%—of all births in the developing world are assisted by a skilled birth attendant, and there has been little change in maternal mortality or in the coverage of skilled care during childbirth over the past decade. Significant disparities in skilled care persist within regions (see *Figure 1*).

FIGURE 1 Estimated Percentages and Number of Woman with Skilled Attendant at Delivery, by Subregion



### Staffing Goals and Effective Deployment

One reason so few deliveries have a skilled attendant present is that training in midwifery has been neglected in many countries. Where this is the case, there are simply not enough skilled attendants to provide adequate care, and/or the skills of those working are outdated. Shortages of skilled attendants are often chronic and are most acute in rural areas. In parts of Asia and Africa, there may be only one person with midwifery skills for every 300,000 people. This translates into one skilled attendant for every 15,000 births per year—an impossibly large ratio.

Countries need to develop realistic targets for training and deploying skilled attendants. The International Confederation of Midwives (ICM) and the International Federation of Gynecology and Obstetrics (FIGO) have proposed a target of one person with midwifery skills for every 5,000 people, assuming that the attendant is only providing obstetric care. For a typical

## COMMUNITY MIDWIVES IN INDONESIA

During the 1990s Indonesia trained and deployed approximately 56,000 community midwives as part of a policy to place one midwife in every village. Candidates who had completed nine years of schooling received three years of general nursing training followed by one year midwifery training. Once placed, the village midwife is expected to conduct deliveries herself, supervise deliveries by TBAs, and deal with emergencies.

An evaluation in one district found that there were dramatic increases in coverage by skilled attendants at delivery. The proportion of complications managed in a hospital setting, however, did not increase significantly. A number of factors inhibited hospital use, including poor recognition of life-threatening complications at the community level, lack of transportation, a declining economy, and the continued high cost of hospital delivery. These factors, as well as the issue of how to sustain the village midwife have not been adequately addressed, indicating that the community midwife strategy still needs to be modified.

developing country setting, this would translate into one skilled attendant assisting at 200 births every year. In general, developed countries have set much lower targets, ranging from 30 to 120 births assisted per skilled attendant per year, depending on the culture and health system in which skilled attendants work. Among the important factors planners ought to consider when setting such targets are:

› **The workload of skilled attendants:** Skilled attendants often provide a range of other reproductive and maternal health services in addition to care during labour and delivery (antenatal care, family planning services, counselling, etc.); the amount of time required by these other essential services will influence how many deliveries the attendant can be expected to care for;

› **Provider and client satisfaction:** Ideally, skilled attendants' workload allows them to maintain or improve their clinical competency and interpersonal skills, and provide good quality care;

› **Deployment of skilled attendants:** Rural and urban settings may require different targets to ensure that women in rural areas have equal access to skilled care.

Deployment and retention of health personnel are additional challenges countries face in expanding coverage of skilled care. Most skilled attendants work in hospitals and therefore live and practice in urban areas in or near national and regional capitals. Rural postings are often considered undesirable by health staff due to poor quality facilities, communication difficulties, and concerns about health and safety risks. In addition, poor working conditions and low levels of remuneration in many national health systems have driven doctors and midwives to seek other sources of income and better working conditions, including in private health facilities. This further challenges the ability of governments to make skilled care accessible for all women.

One strategy to increase the number of skilled attendants and improve their deployment, particularly in rural areas, is to recruit midwifery trainees from

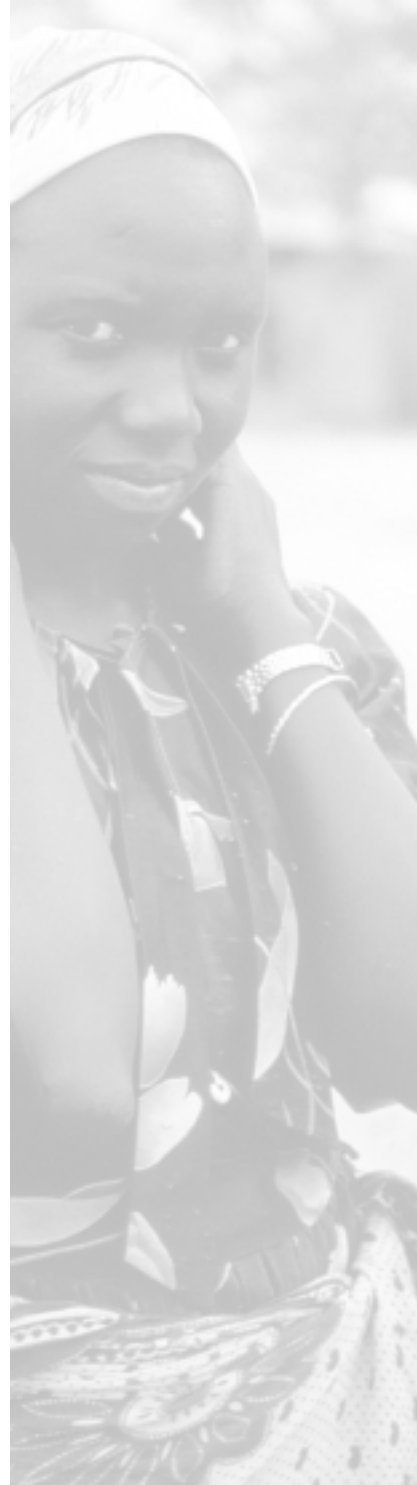
the communities they will serve. When skilled attendants are from the community, and reside in or close to it, they can play a crucial role in educating community members about maternal health, promoting links between traditional health providers (such as traditional birth attendants or TBAs) and trained health professionals, and mobilising resources for care and referral (see *Country Profiles* for Malaysia and Sri Lanka).

### Costs of Providing Skilled Care, and Costs Saved

Information on actual costs and financing mechanisms for skilled care is essential for advocacy and for designing effective and sustainable policies and programmes. A number of studies conducted over the past decade indicate that the cost of a normal delivery with a skilled attendant can be as low as US\$2 per delivery, but tends to range between US\$8 and US\$15 at health centres in Africa and Latin America. Costs of a normal delivery at a hospital range from US\$10 to US\$35 per delivery, while Caesarean sections and complicated deliveries can cost from US\$50 to US\$100 per delivery. Studies have generally found that current practices are often not the most efficient (or effective), and that cost savings can be achieved through consistent application of clinical management protocols (e.g., to prevent the overuse of antibiotics or other drugs).

If the costs per delivery are spread across the whole population, they appear even more affordable. Estimated per capita costs of normal deliveries, for example, could be as low as US\$0.50 in low income countries, while the per capita costs of a full range of maternal services have been estimated at between US\$1 and US\$4.

These expenditures could avert an estimated 4% of a country's disease burden and 20% to 80% of maternal and neonatal deaths, depending on country settings. The cost-effectiveness of safe motherhood interventions is generally comparable to those of other interventions such as Integrated Management of Childhood Illnesses (IMCI).



## Financing Mechanisms

In most cases, countries will need to devote additional resources to building or improving a solid foundation for universal access to skilled care during childbirth. To do this, almost all countries need better estimates of the operating costs and investments needed for skilled care, and a systematic plan for financing these programmes. Rather than relying exclusively on the traditional sources of revenue—taxes and external donor funding—a number of countries are developing and testing alternative financing mechanisms, such as:

- › Partial funding through user fees, community prepayment schemes, and insurance programmes; and
- › New resource allocation methods like bloc grants to localities, prepayment schemes, private and social insurance, and contracting out for services.

Often, these new financing mechanisms are being implemented in the context of broader health sector reform. Reform efforts offer an opportunity to ensure that skilled care during childbirth is an integral part of any improvements in financing, quality, organisation, and management systems.

As policy-makers and health planners explore ways of financing universal coverage of skilled care, it is critical that governments:

- › **Ensure access to care for all, especially the very poor** (e.g., through subsidies for the poor that cover the costs of public or private care they cannot afford);
- › **Identify areas for cost savings** based on country-specific figures, and use cost estimates to select the most cost-effective interventions;
- › **Ensure regular payment of salaries in the public sector**, since experience has demonstrated that health worker motivation and incentives are key to ensuring the quality and sustainability of health care services;
- › **Explore the range of options for more equitable and sustainable financing** of skilled care and maternal health services, pilot-test new mechanisms (before implementing them nationally), and promote more effective implementation of current financing methods.

## Empowering Communities

Partnership between communities and the health system is essential to ensuring women's access to skilled care. First, communities can be a powerful force for improving the quality of care, by demanding, facilitating, and evaluating changes in services and facilities so that they respond to local needs. Second, communities are key to increasing utilisation by addressing the barriers that can limit women's access to care. These barriers include women's lack of decision-making power within families; inadequate financial resources; poor awareness and understanding of maternal health issues; and lack of access to transport. Health providers need training in building community partnerships, improving communication with community members, and finding concrete ways to support women and their families in making healthy decisions about safe motherhood.

In addition, health systems and providers will need to work with community members to help them identify and articulate their needs. Tools must also be developed for holding health providers and health policy-makers accountable for the care provided.

In building partnerships, it is important to involve influential members of the community, including traditional birth attendants (TBAs). Given the scarcity of financial and human resources for maternal health in most developing countries, the current recommendation is to invest in training for skilled attendants, rather than in formal, large-scale TBA training programmes. Nevertheless, in settings where TBAs play an important role in providing care or in educating women and the community, TBAs can and should be included as a member of a "health team" that works together to improve access to and quality of care. In a team setting, TBAs can educate women and families about the importance of skilled care, especially for obstetric emergencies; make appropriate referrals; and help health staff understand and respect local knowledge, traditions, and beliefs about childbirth.

## Laws, Policies, and Infrastructure



**F**or skilled attendants to be able to reduce the incidence of maternal death, injury, or illness, they need an enabling environment that both facilitates and supports their work. Among the critical factors of such an environment are<sup>1</sup>:

- › **Supportive policies, laws, and regulations** that make safe motherhood a priority; authorise health professionals, including midwives, to carry out all life-saving interventions in which they are proficient; and counter the range of barriers women face in accessing care;

- › **Effective health system infrastructure**, including adequate equipment and supplies and systems of referral, communication, and transport;

- › **Professional associations** that promote the development of skilled attendants through shaping policy and protocols, establishing standards of practice and core competencies, and facilitating communication and information exchange; and

- › **Quality education and supervision systems** that offer pre-service and continuing (or in-service) education, and provide a mechanism for support and supervision.

### **Policies and Laws**

**Political and policy commitments** to safe motherhood—with expanded access to skilled care as a major component—have been critical in the process of maternal mortality reduction. But setting quantitative goals for safe motherhood or skilled care, while helpful, is not enough; governments need to invest resources and implement effective interventions. In countries undergoing health sector reform, safe motherhood and other reproductive health issues need to be explicitly incorporated into essential service packets and addressed in other components of reform.

**Legislation that enables skilled attendants** to practice the full complement of their skills, and to use all drugs and devices in which they have been trained is a fundamental legal and policy priority. Such legislation expands women's access to trained professionals who can perform life-saving interventions and prescribe medication during pregnancy, childbirth, and in the post-partum period. This is especially critical in countries with limited numbers of physicians.

But legislation that is supportive of skilled care will not be effective unless it is part of overall legal reform that promotes women's health and rights. Therefore, important adjuncts to an enabling environment for skilled care are laws that protect women's health and that ensure access to a full range of maternal and other reproductive health services.

**Safe motherhood is increasingly defined as a human right by health and legal experts**, supported by international agreements. Ensuring this right depends on laws and policies, as well as provision of health care that meets women's expressed needs.

**Safe motherhood is also a matter of social justice, deeply intertwined with women's status and power.** This is evident in the political, cultural, socio-economic, religious, and attitudinal barriers that prevent women from attaining good health and that undermine their rights, including their right to maternal health care. Through laws, policies, system reforms, and sustained campaigns of public education at the national and community levels, countries will need to work to change the following realities:

- › Girls' unequal access to educational opportunities;
- › Women's limited exposure to new information and ideas;
- › Unequal power relationships that limit women's ability to make decisions and gain access to health care;
- › Women's restricted financial autonomy; and
- › The often poor quality of interactions among health care providers and clients, with women too frequently feeling patronised, treated without respect, or even humiliated.

In Sri Lanka, maternal mortality has fallen dramatically over the past 80 years, from 2,200 maternal deaths for every 100,000 live births in 1920 to its current figure of 70 maternal deaths per 100,000 live births. A central factor in this decline has been the government's commitment to safe motherhood through a policy that promotes universal coverage of skilled care. Current coverage for delivery by skilled attendants exceeds 96%.

Jamaica has sought to operationalise the right to safe motherhood through a patient charter. The charter sets out the rights and responsibilities of health care administrators, providers and clients, and affirms that these must be based on mutual respect and accountability, irrespective of clients' socio-economic status.

### Functional Infrastructure: Facilities and Management Systems

The ability of skilled attendants to save lives can be seriously constrained—at any level of the health care system—if the facility is non-functional and if necessary equipment, supplies, or drugs are outdated, stored improperly, or unavailable. In order to ensure that these critical inputs are available and effectively used by skilled attendants, facilities need to have basic services such as electrical power, clean water, sanitation facilities, etc., and a functioning logistics system for supply and re-supply of materials.

**Also essential are systems of communication, transport, and referral** so that emergency obstetric care is accessible to all women in a timely manner during pregnancy, delivery, and in the postpartum period. Systems of effective communication include the use of telephone or radio for consultations and referral. Programmes of culturally sensitive public education are also important in helping communities and women recognise the importance and availability of skilled care during childbirth, understand when a higher level of care is needed, and explicitly plan for delivery by setting aside funds and making other preparations. Ensuring prompt transport to referral facilities where care is available 24 hours a day is essential, through community efforts or community/health system partnerships. Financial barriers to emergency care should also be addressed, for example by establishing community-based emergency loan funds. All of these interventions are key components of a “birth preparedness” strategy, which aims to ensure that women, families, and communities are ready to take appropriate action at home or on the way to the health facility to ensure that life-threatening delays do not occur.

Maternity waiting homes are another option to consider when access to a health facility is problematic. These homes, located near health facilities and run by health systems or communities, provide women with a safe

place to wait during the final weeks of pregnancy and ensure their access to skilled care. While their effectiveness has not been rigorously evaluated, anecdotal feedback indicates that when developed with and supported by the community, waiting homes can be helpful for women able to utilise them.

### Professional Associations


A supportive environment for skilled attendants includes professional associations that promote and advocate for high-quality care during childbirth. At the local level, professional associations work to promote the personal and professional advancement of their constituents through education, research, and quality assurance. At the national, regional, or international levels, they play an important role in advocating for evidence-based standards of practice and the promotion of core competencies for all cadres of skilled attendants. Professional associations can also be effective channels for communication between and among the various disciplines of skilled attendants (midwives, nurses, and physicians) and between public and private sector health systems. This communication promotes collaboration, co-operation, and respect among skilled attendants, and facilitates the development of professional linkages among health care providers more broadly (e.g., inter-disciplinary professional teams).

In Bolivia, radio soap operas, pamphlets, and posters have been used to get information about pregnancy and delivery to rural women, and to increase their demand for and access to reproductive health care. Women who had been exposed to the messages via the radio soap opera were more likely to know about pregnancy and delivery complications compared to women who had not been exposed.

---

<sup>1</sup> The first three components of an enabling environment will be considered in this section; education policy and practice for skilled care will be discussed in the following section.

### Training, Continuing Education, and Supportive Supervision



**H**igh quality training programmes, along with supportive supervision, are essential to strengthening the capacity of skilled attendants to save women's lives and protect and promote maternal, child, and community health. A successful education process fosters in skilled attendants (whether they be midwives, nurses, or doctors) practical skills and competency in problem-solving, critical thinking, and decision-making. It also emphasises the importance of respecting and responding to clients' needs. Basic components of an educational system that promotes such skills, abilities, and knowledge include:

- › Appropriate training programmes (classroom and clinical), along with continued education and retraining opportunities for practitioners;
- › Teaching materials that are current, comprehensive, and relevant to local settings; and
- › Skilled teachers who can supervise students' clinical learning in both facility- and community-based settings.

**Standards and protocols are also critical to guide and support quality practice** by skilled birth attendants, as well as to measure providers' performance and promote accountability.

#### Training Programmes

The most effective curricula for training skilled attendants are country-specific, evidence-based, and use a competency-based approach to learning and evaluating skills. Lessons learned from training programmes suggest the following for improving both technical and interpersonal quality of care:

- › Curricula should reflect the realities of the health care system in which skilled attendants will work, and take into account the knowledge that attendants already have;
- › Programmes should have the support of, and sufficient funding from, health system administrators;
- › Theoretical learning should be integrated with clinical practice, and emphasis should be placed on critical thinking and problem-solving—not just recall of facts;

- › Counselling and communication skills and the importance of client satisfaction should be emphasised, as well as clinical skills;
- › Classroom educators must be effectively prepared to teach, and clinical instructors should be competent practitioners;
- › Training sites should be based at both the community and referral levels, and should offer students opportunities to acquire competencies in both normal and complicated deliveries;
- › Credit or certification should be awarded only to students who can demonstrate skills to an acceptable standard;
- › Class sizes should be kept small to facilitate learning (e.g., one teacher for every three to five students learning clinical skills, and one teacher for every 15 to 20 students in a classroom setting); and
- › Trainees must be taught to take seriously their accountability to the people they serve, so that skilled care is accepted and valued by communities.

### Advanced Skills and Continuing Education

Experts agree that midwives and nurses, as well as doctors, should receive the more advanced “life-saving skills” (LSS) training (also known as advanced midwifery skills) as part of pre-service training.<sup>1</sup> Countries that have implemented LSS training programmes recognise the value of training teams of providers—physicians and midwives together—so that referral systems are strengthened through creation of mutual respect for each other’s roles in saving women’s lives.

Also crucial to increasing the efficacy of skilled attendance are programmes of continued education and retraining, both to teach new information and to refresh and upgrade clinical and interpersonal skills.

---

<sup>1</sup> LSS includes prevention and treatment of haemorrhage, prevention and management of shock, sepsis, and eclampsia, resuscitation of the newborn, vacuum extraction, and management of abortion complications.

In the province of South Kalimantan, Indonesia, monitoring and support systems are integrated into the in-service training of professional and village midwives. Run by IBI, the national midwives' association, this system of regular peer review offers new practitioners the supervision and guidance of more senior midwives who have been specially trained as supervisors and mentors.

### Teaching Materials and Educators

Ideally, countries will produce their own teaching materials or adapt them from the numerous training manuals, teaching modules, and textbooks available internationally. Three field-tested teaching modules are:

- › The WHO *Safe Motherhood Midwifery Education Modules* (1996), designed to facilitate teaching of essential knowledge and skills to prevent four major causes of maternal death (haemorrhage, obstructed labour, eclampsia, and puerperal sepsis); a fifth module, addressing complications from unsafe abortion, is forthcoming; and

- › *Life-Saving Skills Modules* (1997) produced by the American College of Nurse-Midwives (ACNM), which provide technical guidance for teaching antenatal risk assessment and monitoring and management of labour, including treatment of various complications.

- › *ALARM International Course* (2000), offers continuing education for midwives, nurses, ob-gyns, and family physicians providing basic and comprehensive essential obstetric care. Developed by the Society of Obstetricians and Gynaecologists of Canada and endorsed by FIGO, the course focuses on the five main causes of maternal mortality and morbidity.

Motivated, enthusiastic, knowledgeable, and clinically competent faculty are essential to the success of any education programme. However, in many countries, there are shortages of midwives with the clinical experience and teaching skills necessary to teach new trainees. Two strategies to remedy this are:

- › establishment of national-level midwifery teacher training courses; and

- › expansion of “training of trainers” (TOT) components within midwifery and LSS training programmes.

## Supportive Supervision

Effective programmes of supervision should help health personnel meet national, facility, and community level goals for delivery of quality health services. An important means of meeting these goals and promoting retention of skilled providers is supportive supervision. Supportive supervision is a process by which providers and supervisors together review the quality of care delivered; supervisors reinforce effective practises and offer constructive feedback on needed improvements; and supervisors and providers together decide on mechanisms for continued improvements in service quality.

Supervisory visits should take place on a regular basis, with advance notice given. Criteria for review must be well-defined, and standard forms for assessing practice developed. It is also important that systems of supervision link the health care system, the provider, and communities, since quality improvements cannot take place without communication between all participants in the care-giving process.

## Standards and Protocols

Nationally defined standards and protocols, which identify the type of care to be provided at each level of the health system and by each category of provider, are essential to guide and support the practice of skilled care, as well as assess and improve providers' performance. Standards and guidelines can also be used as the basis for skilled attendants to undertake self-assessments of their clinical practice or for such assessments within programmes of peer review.

Development of effective standards and protocols requires agreement among a range of key stakeholders, including the Ministry of Health, major teaching hospitals, professional associations, and licensing and regulating bodies. Standards should be updated regularly, on the basis of new developments in the field of clinical practice and new policies regarding skilled care.

### of Skilled Care During Childbirth



**M**any national safe motherhood programmes will need to change their emphasis if improvements in the levels of skilled care during childbirth are to be achieved. Progress in implementing programmes needs to be tracked, and the effects on the survival and well-being of mother and child need to be demonstrated, if momentum is to be sustained. Quantitative indicators, and the data on which they are based, are usually the main approach to monitoring and evaluation. But other non-indicator approaches are also useful, including audits of maternal and perinatal deaths or of the barriers women face in accessing care. A pragmatic approach to monitoring and evaluation is to select a variety of measurement methods and pursue a number of indicators, both quantitative and qualitative, so that the limitations of one measure are offset by the advantages of another.

#### Selecting Indicators

Evaluations can take place at various levels: global or regional; national; state, province, or district; health facility; individual care provider; and individual woman. Indicators need to be selected based on the scope of the programme being evaluated. It is essential to define a clear framework for all programme evaluations, and to ensure that programme interventions and the achievement of programme objectives are measured within this framework. For example, where programme goals are stated in terms of reduction in maternal and neonatal deaths, then this is what needs to be evaluated; if the proportion of births with skilled attendants is specifically targeted, then utilisation of skilled attendants, for home as well as institutional births, needs to be assessed. In each case, the feasibility of collecting valid and reliable data is critical to the evaluation's success.

Indicators for health monitoring programmes are normally organised into an input/process/output structure that leads to outcomes. That is, indicators are used to evaluate how the inputs to a programme are converted through activities (processes) to produce results (outputs) and eventually changes at the population level (outcomes).

Input	Activity	Output	Outcome
Financial resources	Training	Improved quality of care	Reduced mortality/morbidity

Where outcome indicators are hard to obtain, as is the case with maternal mortality, process indicators (such as proportion of deliveries that take place with a skilled attendant) are often used as a proxy for maternal outcomes, although it is not clear that this indicator is, in fact, a sensitive marker for changes in maternal mortality.

### Data Sources

The two main sources for data to measure the impact of skilled care are:

- › **Population-based data** (most commonly collected via sample surveys), which provide information on a representative target group (e.g., women of reproductive age in a particular geographic area); and

- › **Service-based data**, which comprise data on service use and outcomes from health information systems (i.e., registers and case notes), client exit interviews, situation analyses, and audits.

In order to gather population-based data on the coverage and impact of skilled care, the following sources are useful, although all have limitations:

- › **Sample surveys of individual women**, like the Demographic and Health Survey (DHS), that include questions on maternal health and service utilisation. Some sample surveys, however, may not be well-designed and many under-represent poor



or marginalised women—the group least likely to have access to maternal health care and more likely to experience poor outcomes;

› **Vital registration data** are sometimes used to track the incidence of maternal deaths and live births. However, in most developing countries, the data are of low quality, especially for rural and poor populations;

› **Rapid assessments**, carried out at facility and provider levels, provide both qualitative and quantitative data. Such studies can provide useful information for a specific intervention, but there is little consistency in approach, data collection, and analysis, making it difficult to compare findings from different assessments.

**Service-based data**, while valuable, are often of variable quality and can overlook large segments of the population. They are most useful in contexts where use of maternal care facilities is common. For example, birth registers that record some maternal and child health outcomes (e.g., deliveries, live births) are often highly informative, and many health facilities produce quarterly or annual reports. But in many countries, large numbers of maternal and neonatal deaths take place either outside the maternity ward or outside health facilities altogether, limiting the usefulness of the data.

In addition, service-based data are likely to be biased toward more affluent clients, as well as toward complicated cases that have been referred. While acknowledging this bias, much useful information can be obtained from service-based data, especially from exit interviews with clients about quality of care.

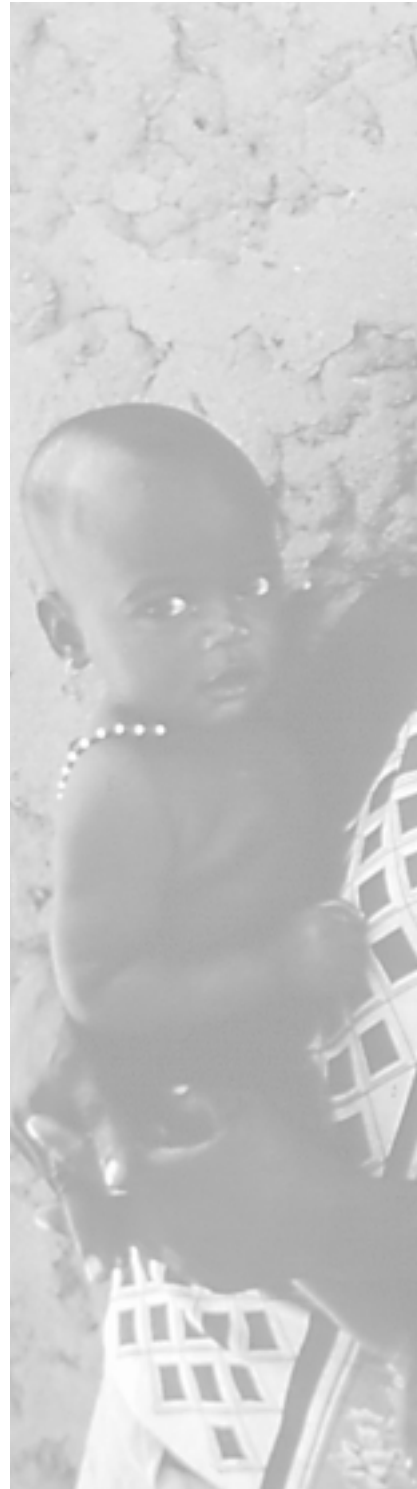
### **Deliveries with Skilled Attendants: A Key Indicator**

The primary indicator for monitoring and evaluating the impact of skilled care during childbirth is the proportion of births attended by a skilled attendant. This statistic is widely used as an international development target, and even though it is a process indicator, its relatively strong links with maternal outcomes make it the focus of evaluation studies.

However, several conceptual, operational, and measurement issues concerning this indicator need to be considered when launching monitoring and evaluation efforts. One is that cross-country comparisons of the coverage of deliveries by skilled attendants cannot be made accurately until the definition of skilled attendant and the providers' level of competency are standardised in surveys. Most surveys simply use some version of the most common categories (doctor, nurse, or midwife), but it is important to recognise that skill levels and scopes of work vary for different categories of health care personnel, between and even within countries. Until standard survey definitions of skilled attendants are developed and adopted, data will need to differentiate between the various professional categories providing care.

A related issue is determining whether a skilled attendant is practising at her/his level of skill. National policies and legislation, and realities at the district and facility level, may either support or constrain the ability of a skilled attendant to exercise the full complement of skills that have been shown to have a positive impact on maternal outcomes (see *Essential Competencies* section).

Another important factor is the structure and functionality of the health care system. Supplies and resources for essential and emergency care, along with systems of referral, transport, and communications, are important elements of a supportive maternal care system—and are not captured by the skilled attendant indicator. In addition, issues of access and utilisation are critical to the effectiveness of skilled care: if women cannot afford, cannot get to, or cannot choose to seek skilled care due to geographic, economic, demographic, or cultural factors, skilled attendants cannot impact maternal and neonatal mortality.





## Other Indicators:

### Usefulness and Data Collection Issues

Reducing the maternal mortality ratio (MMR) is a key development target in international and national agreements and policies. But, as discussed in many analyses, it is not a good indicator for tracking short-term changes or anything but national level outcomes. There are, however, other indicators that can shed light on the quality of skilled care and its impact on maternal and neonatal health and survival. Among these are:

› **Incidence of partograph use** to measure the progress of labour, which can be a good indicator of the quality of care, especially during long and obstructed labours.

› **Client satisfaction and preferences for care**, measured through qualitative approaches like client interviews and focus groups. Although quantitative measurement instruments have been developed and used to assess client satisfaction, no consistent approach has been developed due to the complexities of measurement involved.

› **Staff skills and satisfaction**, which assess providers' clinical skills, experience, training, and communication abilities, along with work hours and salaries—all important inputs to quality care provision. Measurement of these factors is challenging: many indicators will be needed to assess the strengths and weaknesses of services.

### Audit: A Non-Indicator Approach

Non-indicator methods can be important to monitoring and evaluating the impact of skilled care during childbirth. Audits—of maternal deaths, provider care, or barriers to care—are relatively new techniques not yet fully utilised in developing countries.

**Maternal death audits** may include any or all of several complementary review processes: case discussion among providers who participated in the care of the woman; confidential inquiry into factors that affected the process of care; medical audit of the quality of the care provided measured against

existing standards and protocols; and “verbal autopsy,” which involves both facility providers and community members in a discussion of the factors that may have led to a delay in accessing or receiving care.

Professional associations may be mandated by the Ministry of Health to conduct audits at the national, regional, and district levels, with regular reports provided to the Ministry of Health. A professional audit involves five steps:

- › **Establishing criteria** for best practice in managing obstetric complications;
- › **Measuring** current practice;
- › **Providing** feedback and setting local standards;
- › **Implementing** changes in practice; and
- › **Re-evaluating** practice and providing feedback.

Audits of barriers and problems encountered by women in need of care, conducted anonymously and using aggregate indicators, have also proven effective in identifying interventions to fill “gaps” (such as in provider knowledge or skill) or address the “delays” that adversely impact care. Audits will have little effect if their findings are not communicated to individuals, communities, or organisations that can use the data to advocate for positive changes at the health policy, provider, or community levels.

**Two audit approaches currently being tested in developing country settings include:**

1. In “near-miss audits”, cases of severe, life-threatening complications (rather than deaths) are reviewed in hospitals by a team of midwives, doctors, social workers, and administrators. This approach, being tested in 12 hospitals in Africa, is designed to result in the development of standard treatment criteria for complications. Because the cases being examined survived, it is thought that this approach may be less sensitive and therefore more acceptable to the medical establishment.

2. **Criterion-based audits** involve the development of a list of criteria for good quality care. Case notes are then screened to assess whether care has met the criteria. A study to assess the feasibility and effectiveness of this approach is underway in two district hospitals in Ghana and two in Jamaica.





*Safe  
Motherhood*



For further information, please contact the secretariat of the Safe Motherhood Inter-Agency Group:

**Family Care International**

588 Broadway, Suite 503  
New York, NY 10012 USA

1.212.941.5300 Telephone

1.212.941.5563 Facsimile

smi@familycareintl.org E-mail

<http://www.safemotherhood.org> Web site



United Nations Population Fund  
(UNFPA)



World Bank



International Planned Parenthood  
Federation (IPPF)



World Health Organization



International Confederation  
of Midwives



Population Council



International Federation  
of Gynecology and Obstetrics



Safe Motherhood Network of Nepal



Regional Prevention of Maternal  
Mortality Network (Africa)

The principles and policies of each agency are governed by the relevant decisions of each agency's governing body. Each agency implements the interventions described in this document in accordance with these principles and policies and within the scope of its mandate.