Toolkit for strengthening professional midwifery in the Americas

3rd edition

Pan American Health Organization
World Health Organization
Americas

LATIN AMERICAN CENTER FOR PERINATOLOGY
WOMEN AND REPRODUCTIVE HEALTH
CLAP/WR

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Introduction

This Toolkit for strengthening professional midwifery in the Americas has been developed for policymakers, professional leaders in midwifery and their associations, midwife teachers, and managers. The toolkit is intended to complement the resources generated by the International Confederation of Midwives (ICM) and the World Health Organization (WHO) that address the role of midwives and the profession of midwifery.

The toolkit is a compilation of work by many contributors, too numerous to mention individually. Each module in this toolkit was originally developed by an authority in the field and then submitted to extensive rounds of peer review, comment, and revision. Input was received from numerous international midwifery experts — particularly from low-resource settings — working in the areas of midwifery education and clinical practice. In addition, midwives and other authorities in the fields of policy, legislation, research, and evaluation contributed to this toolkit, as did WHO partner organizations. The final version of this toolkit represents the collaborative partnership of ICM and WHO.

The purpose of this toolkit is to offer guidance to strengthen midwifery services in countries. The specific aims are to reinforce the contribution that midwives can make to country efforts in achieving reproductive health for all; in attaining the Millennium Development Goals for maternal, newborn, and child health; and in realizing the overarching aspiration of safe motherhood.

Executive summary

The interest that the World Health Organization's (WHO) has in strengthening midwifery services is driven by the recognition that effective and sustainable mortality reduction, for both mothers and newborn infants, requires the presence of health care personnel equipped with a full range of midwifery skills. In addition, there is ongoing international attention on the midwife's role in global strategies for women's health.

This Toolkit for strengthening professional midwifery in the Americas focuses specifically on the role and function of the fully qualified (professional) midwife as being central to the provision of quality reproductive and sexual health services. Guidelines have been prepared to assist Member States as they consider strategies by which midwifery services can be strengthened. These guidelines have been developed by experts in the various areas, drawing on lessons learned from countries that have successfully implemented quality midwifery services that are accessible to all women. The guidelines can be used for establishing or reviewing midwifery programs, according to a country's needs and priorities.

Critical components of a strategic approach to reducing maternal morbidity and mortality, as well as to promoting women's health throughout their reproductive life, are addressed in these guidelines. Accordingly, the introductory module (Module 1) highlights the place of midwives and the midwifery profession in the context of global strategies for improving safe motherhood and raising the status of women.

Module 2 considers the purpose of legislation for the midwife, outlines the requirements for establishing a regulatory body for midwives, and describes that body's main functions. The module examines general legislation affecting midwifery care and reproductive health, including laws concerning gender discrimination. Finally, there is information to assist those involved in either formulating or reforming legislation governing midwifery education and practice.

Module 3 explores the purpose of standards in advancing quality of professional health care service delivery. The module presents a step-by-step process for assessing the need for a standard to guide the development of midwifery education programs and the process of health service delivery, and for then moving forward to accomplish the development, implementation, and monitoring of the standard.

The essential competencies for basic midwifery practice are presented in Module 4. These competencies were first developed by the ICM in 1999 and approved by the ICM Council in 2002. The competency statements were updated and approved in 2010 through the cooperative effort of ICM and WHO. The competencies contain the comprehensive set of knowledge, skills, abilities, and professional behaviors that are the core of the practice of midwives who are fully qualified according to ICM standards. Countries can use this list to guide the development of education programs to build cadres of professional midwives.

Module 5 offers a framework for a community-based midwifery education program that can be adapted to meet the needs of each country. The curriculum offers several different pathways to midwifery qualification, building on the strengths that exist within the professional nursing workforce, and also providing options for direct entry into the midwifery profession. The course/module content of midwifery studies will be complemented by any additional course requirements of the technical or academic degree program within which the midwifery program is embedded.

Midwifery students should be taught midwifery theory and clinical skills primarily by midwifery professionals. Experts in allied fields serve in important supportive roles. Module 6 builds on the basic elements of sound educational theory and practice that were presented in Module 5 for the preparation of student midwives. These elements are reflected in a curriculum of study that prepares practicing midwives to become effective teachers in the classroom and in the clinical practice setting.

Module 7 focuses on the wider benefits of supervision for midwives in clinical practice. It offers a step-by-step guide for introducing supervision to maternity services. An example of introducing supervision for other cadres of skilled birth attendants is also included.

Module 8 offers guidelines for individuals and for health systems managers who wish to establish mechanisms for promoting continued professional development. It offers guidelines and working tools that can be incorporated within a continuous quality improvement process.

The ninth and final module in this toolkit recognizes that some countries do not have the capacity to prepare professional midwives immediately, and therefore suggests some interim strategies that lead to/build capacity for midwifery personnel. The module emphasizes collaboration among various cadres of health service providers, with recognition and respect afforded to all those who contribute to the continuum of care for women, newborns, and families.

Finally, an annex to this toolkit provides two model midwifery curriculum outlines. One of the outlines is for a three- year direct-entry midwifery program, and the other outline is for an 18-month program for post-registration health providers. These materials are a slightly edited version of a “resource packet” that the International Confederation of Midwives (ICM) has prepared for use by educators and policymakers as they develop or revise curricula for programs of professional midwifery education in their countries. (The full set of the original documents, along with many other useful resources, can be obtained from the ICM website, at: http://www.internationalmidwives.org/.)

Providing skilled attendance for every birth is an essential component of programs for reducing maternal morbidity and mortality and for promoting reproductive health. The availability of a health provider with specific midwifery skills and competencies, particularly life-saving skills, is critical if the international goals for maternal and newborn health are to be achieved. This Toolkit for strengthening professional midwifery in the Americas is offered as a resource for midwives, for midwifery associations, and for those responsible for health policy and programming within countries, to assist in placing midwives central to the country's core strategy of making pregnancy safer and reproductive health a reality.

Module 1

Strengthening midwifery services: background paper

1.1 Introduction

The interest that the World Health Organization (WHO) has in strengthening midwifery services is driven by the recognition that effective and sustainable mortality reduction, for both mothers and newborns, requires the presence of health care personnel equipped with a full range of midwifery skills. There is an ongoing international interest in the midwife's role in global strategies for women's health.[1]

There have been serious efforts over the past several decades to review effective interventions for improved pregnancy and childbirth outcomes. A clear consensus has emerged from this analysis that providing skilled attendance for every birth is an essential component of programs for reducing maternal morbidity and mortality, and promoting reproductive health (Crowe et al., 2012). Those assessments have concluded that without availability of a health provider with specific midwifery skills and competencies, particularly life-saving skills, international goals for maternal and newborn health cannot be reached.

There are several types of practitioners who have a mix of skills and abilities that qualify them to serve as skilled birth attendants (WHO, ICM, FIGO, 2004). They include:

- Midwives who have been educated and licensed to perform an agreed set of competencies;
- nurses who have acquired selected midwifery skills either as part of a nursing curriculum or through special post-basic education in midwifery;
- medical doctors who have acquired these competencies at some point in their preservice or post-basic education;
- obstetricians who have specialized in the medical management and care of pregnancy and childbirth and in pregnancy-related complications.

Thus, WHO focuses on strengthening the health system, to ensure that all women and newborns have access to and care from a health practitioner with midwifery skills. The strategic approaches of the WHO Family, Women's and Children's Health Cluster Department of Maternal, Newborn, Child and Adolescent Health aim to support countries in their efforts to accelerate progress towards the attainment of international development goals and targets related to reproductive health (UN, 2000; WHO, 2004; WHO 2006a).

[1] It is acknowledged that in some countries a different name is ascribed to those who carry out the function and role of the midwife as identified in the international definition of midwife cited later in this module. Furthermore, in some countries the midwife (or country equivalent) may also have to carry out tasks in addition to those included in the definition. For simplicity the term "midwife" will be used throughout this document to refer to any person, whatever their title and regardless of how they are formally prepared and licensed, who fulfills the ICM international definition of the midwife.

1.2 Purpose of this toolkit

This toolkit focuses specifically on the role and function of the professional midwife, as central to the provision of quality reproductive and sexual health services. Guidelines have been prepared to assist Member States as they consider strategies by which midwifery services can be strengthened. These guidelines have been developed by experts in the various areas, drawing on lessons learned from countries that have successfully provided quality midwifery services that are accessible to all women. The guidelines can be used for establishing or reviewing midwifery programs according to a country's needs and priorities.

Critical components of a strategic approach to reducing maternal morbidity and mortality, as well as to promoting women's health throughout their reproductive life, are addressed in these guidelines. These include:

- Redefining the role of the midwife (Modules 2 and 4);
- establishing an enabling legislative and policy framework for practice (Module 2);
- defining essential competencies for clinical practitioners and educators, as well as for the health system, to support effective service delivery (Module 4);
- establishing standards that promote the quality of midwifery services (Module 3);
- updating educational programs for both students and teachers, to respond to community needs (Modules 5 and 6);
- developing mechanisms for supportive supervision (Module 7) and the assessment of continued competency of midwives over their working lifetime (Module 8);
- proposing alternatives that countries might consider as they build capacity for quality midwifery services (Module 9).

This background paper underpins the Toolkit for strengthening professional midwifery in the Americas. The paper briefly considers the concepts of safe motherhood and reproductive health. It presents a brief historical background of the development of midwifery as a way of being "with women." It also presents a conceptual framework that depicts the central position of midwives as key providers of maternity services, within the context of the health system policy and infrastructure that create the enabling environment for midwifery practice. The content of the specific modules of the toolkit is then described, and a rationale in support of the guideline is presented. An assessment tool in the annex to this Module 1 background paper is suggested as one approach for evaluating the status of the midwifery profession in a country, leading to identification of priorities for action.

1.3 The concepts of reproductive health and safe motherhood

1.3.1 - Reproductive health

Women's reproductive health is a concept that embraces women's health from birth to the menopause.

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. In line with the above definition of reproductive health, reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases.

Source: ICPD Program of Action, 1994

1.3.2 - The status of women

The status of girls and women in society is an important determinant of their reproductive health. Girls and women in many resource-poor countries suffer great risks to their health from reproduction. From early childhood in most poor countries the girl is more likely to suffer from malnutrition. She is often breast-fed for a shorter period of time. Subsequently girls and women may have to wait until the men and boys in the family have eaten before they are permitted to eat.

Girls usually have fewer opportunities for education and far more household responsibilities than boys. They are frequently exposed to violence, sexual harassment, and trafficking, which may lead to pregnancy during adolescence and/or sexually transmitted infections (STIs). Early marriage and adolescent pregnancies are far too common in many countries. They often mark the end of the period of formal education for girls, and they are associated with greater risks for ill health, long-term disability, and even death of mother and child. Frequent pregnancies are also common, especially in circumstances where women's status is often linked to their ability to bear many children, especially boys. Complications during pregnancy and childbirth are relatively common, especially when women are in poor health and do not have adequate care during pregnancy, childbirth, and the postnatal period. Women may also face risks in preventing unwanted pregnancies; they bear most of the burden of contraception; and they often have to endure complications affecting the reproductive tract, particularly STIs and cancers (Filippi et al., 2006; Keleher and Franklin, 2008; Sciarra, 2009; WHO, 2005).

Both young women and young men are particularly vulnerable to reproductive health problems because of lack of information and limited or no access to services such as family planning. The rapid spread of HIV/AIDS, particularly among young women, has demonstrated their vulnerability and the need for sensitive and responsive education messages, technologies, and services that reach them wherever they may live. It also demonstrates yet again the need to address prevailing gender-based inequalities (UNICEF, 2006; Briones-Vozmediano et al., 2012).

On a societal level, it would be possible to improve the standard of living for the whole of society if birth rates were reduced. Family planning services are therefore of the utmost importance for the whole population. In order to achieve acceptance, however, education is essential. Medical services and, in particular, maternal and child care have to improve so that families are assured that their existing children have a good chance of survival. On the family level, too many children impoverish the family and adversely affect the mother's health. However, in some countries, a large number of children is considered to be important as a sort of social insurance for the old age of the parents. Also, the value of a woman is dependent on her capacity to bring living children into society, and her fertility is thus considered of great importance. Improved outcomes in pregnancy and childbirth, together with adequate fertility regulation measures, health education, and counseling, could help to bridge these dichotomies and help couples to reduce the number of children in their family.

Gender equality is central to realizing current international goals related to the status of women (Tyer-Viola and Cesario, 2010; Diaz-Granados et al., 2011; Payne, 2012). Millennium Development Goals for women and children and the practice of midwifery as a profession are both inextricably linked to the status of women. They are connected, not only because most midwives are women (which in many countries remains as true today as many years ago) but also because midwifery, as an art and a science, is concerned with working with women and caring for women during a life process that mainly affects the health of women, even though it will impact men's lives and the wider society. Regrettably, in many countries, political, social, cultural, and religious factors, along with gender stereotypes, prevent women from accessing health services freely and also limit the educational and economic opportunities that would improve their socioeconomic status.

Eliminating gender discrimination and empowering women will require that women's influence be enhanced over key decisions made at the household level, in the workplace, and in the political arena (UNICEF, 2007). Empowering women would foster their ability to act as self-advocates for changes at each of these levels of decision-making, thus bettering women's opportunities for improving their personal health and well-being. The needed enhancements include:

- Equal access to primary school education for themselves and for their children, and in particular for their girl children;
- access to health care services that promote sexual and reproductive health (e.g., family planning, legal abortion, treatment of sexually transmitted infections) (Grimes et al., 2006; Ahman and Shah, 2011);
- reducing risks to personal health (e.g., HIV and AIDS from unprotected sexual intercourse);
- increasing understanding of complications in pregnancy, childbirth, the postnatal period and neonatal periods; in turn, increasing the demand for access to life-saving interventions, through referral and transport, when necessary;
- promoting delay in marriage and first birth;

- strengthening access to and control over income derived from their own employment, and enhancing their influence over expenditures made with household income (e.g., nutrition, preventative and curative health care services);
- influencing development of policies that promote their access to essential obstetric care and similar servicesthat promote safe motherhood and that protect women from the risk of violence, rape, trafficking, abuse, and culturally embedded practices that are harmful to health (e.g., female genital cutting) (Meleis, 2005; WHO, 2005; Cook and Ngwena, 2006; Glasier et al., 2006; Iyer, Sen and Östlin, 2008.; Mbizvo and Zaidi,2010).

1.3.3 - The concept of safe motherhood

Safe motherhood is a central component of reproductive health. Many countries have initiated national or local efforts to improve and expand maternal and newborn health services. Some countries have even made encouraging progress in improving reproductive health and particularly maternal and newborn health outcomes. Almost all countries that have achieved such success have done so through strengthening the capacities of those who provide midwifery services and emergency obstetric care. Improvements in maternal and newborn health have come about usually when midwives have received a firm educational foundation for practice, they have ongoing support for their work (supportive supervision and continued education), and there are effective systems in place that create a positive practice environment for midwifery services. These factors create the effective links and mechanism for referral of women and newborns with complications for comprehensive essential obstetric and neonatal care. These linkages are depicted in Figure 1.1 as a conceptual framework of quality, equitable, and accessible health services.

Safe motherhood is a concept, a commitment, and a set of ideals. Therefore, the definition is continually evolving, shaped by those who are engaged in deliberation about the concept or taking action to move it forward. A holistic definition of safe motherhood was promulgated by the WHO in 1994.

Safe motherhood aims at attaining optimal maternal and newborn health. It implies reduction of maternal mortality and morbidity and enhancement of the health of newborn infants through equitable access to primary health care, including family planning, prenatal, delivery and post-natal care for the mother and infant, and access to essential obstetric and neonatal care.

Source: WHO, 1994

The global Safe Motherhood Initiative was launched at an international conference in Nairobi, Kenya, in 1987 and was sponsored by the WHO, the World Bank, and the United Nations Fund for Population Activities (UNFPA). Since that time midwives have worked in collaboration with other professionals, agencies, governments, and communities in pursuit of the goals of safe motherhood, including the Millennium Development Goals (MDGs) adopted by 189 countries in the year 2000 (UN, 2000; Lozano et al., 2011). Three of the MDGs are directly related to reproductive and sexual health.

- Improve maternal health;
- reduce child mortality;

- combat HIV/AIDS, malaria and other diseases.

Four additional goals have a close relationship with health, including reproductive health:

- Eradicate extreme poverty and hunger in communities;
- achieve universal primary education;
- promote gender equality and empower women;
- ensure environmental sustainability.

Much has been learned about the complexity of these problems, and also about the difficulties associated with implementing many of the strategies aimed at improving reproductive health. Some progress has been made, but much remains to be done, particularly in lower-resource countries (Ekechi et al., 2012; Stanton et al., 2007). A strategy to accelerate progress toward achieving the MDGs was formulated by the WHO in 2005. The strategies were revisited and reaffirmed during a meeting of delegates to the UN Summit on Millennium Development Goals in 2010. The strategy is formulated on the guiding principle of human rights, specifically including rights to self-determination with respect to reproductive and sexual health. These human rights are also the essence of safe motherhood.

A summary of the fundamentals of safe motherhood is offered as follows.

Safe motherhood is the collective actions of childbearing families, women, men, health professionals working with women, health systems, government agencies, donors, and policymakers to take action that promotes the health and well being of women and their newborns during the childbearing period, including evidence-based interventions and policies needed to prevent unnecessary deaths and disabilities.

Source: Thompson, 2005

1.4 A brief history of midwifery, and the contemporary role of the midwife in maternal, newborn, and reproductive health

The occupational role of the midwife is timeless in history. It emerged from the experience of being “with women” for childbirth, as a simple act of caring and compassion, that characterized the way of women regardless of culture or time. A more structured role emerged in many countries during our middle history, reflecting the development of the guild concept, with its apprentice approach to occupational status and function. The midwifery role and function has now evolved to the internationally recognized and respected status of a profession. The midwife’s traditional responsibilities have been extended into the broader context of reproductive health, counseling, and education. The midwife has also become, in different times and places according to need, a manager, researcher, educator, and advocate. The midwife’s field of action now extends beyond pregnancy and birth, to encompass issues such as the reproductive health of the adolescent, family planning, and the care of menopausal women. Midwives provide essential care for the newborn. They also care for the health of the communities where they live and serve.

The following sections briefly trace the development of the midwifery profession.They provide briefcomments on certain factors that continue to present challenges to the full realization of the potential of the midwife as a key contributor to safe motherhood.

The following sections briefly trace the development of the midwifery profession. They provide brief comment on certain factors that continue to present challenges to the full realisation of the potential of the midwife as a key contributor to safe motherhood.

1.4.1 - The early tradition of midwifery: issues of social class and gender

Midwives are named in early Jewish and Christian writings, which call them “wise women.” Prehistoric sculptures and ancient Egyptian drawings depict the work of midwives. The midwives’ efforts were central to the survival of the women and children of their time. Women were caretakers and healers. They mixed, brewed, and administered herbs and portions (early pharmaceuticals) for healing. The knowledge and skills of midwives were passed from generation to generation through apprenticeship.

The Greeks and Romans were the first to apply qualifications to midwifery practice, requiring that all midwives have had a child of their own. The writings of Hippocrates in the fifth century BC include a description of normal birth. Hippocrates is thought to be the first to organize and formally educate midwives (Wright, 1999).

The historical literature on midwifery suggests that midwives took care of normal births but that in an emergency a male physician (or priest) had to be summoned. In the second century A.D., the physician Soranus of Ephesus wrote an obstetrical treatise giving instructions for midwives, including techniques for management of malpresentation by internal version and breech extraction. Women did not write books in that era; historians suggest that the obstetrical knowledge attributed to physician-authors was likely drawn from stories told by the midwives who learned their midwifery art and intervention skills from their practical experiences (Soranus, in Cutter and Viets, 1964).

However important this work might have been to the community, it was not necessarily considered respectable work, and was undertaken almost exclusively by women, and rarely by women of higher class status in their society. This social stigma prevailed well into the middle ages, with particularly strong endorsement by the church, which forbade males to attend at births. Midwifery was seen as an unclean profession at best, and an unholy one – the practice of witchcraft – at worst. Female healers became the target of witch-hunting, a program of ruthless persecution that was promoted by the church and supported by both clerical and secular authorities (Minkowski, 1992; Vann Sprecher and Karras, 2011).

In ancient times and in primitive societies, the work of the midwife had both a technical or manual aspect and a magical or mystical aspect. Hence, the midwife was sometimes revered, sometimes feared, sometimes acknowledged as a leader of the society, sometimes tortured and killed. The midwife had knowledge and skill in an area of life that was a mystery to most people. Since women had no access to formal education, it was widely assumed that the midwife’s power must come from supernatural sources, such as an alliance with the devil. During the Middle Ages, a frenzy of witch-burning, promoted by both church and civil authorities, was responsible for the killing of up to several million women, many of whom were midwives and healers.

Source: Sullivan, 2002

1.4.2 - The middle tradition of midwifery: issues of technological developments, and the dominance of male physicians in the practice of obstetrics

As late as the fifteenth century, only women birth attendants are depicted in paintings and engravings. The man-midwife appears around the seventeenth century, at a time when the male medical profession begins to control the practice of the healing arts. Barbara Ehrenreich and Deirde English, in their classic treatise titled *Witches, Midwives and Nurses: A History of Midwifery* (1973), document the emergence of the male medical profession, under the protection and patronage of the ruling classes.

Medical training was introduced into the arts and sciences taught in medieval universities, from which women were excluded. The general status and reputation of midwifery was reduced even more, with it suffering from a continued lack of organization and regulation, and with little or no support for training and development.

There were some exceptions, however. For example, German midwifery has a strong tradition that has developed since the twelfth century. The first known professional contract between a midwife and a municipal authority dates to 1381, when the city of Nünberg established a salary, accommodations, and tax benefits for the midwife who agreed to serve thecity's poor. Written in 1452, the first professional midwifery code protected midwifery against attempts by other groups to influence or control the profession (Scheuermann, 1995).

Louise Bourgeois is one of the more well-known midwives of the middle ages, because of her service as midwife to the French royal court. She may have been a graduate of the school for midwives that had been established at the Hotel-Dieu in Paris in 1531. It is known that in 1598 she passed an official examination giving her a license to practice midwifery. She authored a textbook on midwifery that was widely translated into other languages (Perkins, 1996, Dunn 2004).

Madam du Coudray, who lived and worked in the mid-1700s, traveled throughout France, bringing education tomidwives on behalf of the king (Gelbart, 1998). She wrote her own text (Abrégé de l'art des accouchements, 1750) and crafted a life-size obstetrical teaching mannequin. Madam du Coudray taught over 10,000 students over a thirty-year period.

However, these women serve as exceptions to the widespread negative perception that then prevailed concerning the competence of women healers in general and female midwives in particular. In fact, the history of midwifery in each of these countries parallels the experience of the middle centuries when church and male dominance and control caused many reversals and downturns in midwifery's attempt to reach an honorable occupational and professional status.

The development of obstetrical forceps, used only by man-midwife obstetricians, had a further negative influence on the status of midwifery. The Chamberlain family is credited with the invention of the forceps in the mid-1600s, but the tool remained a closely guarded family secret for many years. William Smellie recorded his use of forceps in France nearly a century later. After the forceps became available to all male – and to almost no female – childbirth practitioners, an exclusive class of birth providers was created, with these persons more systematically disputing and devaluing midwives' knowledge (Cahill, 2001).

Developments of the nineteenth century included pioneering efforts in obstetric anesthesia (specifically, the use of chloroform (Simpson, 1990)), advances in understanding of the function of the placenta, and, importantly, the conquest of childbed fever (Drife, 2002). Still, without wide access to education, the midwife was largely left without opportunity to benefit from new knowledge, creating an even wider social and economic gap between male-physician midwives and women practitioners of the midwifery art (Loudon, 2008; Allotey, 2011).

1.4.3 - The present tradition of midwifery: issues of professional practice

Midwifery as a profession has its origins in the seventeenth century when European countries such as Sweden, France, Belgium, and the Netherlands began to acknowledge that traditional attendants at birth required specialist education, assistance in skills development, and appropriate supervision. Other European countries, such as the United Kingdom, eventually followed suit later in the nineteenth and early twentieth century. Educational opportunities opened for women. Midwifery institutes were established throughout Europe (e.g., theNightingale Ward, King's College Hospital, London, 1862), and, by extension, in developing nations (Summers, 2000). Midwifery regulation was developed and widely implemented, in the interest of raising the standards of midwifery education and practice (Stevens, 2002).

The stories told about the emergence of midwifery in many (mainly Western) nations invariably include commentary about the evolution from the apprenticeship model of occupational preparation to the contemporary acknowledgment of the need for a more formal educational foundation for practice. However, these same stories reflect the importance of retaining aspects of the social and cultural context of midwifery practice, resisting full transformation of midwifery practice in the biomedical model of obstetrical health care services (Armstrong, 2005; Temmar et al., 2006; Woods, 2007; Loudon, 2008).

The profession of midwifery at the turn of the century and in the new millennium has emerged in many nations as an autonomous profession, separate from other professions, even though, in many countries, it is linked conceptually and practically to both nursing and medicine (Dawley, 2002; ICM, 2005). Midwifery in many other nations (those lesser developed, and several Asian nations) continues to struggle to change understandings, expectations, and values and to transform traditional cultural paradigms. Midwifery remains an occupation or craft, and it has yet to achieve a professional identity.

The International Confederation of Midwives (ICM), founded in 1919, currently includes midwifery associations from 98 nations of the world. The ICM and its members groups represent the organized efforts of the midwives in those countries to speak for themselves on matters that affect the occupation and the profession, and to speak out with a unified voice about matters that affect the health of women, families, and communities.This work includes advocacy for developing national health strategies in all countries that would give midwives and doctors complementary roles in maternity care, as well as equal involvement in setting public health policy (Högberg, 2004).

1.5 The international definition of the midwife

The definition of a midwife that follows was adopted by the International Confederation of Midwives in 2011. The description delineates both the broad scope of practice and the settings in which the midwife provides maternity care services.

International Definition of the Midwife

A midwife is a person who, having been regularly admitted to a midwifery educational program, that is duly recognised in the country where it is located and that is based on the ICM *Essential Competencies for Basic Midwifery Practice* and the framework of the ICM *Global Standards for Midwifery Education*; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title "midwife"; and who demonstrates competency in the practice of midwifery.

Scope of Practice

The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures.

The midwife has an important task in health counselling and education, not only for the woman, but also within the family and the community. This work should involve antenatal education and preparation for parenthood and may extend to women's health, sexual or reproductive health and child care.

A midwife may practice in any setting including the home, community, hospitals, clinics or health units

Source: ICM, 2011

1.6 Toolkit for strengthening professional midwifery in the Americas

1.6.1 - Module 1: Strengthening midwifery services: background paper

This introductory module is intended to highlight the place of midwives and the midwifery profession within the context of global strategies for improving maternity care, and the status of women. Current global maternal mortality data indicate that the maternal mortality ratio in developing regions of the world is 15 times higher than in developed regions. The risk of a woman dying as a result of pregnancy or childbirth during her lifetime is about one in 39 among women in sub-Saharan Africa, in contrast with 1 in 3,800 among women in developed countries. Inequalities in the risk of maternal death occur not only by geographic region, but also by cause of death (Kahn et al., 2006; Ronsmans and Graham, 2006; Hogan et al., 2010; Abouzahr, 2011; WHO/UNICEF/UNFPA/ World Bank, 2012). The timing of maternal deaths clusters around labor, childbirth, and the immediate postpartum period. Recent attention has also focused on the status of the newborn, and the impact that neonatal mortality has on the rate of mortality of children under the age of 5 years (Lawn et al., 2009; Lawn et al., 2012).

The role of skilled attendants in reducing these very undesirable statistics has been clearly demonstrated in several developing countries that have managed to reduce their rates over the past several decades (Hogan et al., 2010). These achievements have been attributed, in substantial part, to

- Scaling up midwifery education;
- promoting facility-based births and supporting systems that promote referral and transfer to these facilities;
- developing a supportive system for maternity care, including by addressing regulation, control, and supervision of the medical and midwifery professions.

The major direct causes of maternal death (hemorrhage, hypertensive diseases, sepsis and infection, obstructed labor, and unsafe abortion) continue to be those for which effective life-saving interventions are available (Ronsmans and Graham, 2006). Midwives and other skilled attendants therefore have a major role to play in any effort further to reduce these undesirable rates of maternal and newborn morbidity and mortality. Guidance for countries about ways to promote and enhance the role of midwives as essential providers of skilled care within an enabling environment of care are offered in the separate modules of this toolkit.

Each module deals with a different element that must be strengthened in order to have a competent, fully qualified midwifery cadre. Each module has a number of checklists or a simple quick assessment guide, which are aimed at assisting those responsible for strengthening midwifery, or those who are just looking for ideas of where to start. The annex to this Module 1 background paper provides a checklist for conducting a rapid situational assessment or “health check” for midwifery. This rapid assessment can be carried out by midwifery leaders in a small group, or they can complete it individually and then together share ideas and come to a consensus. The assessment aims to start the discussion around developing an agenda for creation of a “strengthening midwifery” action plan. The “health check” will help identify quickly the areas where there is a need to work. The criteria used for this rapid assessment have beendeveloped with input from a wide variety of professional leaders at policy, education, and managerial levels, in both developing and developed countries.

1.6.2 - Module 2: Legislation and regulation: making safe motherhood possible

Effective legislation and regulation of midwives is essential for quality practice and improved standards of care. This module considers the purpose of legislation for the midwife and also outlines the requirements for establishing a regulatory body for midwives and its main functions. The module also examines general legislation affecting midwifery care and reproductive health, including laws concerning gender discrimination. Finally, Module 2 provides information to assist those involved in the formulation or reform of legislation governing midwifery education and practice. The checklist presented in the annex to this module outlines the essential elements of a supportive legislative and regulatory environment that would enable midwives and other skilled providers to practice to the full extent of their competency, within the context of country-specific needs for safe motherhood.

1.6.3 - Module 3: Developing standards to improve midwifery practice

This module discusses the purpose of standards in advancing high-quality health care service delivery. A step-by- step process for assessing the need for a standard to guide the development of midwifery education programs and the process of health service delivery, and for then moving forward to accomplish the development, implementation, and monitoring of the standard, is presented. The conceptual purpose and the process of standard-setting are linked to the clinical care standards that have been developed and published by WHO. The checklist offered in the annex to Module 3 is an audit tool that can help assess clinical care performance against the established standard.

1.6.4 - Module 4: Competencies for midwifery practice

The essential competencies for midwifery practice that are referenced in this module were developed by the International Confederation of Midwives in 1999, approved by the ICM Council in 2002, and updated in 2010. The competencies emerged from an extensive process of global consultation, a detailed scientific Delphi study that drew consensus for the specific task statements, a field test conducted in 17 countries (2002), and a survey of ICM member associations in 88 countries (2010) that affirmed their global feasibility and importance in practice. The competencies provide an answer to the question “What is a midwife able to do?” The competencies address the needs of women and newborns throughout the pregnancy, childbirth, and postnatal periods and include crucial life-saving skills. They also address the role of the midwife in contributing to the health and welfare of the community that she serves. The competencies:

- Provide the basis for developing a program for midwifery education;
- give clear direction to midwives about the competencies they must have in order to fulfill their role and responsibilities at the time of entry into practice of the profession;
- give clear direction to teachers about essential midwifery knowledge and skills;
- provide information for governments and other decisionmakers, who often need a better understanding of exactly what midwives do and how they can be prepared for practice.

The ICM competency documents can be retrieved from the ICM website. The documents themselves are not included as an annex to Module 4, but the module does give the address for the ICM website.

1.6.5 - Module 5: Developing a midwifery curriculum: guidelines for midwifery education programs

This module offers a framework for midwifery education that can be adapted to meet the needs of each country. The framework proposes an education program that prepares midwives for service in both urban and rural communities, because evidence has shown that when midwives are based in the community they can make a real difference to reproductive health, particularly in countries and communities where the health care infrastructure is less developed, and where there are differences in access to care because of differentials in personal wealth (Koblinsky et al., 2006; Montagu et al., 2011). Some clinical experience in teaching and referral hospitals is included, however, because student midwives must learn to recognize and manage complications effectively and be competent in life-saving skills. The curriculum is competency-based, involving students in their own learning throughout the education and training program. The model curricula and guidance documents are included in this Toolkit for strengthening professional midwifery in the Americas as as a special annex, following Module 9.

1.6.6 - Module 6: Developing effective programs for preparing midwife teachers

A sufficient number of well-prepared midwife teachers, who are also competent in midwifery practice, is essential for the effective education and training of midwives. Regrettably, there is a serious shortage of well-prepared midwife teachers in many developing countries. This means that the trainers of midwives are often other professionals who do not fully understand midwifery, midwifery philosophy, or the culture, role, and responsibilities of a midwife, and who are not skilled practitioners of midwifery. As a consequence, midwifery has not always been well understood; in some countries midwife graduates do not possess the full complement of midwifery competencies and/or may not be grounded in the professional ethic of midwifery. This module builds on the basic elements of sound educational theory and practice. These element are applicable both for the preparation of students for entry into practice (Module 5) and for the preparation of practicing midwives to become effective teachers in the classroom and in the clinical practice setting (Module 6). The recommendations made for content of a teacher-education program include the pedagogy of curriculum development, effective teaching strategies, and methods of evaluation. A number of options for the provision of programs for the education of midwife teachers are included that build on shared resources within and among countries. A self-assessment checklist of midwife teacher competence is included in the annex.

1.6.7 - Module 7: Supervision of midwives

Midwives predominantly work independently and often in challenging situations. There are great benefits to midwives, as well as to mothers and babies, when midwives are supported in practice by supervisors. There is evidence that midwives value this support. Midwives are enabled to provide a higher level of care when they are nurtured, developed, and empowered. The role of the supervisor includes monitoring the practice of midwives to see that safe standards are maintained and encouraging continuous personal educational development. Supervisors are available to provide advice and guidance to midwives on practice issues. Supervisors contribute to the protection of mothers and babies through this service.

This module looks at the wider benefits of supervision. It offers a step-by-step guide for introducing supervision to maternity services. An example of introducing supervision for other cadres of skilled birth attendants is also included. A supervision checklist is provided in the annex

1.6.8 - Module 8: Monitoring and assessment of continued competency for midwifery practice

The evidence that forms the basis of high-quality clinical care is continually emerging and evolving. Continued competency for practice requires that each individual practitioner engage in an ongoing process of inquiry and lifelong learning. This commitment is consistent with the ethics that underpin professional midwifery practice. Nevertheless, access to current information is often restricted in lower-resource countries, where midwives may practice in communities that are geographically distant from educational centers and that have limited access to resources that are available electronically (Internet). These community-based practitioners may also often practice without the peer and supervisor review and support that could normally help them reflect on their own performance in relation to established standards of practice. This module offers guidelines for individuals and for health systems managers who wish to establish mechanisms for promoting continued professional development and a continuous quality improvement process. Two tools have been developed for individual and for peer or supervisor assessment of continued competency for midwifery practice. The tools are based on the ICM Essential Competencies for Midwifery Practice (see Module 4), and can be adapted to reflect the particular competencies that reflect the specific situation of the various countries.

1.6.9 - Module 9: Developing midwifery capacity for the promotion of maternal and newborn health

The final module in this toolkit offers alternatives that countries can consider as interim strategies while building capacity for midwifery personnel. The strategies have in common the recruitment and posting of health workers in the community, after giving them additional preparation in selected midwifery skills, and particularly, in life-saving skills (Fauveau, 2006; Koblinsky et al., 2006; WHO, 2006 a, b). This module also proposes strategies to address the recruitment of new aspirants to the profession and the retention of midwives, countering the adverse impact of international migration of members of the health care workforce. A capacity assessment tool that addresses the status of development of country midwifery association(s) is provided in the annex.

1.6.10 - Annex: Model midwifery curriculum outlines

The annex to the toolkit provides two model midwifery curriculum outlines. One of the outlines is for a three-year direct- entry midwifery program, and the other outline is for an 18-month program for post-registration health providers. The annex materials describe the suggested placement of the required midwifery competencies with their associated knowledge, skills, and behaviors within specific modules (instructional units) for each year of the three-year direct-entry midwifery program as well as for each of the six-month blocks of the post-registration health providers program. Two sample modules show how to put together an instructional unit. Those modules can also help persons planning a midwifery program to think through what content might be appropriate for their training curriculum.

1.7 References

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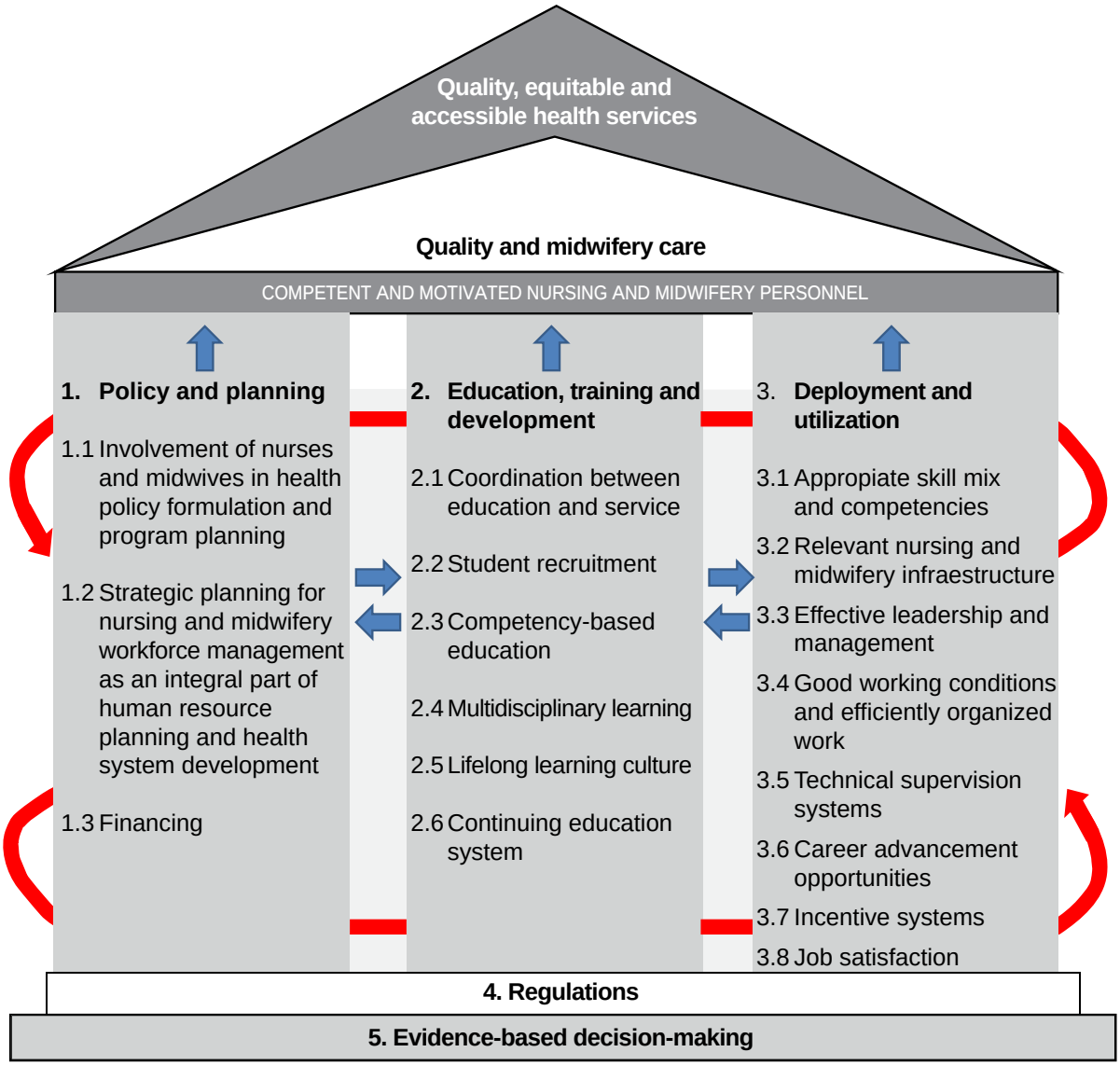
Figure 1.1 - A conceptual framework of quality, equitable and accessible health services



Annex 1.1 - A rapid assessment approach to identifying the need to strengthen midwifery in country

Current Status	0	1	2	3
1. Rules/legislation are in place that frame/define the authority to practice midwifery.	No legislation covering authority to practice midwifery exists.	Rules are in place but not functioning.	Rules governing authority to practice are functioning but are assessed as being ineffective.	Authority for practice as defined in the ICM Definition of the Midwife are in place and assessed as operating well.
2. A relicensing procedure is in place that promotes the maintenance of continued competence.	No relicensing procedure is in place.	A relicensing procedure is in place, but is not linked to demonstrating competency to practice.	Plans are being developed/ implemented to ensure relicensing procedures that are linked to competent practice.	A relicensing procedure is in place and linked to continued competency to practice. The procedure is operating and assessed as being effective.
3. A midwifery education curriculum has been developed and is based on particular country needs ("fitness for purpose").	No central standards have been established for a midwifery curriculum.	Central curriculum standards have been established, but no evidence exists that they meet current needs of the country.	Curriculum standards have been revised to be in line with fitness for purpose; however, they are awaiting approval or implementation.	Central curriculum standards based on fitness for purpose have been established, updated, and implemented. They are regularly reviewed.
4. Evidence-based (EB) standards have been established for midwifery practice (competency-based).	EB standards of comprehensive midwifery care have not been established.	EB standards are not developed, or no system is in place for regular updating or auditing.	EB standards are currently being developed/ implemented.	EB standards are in place and are regularly audited; action is taken based on audit findings..
5. Areas for midwifery and student clinical practice are assessed for the provision of quality service provision (care based on evidence-based standards) and for their fitness to provide appropriate clinical experience for students to gain competency in midwifery.	No assessment has been made of clinical areas.	Clinical areas do not provide quality care, or the experiences required for developing competent midwifery practice.	Clinical areas have been assessed; quality midwifery care is provided. However, the areas do not provide the full experiences required for developing competency.	Clinical areas provide quality, comprehensive midwifery care and all experiences required for students of midwifery, including supportive supervision of students.

Annex 1.1 (continued)

Current Status	0	1	2	3
6. Realistic norms have been established for the number of midwives needed in each district.	No staffing norms have been established for districts, or norms for midwives are not generally known at district level.	Staffing norms are being established but current numbers of staff in the establishment are below that required to meet the needs of women and newborns in the district/country.	A national plan is being developed or revised to establish norms required to meet current needs.	Norms have been established and are being met in all districts, with only minimal shortfalls of midwifery staffing in some areas.
7. The number of midwives in clinical posts (both government and private) are known and mapped according to actual place of work.	No mapping of midwives in clinical practice has been undertaken recently. There is no real knowledge of the total number of midwives currently working (including in private practice).	The numbers of midwives in clinical practice are known, but many vacant posts exist and there is no realistic plan in place to address the shortfall.	Mapping of midwives in clinical practice is taking place as part of a national plan to address needs and shortfalls.	A realistic map of all midwives is currently in place and is known at national and district level. Special efforts are in place to meet the needs of hard-to-fill/ long-term vacant posts.
8. Sufficient midwife teachers are in place - based on norms set for student:teacher ratio (S:TR).	No S:TR norms have been agreed upon, or the S:TR is unrealistic.	A realistic S:TR has been established, but is not in place in most areas.	A plan is currently being developed to address the shortfall of midwife teachers; the plan is based on a realistic S:TR.	A realistic S:TR has been established and is being met in most places.
9. A program for preparation of midwife teachers is in place to ensure that midwife teachers are competent in all aspects of midwifery practice and education, including teaching and learning strategies, and have been adequately prepared for their post.	The numbers of midwife teacher posts required has not been determined and/or posting as a midwife teacher is not determined by successfully completing a specialist teacher preparation program/educational course.	Very few teachers of midwifery have received training and been assessed as competent in all aspects of midwifery, as well as competency to teach.	A plan is currently being developed/ implemented to ensure all teachers of midwifery are competent to be teachers of midwifery.	All teachers of midwifery have successfully completed specialist preparation as a midwife teacher.

Annex 1.1 (continued)

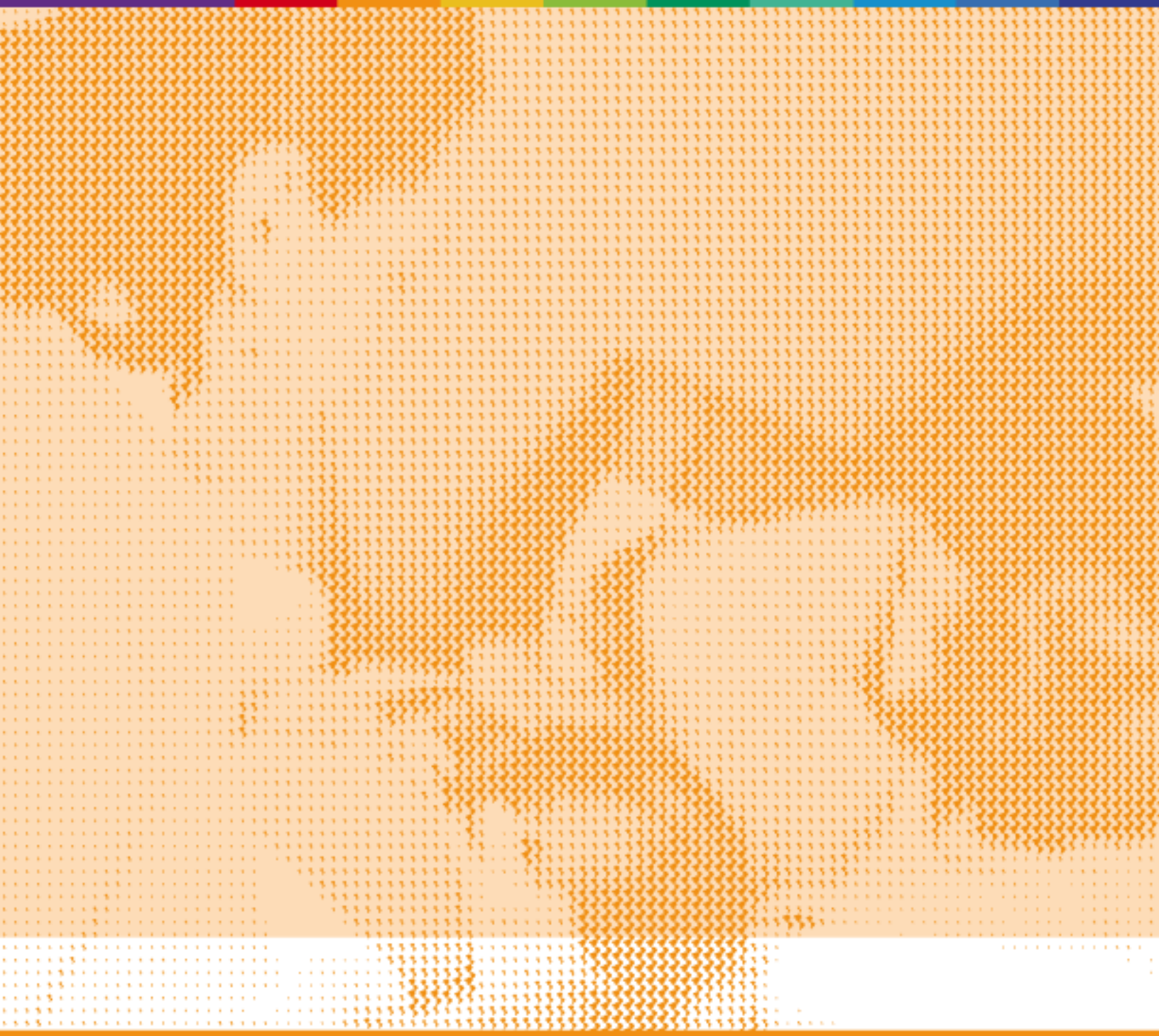
Current Status	0	1	2	3
10. Quality teaching and learning (TandL) resources are available.	No or very few TandL resources are available at all midwifery schools/ educational institutions.	Limited TandL resources are available at most centers, but many are out of date.	Plans are currently in place to develop in- country appropriate quality TandL material to be available at all centers.	Sufficient and varied TandL materials of good quality are available and being used in all centers.
11. Job descriptions for midwife at all levels of service (including the community) have been developed, are regularly updated/revised, and include statements about the minimum standard of midwifery practice required by the post holder.	No specific job description is available for the person who provides midwifery care, or job descriptions are not prepared for posts at all levels of the service.	Job descriptions of clinical midwife posts are too vague, do not specify the particular needs of midwifery, or are out of date.	Job descriptions are currently being reviewed/updated, to ensure that specifics of midwifery practice are covered, including EB standards of care and practice.	Job descriptions specific to midwifery practice are in place; they are based on provision of EB standards of care in all areas, including the community.
12. An in-service/updating program (prescribed by the midwifery association and/or developed in liaison with the midwifery regulatory body) is in place.	There is no provision for updating or in-service and on-the-job training.	Limited updating is available to some midwifery practitioners in some areas.	A plan is being developed to implement a regular updating program for all midwifery practitioners in all areas, including rural, hard-to-reach areas.	All midwifery practitioners participate in a regular updating program. All have received some updating in the last three years.
13. Provision has been made for continuing education programs (CEP) for strengthening the capacity of midwives in country to provide leadership, and for career enhancement; the strategy is operating well.	No or limited provision has been made for midwifery practitioners to participate in CEP/ advanced education programs, and/or research development, management, policy, or leadership programs.	Provision of CEP/ advanced education programs for midwifery practitioners to increase capacity of midwives to plan and deliver quality midwifery, including research and management services, is under consideration.	Plans are currently being developed or implemented that will increase access to CEP/advanced education programs, including midwifery management and research.	Midwifery practitioners at all levels of the service have the opportunity to participate fully in CEP or advanced education programs, including specialist midwifery studies at both Master's and Ph.D. level and specialist programs for midwifery leadership, management, and research and policy development.

Table legend/scoring rule: 0= low and 3= highest (ideal is to score 3 for each criterion).

Total score ☐ **Date assessment undertaken:** ☐

Module 2

Legislation and regulation: making safe motherhood possible



2.1 Introduction

The aim of this module is to outline the ways in which legislation and professional regulation of midwives can be employed to enhance national and international efforts to reduce maternal and newborn morbidity and mortality and improve reproductive health, in accord with WHO's strategic directions for nursing and midwifery services (WHO, 2010). The evidence from numerous studies conducted in diverse global settings that explored the direct and indirect causes of maternal morbidity and mortality (maternal audit studies) shows clearly that the vast majority of deaths related to pregnancy and childbirth are avoidable, but require a skilled person to be able to provide quality care, which must include being allowed to perform certain life-saving interventions (Pattinson et al., 2003; Fawcus et al., 2005; Dumont, Tourigny and Fournier, 2009; Kongnyuy, Leigh and van den Broek, 2008; Qiu et al., 2010; Kalter et al., 2011). This module of the Toolkit for strengthening professional midwifery in the Americas addresses a range of issues related to the statutory or regulatory (legal) authority that governs the practice of midwifery in any country and the authorization of individuals to engage in midwifery practice (occupational or professional registration and/or licensing).

While the emphasis in this module is on legislation to support midwifery practice, legislation also has to be considered for other health care workers who function in the reproductive health field, particularly those who provide pregnancy and childbirth care. Similarly, reproductive health legislation has to be considered in relation to other laws that influence the position of women in society generally (Andorno, 2009; Garcia-Moreno and Stöckl, 2009; Cook and Dickens, 2012).

2.1.1 - The challenge

The contrast between maternal mortality reduction in the industrialized world and in many developing countries highlights the challenge facing those countries where the level of maternal deaths is unacceptable. It seems logical first to identify the desired outcome and, secondly, to identify the barriers to achieving that outcome, before finally considering legislative approaches to bring about change and to support good practice.

Millennium Development Goals were endorsed by 189 countries, as a commitment to global development, security and human rights (UN, 2000). Goal 4 (reduce child mortality) and Goal 5 (improve maternal health) are clearly linked to the quality of health care services received by pregnant women and their newborns, as offered by their providers and at the service delivery site. Nevertheless, maternal and newborn morbidity and mortality rates are influenced by a wide range of issues, many of which lie outside the health sector. They include the available resources (both human and financial), the current economic and nutritional status of the population, the degree of political stability of the country, as well as political commitment to maternal and newborn health, the position of women in society, the level of female literacy, and many others (Moss, 2002; UNFPA, 2005; WHO, 2005; UNICEF, 2006).

These factors contribute substantially to the wide variation in the risk of any woman dying as a result of pregnancy or childbirth during her lifetime. This risk was estimated to range from about 1 in 39 among women in sub-Saharan Africa to 1 in 3,800 among women in developed countries (WHO/UNICEF/UNFPA/World Bank, 2012), with the risk being concentrated in sub-Saharan Africa and Asia (Hill et al., 2007). These factors also contribute to the deaths of over 7 million babies during pregnancy or the newborn period (WHO, 2005), although recent estimates indicate an accelerating rate of decline (Rajaratnam et al., 2010). Recent comprehensive reviews of the interventions proven

to work in reducing maternal mortality conclude that access to skilled attendance at births would be a key strategy (Campbell and Graham, 2006; Nyamtema, Urassa, and van Roosmalen, 2011). These findings are echoed by the authors of a recent review of the evidence-based interventions that have proven effective in reduction of intrapartum-related stillbirths and neonatal deaths (Lawn et al., 2009). Authors of these reviews noted that on a global scale, all too often the political will to take effective action is lacking.

Maternal mortality is a symptom of the underlying neglect of women's health and well-being. Deaths during pregnancy and childbirth are almost entirely avoidable with existing skills and technologies, yet services to provide appropriate maternal health care and safe obstetric interventions are not universally available. All women should have access to high quality prenatal, delivery and postpartum care in the context of primary health care, including access to referral services for obstetric complications.

Source: WHO,1995

2.1.2 - A contribution to resolution

A workforce of midwives with a common body of knowledge and skills (Module 4) could have a measurable impact on maternal morbidity and mortality in any country. Matching this knowledge and these skills to the specific major causes of maternal deaths (hemorrhage, sepsis, obstructed labor, eclampsia, and abortion) could result in a significant reduction in deaths from these causes (Ronsmans and Graham, 2006). However, this will only work with the necessary legislative framework in place that provides for a skilled midwifery workforce supported by an effective system of regulation. This view does not stem from a narrow view of professional protectionism, but from historical evidence and the fact that the midwife's role spans that period of a woman's life, which involves a number of major risks to her health and life (Louden, 1992). To be "with woman" (the literal translation of the word "midwife" in English) in the twenty-first century must include being with her as the expert in normal birth as well as in whatever circumstances she experiences pregnancy and childbirth, particularly when life-threatening complications of pregnancy arise.

Furthermore, an enabling legislative framework for promoting and enhancing reproductive health and rights is crucial for achieving the goals of safe motherhood and saving newborn lives (Freedman, 2001; Cook and Dickens, 2002; WHO, 2003; Germain, 2004; Fathalla, 2006; Milliez, 2009). Such a framework also enables the midwife to positively exploit the potential which her[1] role offers to bring about major improvements in maternal and newborn morbidity and mortality rates through improved quality of provision of maternal and newborn health care services (Thompson, 2004).

2.2 The value and purpose of midwifery legislation and regulation

A human rights-based approach to reduction of maternal mortality provides a legal or development-centred framework or both for strengthening policy and program interventions.

Source: Manandhar, Osrin and Shrestha, 2004

Professional regulation of midwives should represent a partnership among the public that expects it, the individuals who practice it, and the boards or committees that administer the system (Norman, 2000). There is now strong

[1] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However, in a number of countries men now enter into this profession. The ICM international definition (ICM, 2011) has been updated to reflect a more gender-neutral language; however, this guidance uses the female gender for ease of use.

evidence that underpins the recent recommendation that all women should have a skilled attendant during pregnancy, childbirth, and the immediate postnatal period, in order to advance the goal of making pregnancy safer (WHO, ICM, FIGO, 2004). Information about the knowledge, skills, and abilities (KSAs) required of the skilled attendant is also clear (see Module 4 of this toolkit), and is clearly linked to the evidence that demonstrates the relationship between high-quality and timely application of these KSAs and the quality of the outcomes of maternal and newborn care. If the full potential of midwives as skilled attendants is to be realized, they need to practice within a supportive (positive) practice environment that enables them to use their best critical thinking skills and clinical judgment to make appropriate assessments, select appropriate interventions, including life-saving skills, and use them accordingly. Supportive legislation[2] is a critical component of that enabling environment.

Whether the need is to develop new legislation or to amend legislation that presently exists, it is a fundamental fact that appropriate legislation is part of the essential foundation for the effective development of health services. For example, in low-resource settings, in order to meet community health care need, midwives may be placed in the situation of needing to prescribe or dispense drugs or to perform certain other functions even in the absence of supervision, legislation, and regulation (Miles, Seitio, and McGilvray, 2006). This is clearly undesirable from the perspectives of the individual, the community, and the public good.

The public purpose of midwifery regulation therefore (Spoel and James, 2006) includes:

- Protecting the public from unsafe practices;
- promoting quality of services (through standards of practice, competencies, and evaluation of outcomes);
- informing the public of what services to expect so they can make choices;
- fostering the development of the profession;
- conferring accountability, identity (including protection of title), and status upon the professional practitioners;
- promoting the socioeconomic welfare of the practitioners.

2.2.1 - Developing new regulations

This enabling legislation may need to be newly developed in some countries. Both the ICM (2011) and the WHO (2002) have provided guidance for this effort. To develop new legislation, midwives must engage many other interested and affected stakeholders, including women, in a coalition of support, first to raise awareness of the need and value of such legislation, and then to take action to develop appropriate legislative guidelines, enact this legislation through regulation, and monitor its implementation. The action steps can be broadly outlined as follows:

- Raise political awareness of the need for legislation that regulates the profession, and engage political action and support to pursue it;
- become knowledgeable about the legislative and governmental processes that would be essential to the regulatory development process;
- set goals and develop a plan of action (including identifying responsibilities and setting a timeline);
- establish a position on midwifery issues, especially the purpose and goal of midwifery as well as the principles and philosophy of comprehensive midwifery care;

[2] Legislative and regulatory terminology varies greatly by country.

- establish a desirable and preferred model of midwifery regulation (e.g., as an autonomous profession, distinct from nursing, or another model);
- gather data to support the identified goals and position;
- involve all relevant stakeholders in an action plan for development and implementation of midwifery regulations;
- form coalitions that will advocate for the process and pursue the steps cited in the action plan. Coalition members can include other relevant health care professions, women's groups, and others (both national and international) concerned with maternal and newborn health, social development and mobilization, and poverty alleviation;
- provide feedback to all stakeholders throughout the process. It is important to ensure that all who may be affected by the new regulation and licensing rules and mechanisms are kept fully informed of progress and have the opportunity to offer their feedback.

2.2.2 - Adapting current regulations

In some countries, existing legislation authorizes the practice of midwifery, but with constraints that limit the realization of the midwives' full potential, thus leading to the need to reform current regulatory guidelines (Fealy et al., 2009; Bogren, Wiseman, and Berg, 2012). For example, in a number of countries the legislative framework exists to enable midwives to work as autonomous practitioners who provide a whole range of midwifery services, from preconception to the end of the postnatal period (Reed and Roberts, 2000). In other countries the midwife may be required to work under the supervision or guidance of physicians.

The scope of practice may also be defined differently within practice authorizations, and these practice restrictions mayimpede realization of the full scope of midwifery practice.

For example, there may be prohibitions on the performance of certain functions, or the functions may be authorized only for midwives who have achieved a certain level of education (Larsen, 2004; de Bijl, 2005). For example, there may be broad restrictions on the midwives' authority to select or dispense certain drugs (Adekunle et al., 2001; Adame and Carpenter, 2009; Osborne, 2011). In some circumstances, these practice restrictions can impede the delivery of safe or even life-saving care (e.g., antibiotics for treatment of infection; uterotonics for control of hemorrhage). Other examples of functions that are often restricted include performance and repair of an episiotomy or perineal repair, or manual vacuum aspiration in the event of incomplete abortion (Foster et al., 2006; Berer, 2009; Akiode et al., 2010), which can result in the need for urgent transfer to another birth site or facility for further care.

2.3 Establishing a regulatory authority for midwives: models and strategies

The main functions of a professional regulatory system are to bring order and control to a profession and to protect the public by:

- Setting standards for entry to the health occupation or profession (which includes, in some jurisdictions, also setting standards for accreditation of education programs);
- defining (in collaboration) the scope of practice of the health occupation or profession;
- ensuring, as much as possible, the maintenance of standards of practice;

- providing a mechanism for dealing with professional misconduct;
- maintaining an effective public register of all those eligible to practice.

There are several options for establishing the regulatory authority for midwifery practice in any country. Each has advantages and disadvantages, depending on the status of the profession and the political, social, and cultural environment in the country. Two common mechanisms are offered in detail.

- A statute (or law) could be passed by the country-level authority that regulates midwifery practice, and defines its scope. The statute would establish a regulatory body to implement the provisions of this statute. Advantages of this approach include visibility of the midwifery workforce, and acknowledgment of its role within the country's health care system. This provides a certain status for the occupation/profession and offers it some protection, including that of protection of title. Disadvantages include the fact that changing the statute (law) is a lengthy and difficult process. The specific details contained within the statute (law) could become outdated over time as new evidence emerges.
- A statute (or law) could be written that establishes midwifery as a specific and recognized occupation or profession, but that delegates the authority for establishing standards and guidelines to another regulatory body. The distinct advantage of this approach is the flexibility that this body has to act more quickly to update these standards and guidelines, when indicated. A second advantage is that the membership of these regulatory boards can (and should) include representatives of the midwifery cadre that is being regulated, along with representatives of the consumer public. Disadvantages of this design include the potential for unbalanced representation, such that members of the midwifery cadre are a minority of those who actually implement standards of practice for the profession.

An enabling regulatory mechanism must be flexible and pragmatic and yet at the same time must provide a framework for good governance of the profession. It is generally believed that the most effective regulatory mechanisms are those that are understood and valued by society and the professional group. It is essential that midwives take the lead in reviewing proposed legislation and regulations for the occupation/profession, and in considering new approaches, as they are the individuals who can best interpret the occupation/profession and its values to others. The International Confederation of Midwives can provide resources (e.g., the list of Essential Competencies for Basic Midwifery Practice (2010), and the Global Standards for Midwifery Regulation (2011)) that can be adopted, or referenced for use in regulatory language at the country level.

Accountability of the profession to civil society is also crucial. Effective regulation is dependent on civil recognition, confidence in the mechanism, a system in place, and the ways in which these are made operational in the country. A checklist for monitoring the process of establishing a new regulatory framework is offered as an annex to this module.

A glossary of midwifery regulatory terms

Accreditation: A process of review and approval by which an institution, program, or specific service is granted a time-limited recognition of having met certain established standards. The accreditation function is conducted under the authority of the regulatory body or, alternatively, by independent, nongovernmental, agencies.

Certification: A process and procedure of external assessment or examination by which an individual is determined to possess a minimally acceptable body of knowledge and/or skills. Certification may be voluntary or mandatory as a condition of licensure.

Guideline: A recommendation for a way of acting.

Licensure (v)/license (n): The process and procedure by which an individual is granted authority to enter into practice; the document that acknowledges that authority.

Malpractice: lack of knowledge or experience, or the negligent performance of duties that result in patient injury.

Professional misconduct: Work-related behaviors that are unworthy or unethical.

Registration (v)/register (n): The process and procedure by which an individual is acknowledged as having authority to practice; the official roll of individuals who have been registered. (Note that this term is used as an alternative to licensure in some country jurisdictions.)

Regulation: Prescriptive guidance for the enactment of the provisions of statute (law), whether defined within the statute or developed by another institutional body (e.g., institutional ministry) that has the authority to implement, interpret, or make the statute specific; an authoritative rule (e.g., ministerial decree, order, regulation) dealing with details or procedure.

Standard: An agreed-upon manner of performance; a benchmark for expected performance (e.g., as established by consensus committees or professional associations) (also known as a "rule" of practice).

Statute (Law): A decree enacted by the highest legislative assembly in the jurisdiction (e.g., parliament, congress, national assembly, state government, or ruler's court).

2.4 Regulations, rules, and guidelines for the practice of midwifery

The professional regulatory body has the authority to enact the rules and guidelines for the practice of midwifery in the country. The component elements of these rules and guidelines are depicted in Figure 2.1, some of which are further described in the sections that follow.

2.4.1 - The constitution and composition of the regulatory body

Many countries have established a single regulatory body that governs a number of occupations and professions that share components of a scope of practice, as, for example, the Nursing and Midwifery Councils of the United Kingdom and the countries of Malawi and Ghana. Other countries have established regulatory bodies that specifically address midwifery as an autonomous profession (e.g., the New Zealand Midwifery Council). There are variations, of course, depending on the manner in which countries have delegated jurisdiction over matters such as licensure to states or

provinces (King, Ogle, and Bethune, 2010). For example, the practice of midwifery is authorized in some provinces of Canada and not in others; regulatory authority is retained at the provincial level. The practice of midwifery is regulated by individual states within Australia (Brodie and Barclay, 2001) and the United States of America. The majority of the U.S. states require that midwives also be nurses, but even in the states that have this requirement, the regulatory functions may be delegated to a nursing board, joint professional boards (e.g., medicine or public health), or a separate midwifery board or council (Reed and Roberts, 2000).

The direct involvement of midwives in the work of this regulatory body (including elected or appointed membership on the regulatory board) will have a direct effect on the development of regulations, rules, standards, or guidelines that will create an enabling framework for professional practice (James and Willis, 2001). Midwives are best able to define their own practice, and are most knowledgeable about the circumstances that serve as barriers or restrictions to quality service delivery. Participation of midwives on these boards will help to ensure that these regulations are written in the broadest (least restrictive) sense, to enable the midwife to both practice to the fullest extent of her competency and use her professional best judgment under challenging circumstances.

It is also critical to involve the midwifery member association of the country in shaping the design of the regulatory system, through both consultation and advocacy. The association may be the best source of information and evidence about issues that are particularly specific to midwives, such as a code of ethics and the essential practice competencies. These do not have to be newly developed, but can be adopted or adapted from the materials that have been developed and promulgated by others, such as the International Confederation of Midwives and WHO. Countries can only benefit by the wisdom acquired through the experience of their peers in other international settings (Jowett et al., 2000; Carty, 2005).

Finally, in order to ensure that regulations and licensing systems, especially the standards set for midwifery practice, have legitimacy, they must be developed through a participatory process, with the involvement of other stakeholders. Key stakeholders include members of the public, in particular those representing the views and rights of women. Having women's health activists involved in the drafting of policies, laws, and regulations, and in the actual regulation of midwives and midwifery practice, will ensure that a woman, her newborn, and family will be the focus taken in these areas.

Membership of a midwifery regulatory body therefore should ideally include:

- Maternal and newborn health policymakers at the national level;
- representative(s) of the government;
- midwife educators;
- practitioner(s) in current clinical practice;
- representatives of the professional membership association(s) of midwives, to represent the occupational and welfare concerns of practitioners, as well as professional issues;
- member(s) of the general public representing women's interests;
- women (including beneficiaries of midwifery services);
- lawyers or others qualified in the drafting of regulatory language;
- representatives from relevant allied professions.

In many countries there is a mix of elected and appointed members who make up a regulatory body. The system for election or appointment onto the regulatory body should be transparent. The interest of upholding the public good and the needs of women and their newborn and families, fairness, and equity should be paramount in deciding on the composition and constitution of such a body.

2.4.2 - Guidelines for midwifery education programs

Midwifery regulation should be developed to ensure minimum standards of midwifery education and practice (Brodie and Barclay, 2001; ICM, 2010; ICM, 2011) for each of the types (cadres or levels) of individuals who are recognized as midwives in the country. Countries decide the academic pathways that are most suited to country needs and resources.

The guidelines that are established for the length of programs of study, and the core competencies to be taught in those programs, are commonly defined by the authoritative bodies that regulate the practice of the profession, who, in turn, should be informed by the international organizations (such as ICM) that are the most knowledgeable about the profession. The delegation of this responsibility to a regulatory body helps to define the common standard expected as the outcome of all program graduates who will use the title “midwife” in the country, so that other health professionals and the public can have a reasonable understanding and expectation of the scope of practice. This authoritative body can also address ways and means of reviewing the quality of education programs, through the provision of oversight and peer review (accreditation) of teaching institutions (Forrester, 2009).

Two models of professional midwifery curricula (post-registration and direct entry) are provided as an annex to this Toolkit for strengthening professional midwifery in the Americas These model curricula can serve as a resource that can be incorporated (adopted) or adapted to meet the specific needs of the country situation. The course/module content of midwifery studies will be complemented by any additional course requirements of the technical or academic degree program within which the midwifery program is embedded.

The models outline the essentials for education of a midwife prepared for service in both urban and rural communities, and at various levels of the health system. The midwife is prepared to provide effective care for women who are undergoing normal pregnancy and childbirth, but also for women and newborns who experience complications, many of which are life-threatening (thus the need for learning life-saving skills). The competency-based model curricula are to be interpreted only as a content guide. Any program of midwifery education should conform to the standards and guidelines as promulgated by the ICM for midwifery education around the globe (ICM, 2010), and must incorporate sufficient time for students to acquire clinical proficiency.

There may be different levels of qualification for various cadres of practitioners (e.g., auxiliary nurse-midwife) who are educated in some part, but not all, of the full scope of midwifery practice in a single country, and who do not meet the definition of the fully qualified, professional midwife (ICM, 2011). The professional midwifery regulatory body may have authority to define the educational patterns and the expected outcomes of the various less-qualified cadres. Other countries may choose to establish separate regulatory boards for the various cadres, to ensure that there is sufficient representation of the particular cadre type on the board (or country equivalent) that has the authority to regulate practice.

2.4.3 - Entry into practice and initial licensure

A primary purpose of licensing bodies is to protect the public from unsafe practice. Therefore, the expected outcomes of midwifery education programs (the knowledge, skills, and behaviors expected of safe beginning practitioners) are also often explicitly cited as the component elements of entry-into-practice requirements that are established by regulatory boards. There may be additional requirements, such as standardized testing (e.g., national certification or licensure examinations), as a requirement for first licensure. The regulatory body should also address equivalents for internationally qualified midwives; establishing mechanisms and pathways for reviewing their credentials, verifying qualifications, and determining the individual's fitness for practice under the requirements of the new (the receiving) country (Mead, 2003; Kingma, 2006; Bieski, 2007).

Regulatory boards are also the gatekeepers of the professional register of qualified midwives, i.e., the list of those who have complied with all statutory requirements for initial entry into practice, and for relicensure. This information should be accessible to those seeking to employ midwives. A register is also very useful in workforce planning.

2.4.4 - Requirements for assessment of continued competency

The authority to enter into practice may be given for the occupational/professional lifetime, or it may be time-limited. Countries may (and are strongly encouraged to) develop regulations that require a reapplication from time to time for the authority to practice. These regulations may require evidence that the individual has engaged in a program of continuing education (for enhancement of knowledge) and/or reassessment of practice skills. An assessment of continued competency would be particularly important for those wishing to return to the profession after an absence from the workforce; this should be addressed in the regulations.

Maintaining current competency may be particularly challenging for midwives in countries where there is no regular program for the continuing educational development for midwives. To maintain standards the midwife needs adequate opportunities for practice in order to:

- Sustain competence and confidence in the conduct of necessary clinical skills, particularly those for which the need does not often arise, but which are life-saving when needed (e.g., resuscitation of the adult or newborn);
- update knowledge and learn new skills, as the evidence that underpins practice is continually evolving;
- reflect on clinical practice regularly and learn from her experience;
- understand and practice accountability, to her clients, her managers/employer, and the general public.

Strategies for these assessments are discussed in Modules 7 and 8 of this toolkit, including for basic and continued competencies for practicing midwives. The consideration of the importance of the continued competency of teachers in basic midwifery education programs is addressed in Module 6. These strategies could be referenced in the regulations as one approach for meeting any continued-competency requirement that may be established in the regulations.

2.4.5 - Standards of practice

The regulatory guidelines should incorporate reference to standards of high-quality practice. However, it is neither necessary nor efficient for the regulatory board to establish these standards, because the evidence that underpins clinical practice is ever evolving. Best practice standards change rapidly. Practitioners should be able to incorporate

new recommendations for practice, and not be constrained in their practice by the need to await the updating of regulatory language. Regulatory boards can make reference to the existence of standards of practice issued from time to time by international or national authorities, and by midwifery membership associations. The WHO Standards for Maternal and Neonatal Care (2006) materials are an example of the many documents that can serve this purpose (see Module 3 for further discussion).

For the individual practitioner, an emphasis on personal professional accountability is perhaps the most important determinant of maintenance of standards. To assist practitioners, it is usual for the professional regulatory body to issue, from time to time, written guidance on important issues, such as record-keeping (Dimond, 2005 a,b,c; Brous, 2009) and scope of practice requirements.

2.4.6 - Professional misconduct

The primary legislation must enable the development of a mechanism for the discipline (e.g., warning or sanction) of practitioners or for their removal from the professional register if they are found guilty of misconduct or malpractice. Misconduct might be simply defined as “conduct unworthy of a professional.” What constitutes misconduct will differ among countries, but would likely include putting the profession into disrepute or several matters that are addressed in civil law (e.g., assault or theft from a client).

Malpractice might be defined as “lack of knowledge or experience, or the negligent performance of duties that result in patient injury” (Gündoğmuş ÜN, Özkara E, Mete S, 2004), that is, the failure to provide acceptable levels of health care (Hugh and Dekker, 2009; Miola, 2009). Midwives have been reported to be responsible for several types of malpractice:

- Wrongful disclosure of personal information about clients;
- failure to disclose risks of choices and options in childbirth (Bismark et al., 2012);
- incomplete monitoring of pregnancy and inaccurate assessment of pregnancy-related conditions, leading to adverse changes in the client’s health status (negligent care) (Moynihan and Mengersen, 2010);
- failure to detect pregnancy-related problems and to refer the woman to higher levels of care in a timely manner;
- failure to perform tasks in a skillful manner, resulting in injury to the client (e.g., inappropriate technique for management of breech delivery or shoulder dystocia) (Angelini and Greenwald, 2005);
- medication errors (e.g., route, region, and technique of drug administration) (Jonsson, Nordén, and Hanson, 2007).

In any circumstance, unprofessional conduct and professional misconduct can often be very difficult to detect, and even more difficult to “prove” with sufficient evidence to warrant a disciplinary action (Johnstone and Kanitsake, 2004). The point of including reference to standards of practice (such as the WHO Standards for Maternal and Neonatal Care) within a regulatory statute or guideline is to establish an objective, external criterion of “best practice” to which the action(s) of any individual can be compared, and then considered in light of the particular practice circumstances (e.g., the site of care or the availability of alternative options). These standards will augment the expert witness testimony that will establish the expected standard of care under the circumstances.

It is important to note that an undesirable outcome is not necessarily the result of professional misconduct or unsafe practice. Some undesirable outcomes are unavoidable (such as congenital anomalies incompatible with life). Others occur despite the best efforts of midwives to intervene appropriately and to assist their clients to gain access to higher levels of care when circumstances warrant such action.

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Figure 2.1: Design elements of a midwifery regulatory system

Components of a regulatory system for midwifery

- Purpose of the regulatory system;
- structure of the regulatory body;
- specification for the composition and constitution of the regulatory/administrative body, including:
  - Their powers;
  - their functions;
  - powers of the registrar;
  - criteria for membership on this body (composition);
  - method by which members are appointed;
  - terms of office of members:
    - Length of each term;
    - number of terms that can be served without a break in service;
  - officers of the body;
  - reporting responsibilities:
    - To whom they must report;
    - how often reporting is required;
    - the form of reporting required.
- Definition of professional midwifery and of lesser-skilled cadres:
  - Categories (cadres) of the professional that are governed by the regulations (protection of the title);
  - responsibilities of each cadre;
  - scope of practice of each cadre.
- Requirements for entry into the profession;
  - standards and guidelines for preservice education programs;
  - competencies at entry into practice.
- Mechanisms for initial licensing;
  - testing requirements (if selected by the country) and minimum pass standard;
  - equivalency licensing mechanisms for midwives educated in other countries;
  - qualification verification;
  - term of the initial license;
  - initial license fees (if established by the country).
- Mechanisms for relicensing and/or reentry into the workforce;
  - continued competency assessment requirements (if selected by the country):
    - Updates for knowledge;
    - reassessment of clinical skills;
  - relicense fees (if established by the country).
- Standards of professional midwifery practice;
- Protocol for dealing with misconduct and other unfit-for-practice issues;
  - criteria for voluntary or involuntary removal from the registry;
  - consequences for a finding of professional misconduct;
  - appeal mechanism.

Optional components

- Code of conduct/code of ethics or the general values and principles underpinning the professional practice of midwifery practice of midwifery.

Annex 2.1: Achieving change in midwifery legislation and regulation for safe midwifery care

Stage	Question	Yes	No	Action Required
1. Establishing goals and principles.	Is the purpose of midwifery practice in the national context established? Is there consensus on the categories of health provider(s) permitted to practice the art and science of midwifery in the national context.			
	Is the purpose for regulation and licensing of midwifery and those permitted to practice midwifery explicit and clear?			
	Is there a national definition (agreed to by all stakeholders) of a midwife? Is the definition clear and sufficient to enable title protection? Is it consistent with the definition of midwife and skilled birth attendant promulgated by ICM and WHO?			
	Are the role and responsibilities of a midwife explicit and have they been agreed by all stakeholders?			
	Are the competencies required for safe midwifery practice explicit and do they ensure that the midwives providing comprehensive midwifery care are able to fulfill their role and responsibilities as agreed upon nationally?			
	Do the competencies fit the *ICM Essential Competencies for Basic Midwifery Practice* and the WHO/ICM/FIGO list of competencies for a skilled attendant for pregnancy and childbirth?			
	Does the scope of practice for this practitioner meet the national priorities for safe midwifery care?			
2. Legal constraints and barriers.	Do the national policies and laws related to drugs and medicines (including prescribing, administration and safety) permit the midwife to administer essential drugs to the women or newborn, including giving life saving drugs for management of a complication in pregnancy, childbirth and/or postnatal period?			

Annex 2.1 (continued)

Stage	Question	Yes	No	Action Required
	Do the national polices and laws permit midwives (and others practicing midwifery) to carry out all the necessary care and interventions required to fulfill their role and responsibilities.			
	Do the national policies and laws permit midwives and others practicing midwifery to carry out all the necessary evidence-based life-saving procedures for safe pregnancy, childbirth and postnatal and neonatal care?			
3. Strategies for developing effective legislation and regulation.	Is there a national task force/committee or high-level forum established for revising and or drafting regulation and licensing for midwifery?			
	Does the national task force/committee ensure representation from all stakeholders, including women, consumers, and the general public?			
	Are there mechanisms to ensure that the voices of women as users or potential users of midwifery services are heard during development of the regulations?			
	Are there national evidence-based standards for midwifery practice and mechanisms for auditing and reviewing these standards?			
4. Achieving the change.	Is there a process for national public consultation and consensus-building on regulation and licensing governing midwifery practice, is this widely known, and are time frames adequate to ensure all stakeholders can participate?			
	Are there clear timelines set and agreed upon for approval of new regulation and licensing for midwifery?			
	Are the roles and responsibilities of all stakeholders clear for achieving the revision/development of new midwifery regulation and licensing, including for implementation of the new regulations when finally approved?			

Annex 2.1 (continued)

Stage	Question	Yes	No	Action Required
	Have all resources required for achieving the required change, including financial and human resources, been clearly identified?			
5. Monitoring and evaluation.	Have clear indicators been established for monitoring implementation of the new regulations and licensing mechanisms?			
	Is it clear who is responsible for monitoring compliance with new regulations?			

Module 3

Developing standards to improve midwifery practice

3.1 Introduction

A critical factor for all countries seeking to reduce their incidence of maternal morbidity and mortality, and to ensure that all newborns have a healthy start in life, is to invest in strengthening skilled attendants, and to ensure that all women, especially poor and disadvantaged women, can access and utilize these skills (WHO/ICM/FIGO, 2004). This module in the Toolkit for strengthening professional midwifery in the Americas provides an overview of the appropriate use of standards of midwifery practice. Ensuring that midwives are able to perform to agreed-upon, universally accepted, evidence-based occupational and professional standards is one link in the chain required to ensure that all women and newborns can benefit from skilled care. The establishment of standards for midwifery practice promotes good-quality, comprehensive midwifery care. That, in turn, should help to reduce the high rates of maternal and neonatal morbidity and mortality that prevail in many countries, particularly those with limited resources.

3.2 The definition and purpose of standards

3.2.1 - Definitions

There are many definitions of standards; however, in the context of health care service, the definition is understood as an agreed-upon norm, and is generally used in reference to quality. Quality can itself be defined operationally as the extent to which the service delivered meets expectations or needs. A guideline is a recommendation for a way of acting or proceeding (note “clinical practice guidelines”) but does not rise to the level of a required standard of practice.

3.2.2 - Purpose

Standards for practice are an important component of quality assessment programs in health care. They act as externally validated criteria of “best practice” to which the performance of health personnel can be compared. They may also serve as benchmarks, i.e., levels of performance, to which health personnel should aspire. Figure 3.1 presents an overview of a typical quality improvement framework, depicting the pivotal and essential role of standards in this process.

The WHO has engaged in the process of development of generic standards for maternal and neonatal care that countries can use as a basis for establishing evidence-based national standards of care (the complete set of standards can be accessed at the link provided in the footnote[1]). Standards of midwifery practice should reflect national and global standards, and, therefore, are not distinct from these norms established for all skilled attendants.

The broader content of midwifery standards includes the quality of the midwife’s preparation for her role (Morin and Yan, 2007; ICM, 2010) and the environment of the health system in which she carries out that role.[2] Therefore, those seeking to strengthen midwifery at the country level should also ensure the development of standards of quality for midwifery education, and the development of enabling legislation that promotes the ability of the midwife to engage in clinical care to the fullest extent of her competency. Additional modules in this Toolkit for strengthening professional midwifery in the Americas provide guidance for this process.

[1] http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/a91272/en/index.htmll

[2] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However in a number of nations, men now enter this profession. The ICM international definition has been updated to reflect more gender- neutral language; however, this guidance uses the female gender for ease of use.

A glossary of terms related to standards and standard-setting

Enabling environment: A health care practice setting that provides mechanisms (e.g., policy framework, human resources, equipment and supplies, referral systems, and linkages) that support quality health care service, according to standards.

Standard: An agreed-upon manner of performance; a benchmark for expected performance (e.g., as established by consensus committees or professional associations) (also known as a "rule" of practice)

Quality health care service: The extent to which the service delivered is in accord with standards, and meets expectations or needs.

3.3 The standard-setting process

Historically, clinical practice standards were often set by knowledgeable experts, i.e., individuals acknowledged as possessing an in-depth understanding of a particular subject, and the experience to analyze that knowledge in the context of its application in practice. The wisdom of such authority has been augmented in the present day by evidence drawn from the research process (evidence-based practice). This review of literature generates information about the efficacy and effectiveness of the clinical action that is delineated in the standard. Standards are linked to results (outcomes), so that their effectiveness can be measured.

This new approach to standard-setting reflects a professional mandate to respond to societal demand for accountability of all providers for the quality of care that they provide (Althabe et al., 2008; Laurant et al., 2009). It also reflects societal demand for economic value from the service they receive (Leidl, 2008; Dall et al., 2009; McGahan and Keusch, 2010).

3.4 Benefits of the use of standards for midwives and the midwifery profession

There are a number of very tangible benefits for the profession and for the individual midwife from the availability of standards. Three key advantages are described below:

- Promotion of uniform assessments.

Having explicit, written standards allows for more standardized, uniform measurements. It also enables clients, families, and communities to know what level of midwifery care to expect. It is therefore possible for those persons as well as for individuals approving or supervising midwifery care to judge whether midwives are giving the quality of care to women and their families that is required and considered acceptable and responsive to community expectations (Raven et al., 2011). (The assessment of continued competency, in accordance with emerging or evolving standards of practice, is addressed in Module 8 of this toolkit).

- Promotion of an enabling environment.

Standards can incorporate reference to the essential elements that must be in place to enable midwives to perform the specified tasks effectively, e.g., the drugs, equipment, and supplies that are crucial components of effective performance on any particular standard. In that sense, standards can also define what is required of the health system, as the infrastructure for health care service delivery. This should certainly include indication of the data that are required to measure the effectiveness of practice, according to standard.

- Promotion of dialogue among different professional groups.

There are many different cadres of health workers who are identified at the country level as skilled attendants. Standards of clinical care for women and their infants throughout pregnancy, birth, and the postpartum and neonatal periods are uniform, across all cadres of health providers (Fox-Young and Ashley, 2010). The standards serve as a point of common reference among all health provider groups about ways in which each can serve as a resource for the other, and provide support for the achievement of a common goal of safe motherhood. Midwives should be forthright in opening discussions about practice issues and standards, and in engaging their peers and colleagues in discussions about all aspects of the health system that affect the ability to practice according to standards. This dialogue may lead to the development of collaborative research to determine if new practices identified in the standards lead to similar outcomes, when implemented by various cadres of health providers in different practice settings.

3.5 Using an evidence-based approach to establish and develop standards for midwifery education and practice

An expansion of the approach used by WHO to develop the *Standards for Maternal and Neonatal Care* provides a model that can be used by midwives who engage in the standard-setting process for any purpose. The following steps are included in the process:

- Identify the point of each standard;
- explore the evidence that supports a recommendation for action;
- develop a model recommendation;
- engage others in dialogue about the model;
- implement the standard;
- monitor the experience of those applying the standard;
- review this experience; modify the standard as indicated by the experience and other emerging evidence.

3.5.1 - Identify, define, and then refine the point to be addressed in each standard

This first step implies that there is a legitimate purpose for establishing a standard. Fundamentally, there should be some common good (a desirable outcome) that will be achieved through implementation of the particular standard. The public and professional good that can be achieved from setting standards for midwifery clinical practice and midwifery education have been noted. Nevertheless consensus for the desired outcomes should be agreed upon by as wide a constituency as possible and not just the professional group. A code of ethical practice might also be considered a professional standard that adds value not only for the profession (ICM, 2008) but also for civil society.

3.5.2 - Explore the evidence

The nature and quality of the evidence that underpins the clinical practice *Standards for Maternal and Neonatal Care,* and the process through which that evidence was extracted from the body of research-based knowledge, is fully detailed in that document (WHO, 2006). Higher level evidence (i.e., results derived from more rigorous research designs such as systematic reviews and randomized controlled trials) was supplemented by evidence from observational studies. Clinical evidence (the wisdom derived from practice) was always also considered.

The same intention can be applied in the search for evidence to support the development of standards for midwifery practice. The *Essential Competencies for Basic Midwifery Practice* (ICM, 2010) were developed through a similar strategy. Evidence that supported the importance or effectiveness of each of the areas of knowledge, clinical tasks (skills), and abilities (KSAs) that were identified as a characteristic of basic midwifery practice was drawn from the clinical research literature and also from qualitative studies that addressed individual preferences, personal views, concerns, and values (Kennedy et al., 2003; Fullerton, Severino, and Brogan, 2003; Fullerton and Thompson, 2005; Fullerton, Thompson, and Severino, 2011), and through clinical consensus for those KSAs for which scientific studies are not yet available to offer guidance. Module 4 of this toolkit offers a more complete discussion of this process.

The evidence in support of standards for midwifery education is necessarily of a more qualitative nature, as the topic does not lend itself to the more rigorous experimental study designs. The information derived from the experience of other developed and developing countries is, nevertheless, of importance and high value in defining a “best practice” model (Herberg, 2005; Wright et al., 2005; Carolan, Kruger, and Brown, 2007, Malott et al., 2009, Casey, 2011; Kaaya et al., 2012).

3.5.3 - Develop a model recommendation

Midwives should take the lead in developing standards that will affect the practice of the profession. The international and country-level membership associations should be very helpful in this process. Also, again, the experience of other countries can be very beneficial here, as experience forms part of the evidence base that underpins any recommendation that might emerge.

3.5.4 - Engage others in dialogue about the model

Nevertheless, identifying the scope of midwifery education or practice is not just the decision of the midwifery profession. When different professional groups provide the same type of care, they should develop standards for practice jointly. Midwives can take the lead in identifying the desired standards, reflecting ICM standards. These should be discussed and agreed upon with government representatives, other professional groups whose scopes of practice intersect with midwifery (e.g., doctors, nurses, public health practitioners), civil society and health policymakers, health service managers, and women.

3.5.5 - Implement the standard

A good standard must be both realistic (“doable”) and capable of being measured. Field experience generates important information about the utility (usefulness) of the standard as a guide for education or practice and also about the feasibility of meeting the criterion of the standard under the actual circumstances of the education or practice environment (the specific country situation) (Downe, 2010; Fullerton et al., 2011). Process indicators should be

established for the purpose of monitoring various aspects of the field experience (Nelen et al., 2007; de Bruin-Kooistra et al., 2012). A model of an audit tool that could be used to assess actual implementation of a specific element of clinical practice is offered in the annex. It is particularly important also to assess the satisfaction (the "lived experience") of those whose manner of practice is now guided by the new standard. If users are not comfortable with the changes that they are required to make in order to conform to the new standard, it is unlikely that it will be adopted

3.5.6 - Monitor the experience of those applying the standard

Field experience usually leads to identification of the factors that need to be improved, to create the enabling environment for success. These prerequisites include such things as supporting policies and systems, essential supplies and equipment, education and continued education needs, a system of supportive supervision, and an information and data system for recording and reporting outcomes. Mechanisms should be developed to receive feedback from midwives who practice in the community, given that compliance with certain clinical practice standards can be affected by the circumstances of the practice site (e.g., the need for referral to higher levels of care).

3.5.7 - Review this experience; modify the standard as indicated by the experience and other emerging evidence

Evidence is continually evolving. Standards are not meant to be static. Process indicators generate important information about the shorter-term effects (outcomes) of compliance with standards. However, a plan should also be developed for measuring the longer-term impact of standards on improving the quality of maternal and newborn care. The audit cycle is depicted in Figure 3.2.

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Figure 3.1: A framework for quality care

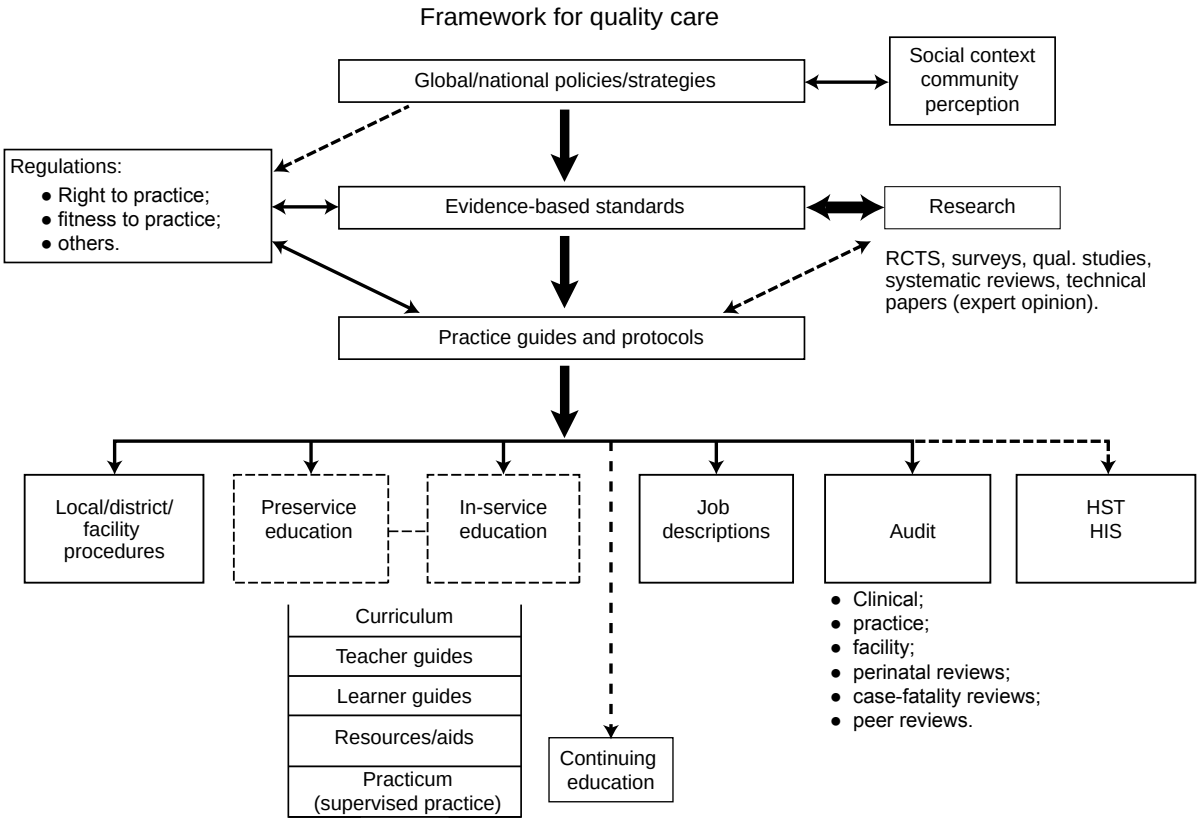
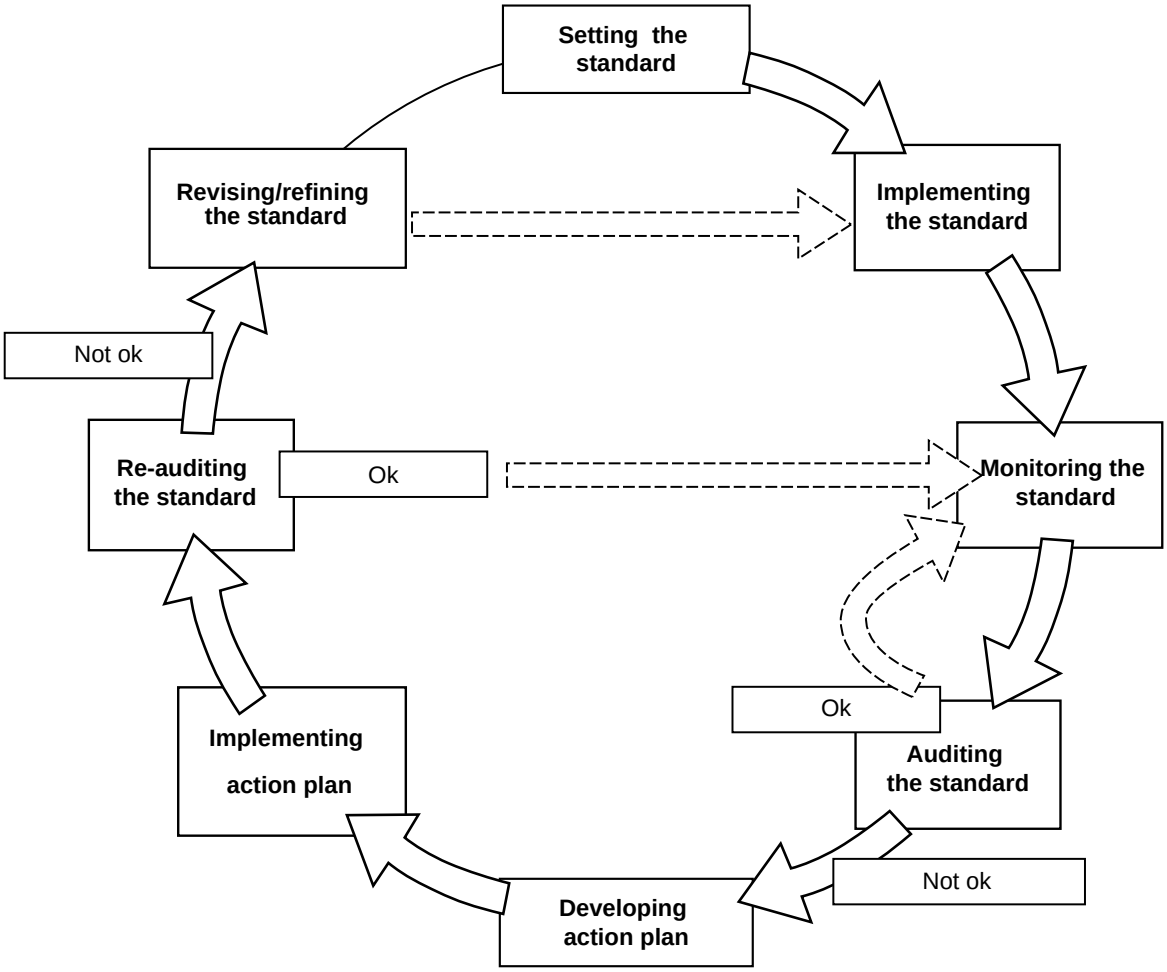


Figure 3.2: The standard-setting process



Annex 3.1 An audit tool for antenatal care

Audit of antenatal care standard: antenatal monitoring and examination

Locality where audit took place: _____

Date of audit: _____

Name of person(s) conducting audit: _____

A. Checklist

Method:

1) Visit the clinic or community to directly observe the midwifery-trained personnel conducting an antenatal examination(s).
2) Engage in discussions with the midwifery-trained personnel.
3) Engage in discussion with the pregnant woman and her husband/family.
4) Review all records, including case registers and pregnancy records

Criteria	Yes	No
Clinic visit is pre-arranged.		
Local pregnant woman is aware of when to attend antenatal care.		
Transport from community to clinic is available.		
All records are available for review.		
A pregnancy record is available for use.		
Midwifery-trained personnel have been trained in the use of pregnancy records.		
Records are complete and accurate.		
Equipment for taking blood pressure is available and in good working condition.		
Equipment such as weight scales or arm circumference measures, measuring tape, and fetal stethoscope is available and in good working condition.		
All equipment required for administration of tetanus toxoid and other immunizations is available, including appropriate cold storage facilities.		
Malaria prophylactics and treatment are available (in malaria-prevalent areas).		
Hookworm treatment is available (in hookworm-prevalent areas).		
Equipment for urine testing for albumin and sugar is available.		
Equipment is available for syphilis testing.		
Equipment or locally available services for measuring hemoglobin are available and/or operational.		
Iron supplementation supplies are readily available.		
Private place is available to examine the pregnant woman.		
All findings are discussed with the pregnant woman and her husband/ family.		
Fully operational referral system for conducting further investigations or for delivery of at-risk/ high-risk pregnancies is in place.		
All referrals are followed up by midwifery-trained personnel.		
All examinations and procedures are carried out in the agreed-upon manner; the process as written in the standard is followed.		

Signature of person(s) conducting audit

Annex 3.1 (continued)
B. Action plan

Purpose: To identify areas that need strengthening or correcting, i.e., prerequisites or process in order to ensure that the standard is being maintained.

Method: Meeting to discuss findings (both positive and negative) and actions required to ensure that the standard is being maintained

<table>
<tr><td colspan="4">Are all the criteria as specified in the checklist for audit of the standard being met?
Yes ☐ No ☐</td></tr>
<tr><td colspan="2" rowspan="3">If yes (all criteria are being met):
● Is there anything else that can improve the process? Specify.

● Are there any other prerequisites that could be included to make the process easier? Specify.</td><td colspan="2">If no (all criteria on checklist are not being met):
● Are all prerequisites in place? Yes ☐ No ☐
If no, specify what is missing.
● Is the process being followed? Yes ☐ No ☐
● Is the process as written faulty? Yes ☐ No ☐
● What action is required to correct the process? Be specific.</td></tr>
<tr><td colspan="2">If prerequisites are missing:
● What action is needed to rectify? Be specific.</td></tr>
<tr><td colspan="2">Who must implement the action for rectifying all of the above?</td></tr>
<tr><td>Date action must be completed by:</td><td>Responsible person(s) for implementing action:</td><td>Date of next review:</td><td>Signatures of auditor(s)/supervisor</td></tr>
</table>

Module 4

Competencies for midwifery practice

4.1 Introduction

There is compelling historical and limited epidemiological evidence that there is a significant relationship between increased coverage of maternity care by skilled personnel and a reduction in maternal mortality ratios (WHO, 2005; Maclean, 2003). The provision of skilled care for all women in childbirth is now recognized as a key strategy in the reduction of maternal mortality (WHO, 2005; Koblinsky et al., 2006; Campbell and Graham, 2006; Hofmeyr et al., 2009; Bhutta et al., 2010).

Skilled care refers to the care provided to a woman and her newborn during pregnancy, childbirth, and immediately after birth by a qualified (i.e., educated and authorized to practice, i.e., "accredited") and competent health care provider who has the necessary equipment with which to work and who also has the support of a functioning health system, including transport and referral facilities for emergency obstetric care (the continuum of care).

The critical role of the skilled attendant in making pregnancy safer was acknowledged in a position statement promulgated jointly by the World Health Organization, the International Confederation of Midwives, and the International Federation of Obstetricians and Gynecologists (FIGO) (WHO, 2004). These organizations have recognized the wide range of health professionals who can provide skilled skilled care, and THEY have agreed to refer to this health care provider as a skilled attendant.

A *skilled* attendant is an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns.

Source: WHO / ICM / FIGO, 2004

4.1.1 - The midwife as a skilled attendant

The midwife who has been educated and authorized to practice, in accord with the international definition of the midwife, is recognized as a skilled birth attendant (see Module 1 for additional discussion and for the full statement of the international definition of a midwife and scope of practice). This definition reflects the commitment of midwives to be prepared for their role according to a certain standard of education, and to practice within a system of regulation and supervision that promotes the highest standards of occupational and professional accountability.

International Definition of the Midwife [abridged]

A midwife is a person who, having been regularly admitted to a midwifery educational program, that is duly recognised in the country where it is located, and that is based on the ICM *Essential Competencies for Basic Midwifery Practice* and the framework of the ICM *Global Standards for Midwifery Education*; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title "midwife"; and who demonstrates competency in the practice of midwifery**.**

Source: ICM, 2011

4.1.2 - The scope of midwifery practice

The scope of midwifery practice used throughout this document is based on the ICM definition of the midwife. The ICM recognizes the scope of midwifery practice to include:

- Education and counseling on sexual and reproductive health and provision of contraceptive methods;
- provision of support, care, and advice during the inter-conceptional, pregnancy, labor, and postpartum periods;
- the conduct of births on the midwife's own responsibility;
- detection of complications, and provision of skilled care to address these concerns;
- provision of assistance and referral in emergencies that require a higher level of care;
- the provision of care for the newborn and the infant.

Midwifery care may be provided in any setting, including the home, community, hospital, clinic, or health unit, depending on how maternity care is organized within a given country. Midwifery care is linked with the care provided by health providers in referral centers (doctors, nurses, and specialists). Comprehensive midwifery care is provided with consideration given to the context of care (i.e., the health care system in which she[1] practices) and the special circumstances of the country of practice, such as specific health concerns and epidemiological challenges (e.g., HIV/AIDS).

Selected functions within the scope of comprehensive midwifery practice may also be shared with other cadres of community-based health providers. The titles of these individuals may vary widely, depending on the specific country context (Koblinsky et al., 2006). Certain functions might be delegated to health workers who may have received very specific training to conduct certain tasks related to the provision of pregnancy and birth care (often termed "task sharing" or task shifting") (FIGO, 2009; Lehmann et al., 2009; Jejeebhoy et al., 2011; Gessessew et al., 2011; Nabudere, Asiimwe, and Mijumbi, 2011; Walker et al., 2011). The essential similarity between the various cadres of providers is the set of skills that promote the ability to provide safe (i.e., competent) care.

4.2 The concept of professional competence

Professional accountability for the delivery of midwifery services includes the commitment to acquiring and maintaining a certain body of knowledge, a professional approach to action (attitudes and behaviors), and a set of skills that are then enacted, at a level of competence in practice that promotes the delivery of safe care. A definition of competence is fundamental to understanding the commitment to safe care.

4.2.1 - Theoretical and operational definitions

The several definitions of competence that have been set forth in the literature are similar in that they acknowledge that competence is a theoretical concept that includes several underlying concepts and characteristics, each of which makes an interactive contribution to safe practice (Yanhua and Watson, 2011). Competence is a complex combination of knowledge, performance, skills, values, and attitudes (Fullerton et al., 2011). Competence involves the possession of sufficient knowledge and skills to perform job-related tasks, but also incorporates ethics, values, and the capacity for reflective practice. The definition of competence is also related to the context in which the practitioner is functioning. There may be more than one way of practicing competently (Cowan, Norman, and Coopamah, 2005; Fernandez et al., 2012).

[1] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However, in a number of nations men now enter this profession. The international definition (ICM, 2011) has been updated to reflect a more gender- neutral language; however, this guidance uses the female gender for ease of use.

A glossary of terms related to professional competence

Conceptual definition of competence: The combination of knowledge, skills, and abilities that enable an individual to perform a specific task in a manner that yields desirable outcomes.

Operational definition of competence: The documentation of an acceptable level of performance, through a process of structured assessment, using objective standards of professional practice (knowledge, skills, and abilities) as the criteria of quality.

ICM definition of competence: The combination of knowledge, psychomotor, communication, and decision-making skills that enable an individual to perform a specific task to a defined level of proficiency (ICM 2011b).

ICM definition of midwifery competency: A combination of knowledge, professional behavior, and specific skills that are demonstrated at a defined level of proficiency in the context of midwifery education and practice (ICM 2011b).

This conceptual definition was reflected by Worth-Butler, Murphy, and Fraser (1994) in their statement on models of competence in midwifery:

... the most helpful models of competence conceptualise competent professionals as people who have learned an adequate overarching set of skills and knowledge to do their job satisfactorily. A capable professional is then someone who is able to draw on that repertoire of skills and knowledge in different ways in different contexts to perform in a way that is recognized as competent.

Source: Worth-Butler, Murphy and Fraser, 1994

4.2.2 - The domains of competence

Competence is one of many determinants of performance. The impact of skilled attendants is enhanced when they are properly educated, have the necessary equipment and supplies, and work within a health system and policy framework that fosters and enables critical thinking and clinical proficiency (de Bernis et al., 2003; Kak, Burkhalter, and Cooper, 2001) (Figure 4.1). Fundamentally, nevertheless, there are several personal characteristics that are generally accepted as the individual components of competence.

- *Cognitive knowledge* is the understanding of the theoretical principles of safe practice (the understanding of facts and procedures). Knowledge is acquired through individual learning (e.g., reading, discussion, deliberation, debate), and through mentoring (observation of others, receiving feedback). Midwifery knowledge is acquired over the practice lifetime, as it necessarily involves understanding of both fundamental (basic) knowledge and continued (evolving) scientific principles.
- *Scientific knowledge* must be translated into practical application; this is, reflected in the performance of clinical skills (the capacity to perform specific actions). Midwifery skills are acquired through guided clinical practice (also known as clinical mentorship or preceptorship) (Licquirish and Seibold, 2008).

- *Competence* also necessarily includes a set of personal attributes, i.e., *personal abilities*. These attributes are rather more difficult to describe or to define, as they are intangible. They are, however, perceptible, and they are reflected in the manner in which any individual applies the knowledge and skills in the context of rendering clinical care. They include such things as communication skills (speaking and listening), the ability to foster supportive interpersonal relationships, the ability to respect diverse cultures and traditions, and a willingness to communicate sensitively with communities, families, and individuals.

- *Critical thinking* skills are particularly important attributes. Critical thinking is defined as a purposeful process of self-regulatory judgment (Turner, 2005). This includes the cognitive processes that constitute professional thinking (Profetto- McGrath, 2005). The application of critical thinking in midwifery practice is associated with clinical decision-making (Fesler-Birch, 2005), diagnostic reasoning, clinical judgment, and problem-solving. It is a process of reflective and reasonable thinking.

- *Confidence*, that is, the self-assessed level of comfort in one's ability to perform a particular skill, is an essential corollary to competence. The midwife may have acquired and demonstrated the ability to perform a task to a certain expected level of technical accuracy at a given time, but may not have attained any degree of internal assurance that she could do so if called upon to perform the skills, and particularly so in emergency situations or when other skilled assistance is not immediately available (Cooper et al., 2012; Fasan et al., 2012).

- *Competence* also involves the demonstration of *professional behaviors*, such as attitudes and values that are reflected in the ethical context within which professional practice is enacted (Vanaki and Memarian, 2009; Graber et al., 2012). Certain attributes may be considered to be characteristic of professional practice (e.g., the concepts of caring, empathy, or compassion). However, an individual's social, religious, and cultural context influences the way in which these attributes may be manifested or expressed.

It is also important to note that, in addition to competencies related to the provision of quality patient care, there are many additional and broader competencies that may be required of an individual within a particular practice context. Examples include competencies related to managing and organizing health services delivery, stimulating active community participation, and serving as a health policy advocate.

Finally, technical competency attained for any skill and the correlated confidence related to task performance are rarely sustained at the same level, even from day to day (Scotland and Bullough, 2004; Gardner et al., 2008). That is because the conditions, circumstances, and uncommon situations that affect peak performance change, thus altering a midwife's capability for competent performance of any task.

4.3 The core components of midwifery practice

4.3.1 - Key midwifery concepts

The key concepts that define the unique role of midwives in promoting the health of women and childbearing familiesinclude:

- Working with women to promote self-care and the health of women, infants, and families;
- respect for human dignity and treating women as persons accorded full human rights;
- advocacy for women whose voices have been silenced;
- empowerment of women who work to obtain better health care;
- cultural sensitivity, as well as working with women and health care providers to overcome cultural practices that harm women;
- a focus on health promotion and disease prevention;
- viewing pregnancy as a normal life event.

Midwives are committed not only to providing competent midwifery services, but also to taking actions to reduce the economic and social vulnerability of women (Filippi et al, 2006). Midwives recognize that the greatest impact on global maternal and child health begins with achieving a status for women that ensures equity and access to the basic necessities for healthy living, such as adequate nutrition and housing, clean water, and sanitation (WHO, 2005; Tyer-Viola and Cesario, 2010).

4.3.2 - The midwifery model of care

The midwifery model of care is based on the fact that pregnancy and birth are normal life events, although complications can occur at any point in the childbearing cycle. The model includes:

- Monitoring the physical, psychological, spiritual, and social well-being of the woman and her immediate family throughout the childbearing cycle;
- providing the woman with personal, culturally appropriate advice, education, counseling, support, and antenatal care;
- continuous attendance during labor, childbirth, and immediately postpartum as well as ongoing support during the postnatal period;
- establishing rapport in order to develop self-confidence in the woman to give birth and adapt to her new family dynamic;
- minimizing unnecessary technological interventions during childbirth;
- identifying the onset of complications, giving emergency care, and referring women and/or newborns who require obstetrical or other specialist attention.

4.3.3 - Evidence-based decision-making

The midwife's decision-making process is organized using a variety of sources of knowledge, intuitive precepts, and the ability to think critically and make sound clinical judgments. The midwifery process is dynamic as well as systematic. It responds to each woman's changing health status, and it anticipates potential problems. Midwives involve women and their families in all parts of the decision-making process and in developing a plan of care for a healthy pregnancy and safe birth experience and in the adjustment to the new family situation (Figure 4.2).

4.4 Core competencies for midwifery practice

4.4.1 - The knowledge, skills, and abilities essential to midwifery practice

ICM took the lead in identifying essential competencies for midwives, as a prerequisite for ensuring good practice. There are many other, similar competency lists, developed by a variety of organizations, as appropriate to their need and purpose. For example, the WHO presents a competency list in one of the clinical guides in the *Integrated Management of Pregnancy and Childbirth* (IMPAC) series (WHO, 2000). A set of "core skills and abilities" for skilled attendants was published by WHO, ICM, and FIGO in support of their joint statement on the Millennium Development Goals (WHO, ICM, FIGO, 2004). WHO recently published a list of core competencies for various health occupational and professional cadres who provide sexual and reproductive health services (WHO, 2011).

Midwifery membership associations in various countries may have also developed country-specific descriptions of knowledge, skills, and abilities (KSAs) essential for the practice of midwifery. These KSA lists may mirror the ICM list (the international reference document), or they may have been amended to reflect specific competencies that are either included or excluded from the domain of midwifery practice in that country (Homer et al., 2006; Butler, Fraser, and Murphy, 2008; Fleming et al., 2011). However, in order to promote a common global understanding of the scope of practice of the midwife, fully qualified according to the ICM definition, all of the "basic" competencies cited in the ICM document should be reflected in the lists developed and endorsed by membership associations.

KSA lists may have also been developed by country-level regulatory authorities. It is known that the knowledge and skills expected of those who are called "midwives" are defined differently across country boundaries. It is also the case that there may be several categories of midwife within a single country. For example, there may be different categories, such as enrolled or registered midwives, each having a more limited or more expansive domain of clinical practice, and, therefore, requiring that a specific KSA list be developed for the purpose of defining what can and should be expected of their performance. This lack of consensus in definition and scope of practice of the "midwife" limits what can be known about the role of midwives globally, and their contribution to the skilled attendant workforce.

4.4.2 - The evidence that underpins the competencies

The ICM competency task list has two particular assets that recommend it as a resource document. First, the task list was generated by and for the community of ICM-member midwifery associations whose practice it would affect. Second, the document is supported by reference to the evidence that underpins the task statements that are included on the list.

The ICM engaged in a formal research process in order to generate, and then affirm, the KSA list that emerged as *The Essential Competencies for Basic Midwifery Practice*. Survey research led to the development of the list of KSAs (Fullerton, Severino, and Brogan, 2003). Field studies conducted in 17 countries in all regions of the world affirmed the importance of each KSA as either a basic or additional skill for midwifery practice. Basic skills are those that would be expected of all midwifery practitioners, and might be characterized as core skills. Additional KSAs are those that enhance the scope of practice, and might be particularly important depending on the environment in which the individual practices (e.g., manual vacuum aspiration). The ICM updated the competency list, again affirming the basic or additional rating for each KSA item, through a global survey of all 88 ICM member-association countries. The current list (ICM, 2010b) contains a newly added domain pertaining to abortion-related care services.

ICM took the further step of linking the competency statements with evidence that supported their importance or effectiveness (Fullerton and Thompson, 2005). Evidence was drawn from the clinical research literature (e.g., randomized clinical trials) (Miller et al., 2003; Barkhordarian et al., 2012) and also from qualitative studies that address individual preferences, views, concerns, and values (Kennedy, Rousseau, and Low, 2003). There are many clinical issues for which scientific studies are not yet available to offer guidance. Expert clinical consensus served as the evidence base in these cases (Buetow, 2002; Fullerton, Thompson, and Severino, 2010.

4.4.3 - The ICM competency statements as a resource: affirmations and adaptations

The ICM list of essential competencies serves a broad purpose as a basic resource and a reference document. The specific ICM competencies should not be adopted for use for any purpose without first reviewing and affirming their relevance to the local realities of a country or region. It is understood that the complete list of basic and additional task statements represents a range of practice (minimum to maximum). Those who wish to use this list as a baseline for their own purposes are urged to take the steps reflected in Figure 4.3, in order to make the statements useful for their own purposes.

The ICM task statements and any similar lists developed at the country level need to be considered “living documents,” i.e., never static, always changing. Any given list must be reviewed periodically to ensure that it remains current, comprehensive, and suitable for its purpose. The evidence that supports the relevance and importance of each individual task statement must also be reviewed periodically to ensure that the current state of the science is reflected in the statement, as new evidence emerges that either supports current practice or provides a compelling rationale for the need for current practice to change.

The ICM *Essential Competencies for Basic Midwifery Practice* can be found on the website of the International Confederation of Midwives at http://www.internationalmidwives.org/Whatwedo/Policyandpractice/ICMGlobalStandardsCompetenciesandTools/GlobalStandardsEnglish/tabid/980/Default.aspx.

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Figure 4.1: Determinants of health care provider performance according to standards

(Source: Kak N, Burkhalter B, Cooper M. Measuring the competence of health care providers. Operations Research Issue Paper 2(1): Bethesda MD. Published for the U.S. Agency for International Development Quality Assurance Project, 2001. Reprinted with permission.)

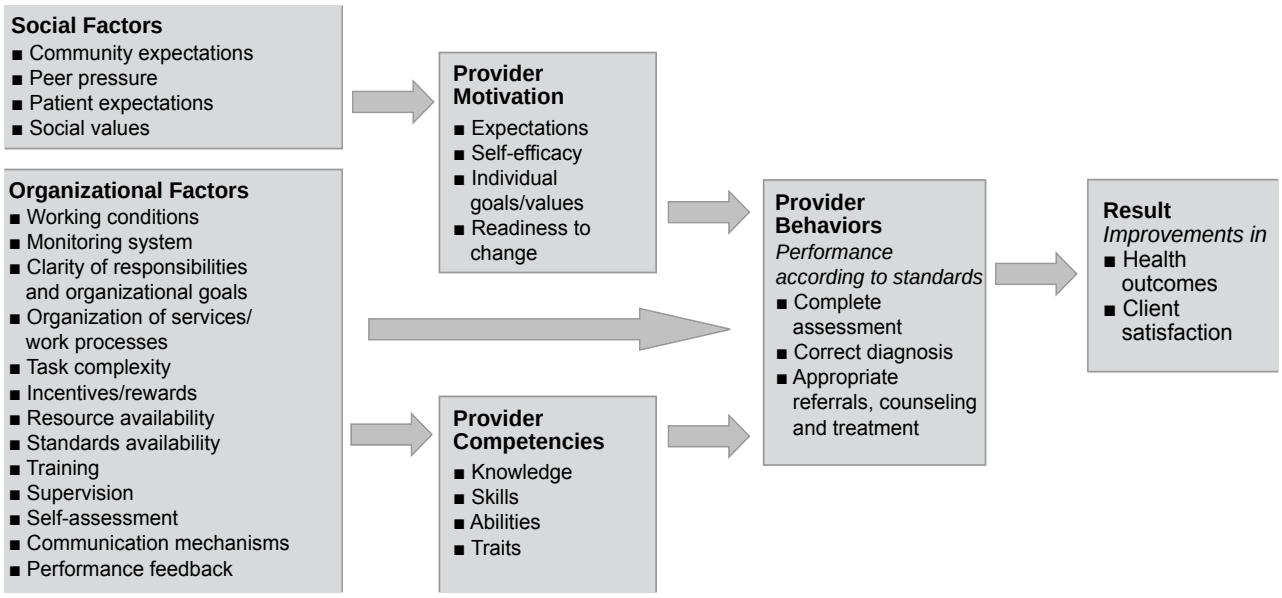


Figure 4.2: A framework for decision-making

Step 1: Collect information in a systematic way from discussion with the woman and her family and from health records, examinations, and laboratory tests in order to make a complete assessment of mother and/or baby.

Step 2: Identify actual or potential problems based on the correct interpretation of the information gathered in Step 1.

Step 3: Develop a comprehensive plan of care with the woman and her family based on the woman's or infant's needs and supported by the data collected.

Step 4: Implement the care plan, continually updating it within an appropriate time frame.

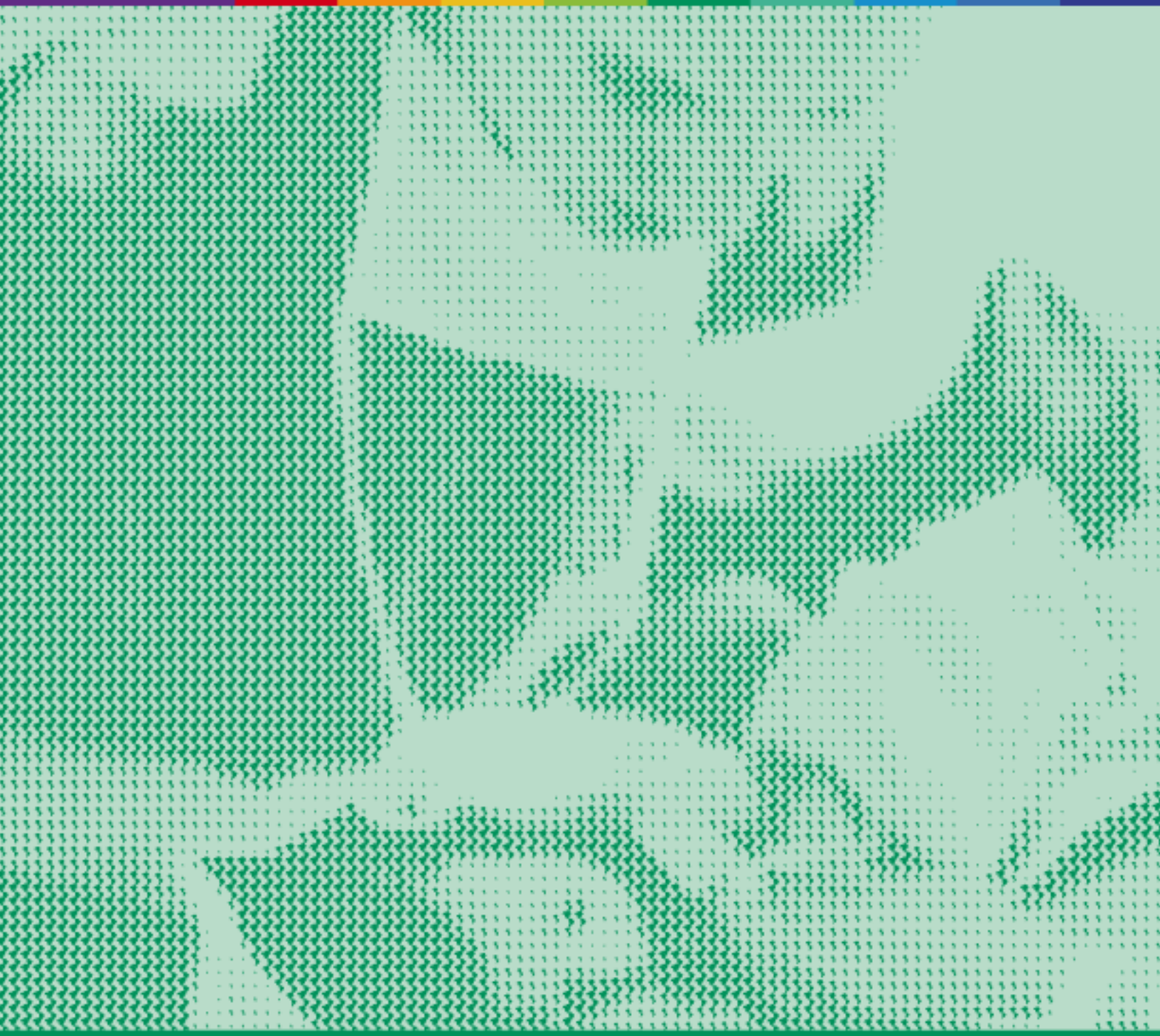
Step 5: In conjunction with the woman and her family, evaluate the effectiveness of the care given; if outcomes are unsatisfactory, consider alternatives, returning to Step 1 to collect more data and/or develop a new plan.

Figure 4.3: Making the ICM competencies useful at the country level

Steps	Purpose and application
1. Compare the ICM competency statements to any similar list of KSAs that may presently exist that describes the scope of midwifery practice in the country.	Policymakers and educators can use this approach to identify areas of consistency between the documents. They would then use this information to affirm the selection of a set of KSAs as a "basic competency for midwifery practice," as defined in regulatory documents, and to develop a curriculum for the education of midwives.
2. Identify specific ICM KSAs that are not presently reflected in other reference documents.	Policymakers and educators should deliberately include the ICM evidence-based "basic" KSAs as a "basic" function for midwifery practice in the country. *All ICM "basic" KSAs should be included in any country-based document in order that there be a uniform understanding of the scope of practice of midwives globally.*
3. Identify KSAs that are relevant to the scope of midwifery practice in the country, and that are essential to safe care.	Some or all of the task statements identified by the ICM to be "basic" midwifery skills might be selected for specific deliberation. The focus should always be on selecting KSAs that have clear links to evidence that the particular task is a *life-saving skill*. These KSAs would be identified as the priorities for supervision of midwives and for monitoring and evaluation of the continued competency of midwives in practice.
4. Identify regulatory barriers that would limit the midwife from performing a particular function.	The evidence of a linkage to safe care should be used as the basis for advocacy for adding a particular KSA to the scope of midwifery practice in any country or region, where it may presently not be an approved practice function.

Module 5

Developing a midwifery curriculum for safe motherhood: guidelines for midwifery education programs



5.1 Introduction

This module offers guidance for those seeking to improve reproductive health services to all, through strengthening the education required to develop the knowledge, skills, and abilities of all those who provide these health services. Particularly important are those services designed for making pregnancy, childbirth, and postnatal care safer. The content of this module offers guidance for development of a midwifery curriculum that is based on a philosophy and ethical framework of professional midwifery and the overarching principles of sound educational practice. It addresses considerations for developing a midwifery curriculum that is linked to the expected outcomes of the education process. It offers general guidance for effective academic and clinical teaching. It presents basic principles that underpin fair and valid evaluation of students in the theory and clinical phases of their education. In an annex to this Toolkit for strengthening professional midwifery in the Americas, the essential elements of a midwifery curriculum are offered as a resource for those who may be developing a midwifery education program.

5.2 The role of midwives in improving reproductive health services

Reproductive health is a concept adopted by the United Nations International Conference on Population and Development held in Cairo in 1994. It is a holistic concept that embraces women's health from birth to the menopause. Reproductive health is a crucial part of general health. It affects and is affected by the broader context of people's lives, including economic circumstances, education, employment, living conditions, and family environment. Social and gender relationships and traditional and legal structures may also affect women's reproductive health (Cottingham et al., 2010; Roseman and Reichenbach, 2010).

Attainment of health, including reproductive health, is seen as paramount by all concerned with public health. Achieving that is also crucial to reaching the ambitious objectives set out in the Millennium Declaration. In order to meet the goal of the "reduction of the maternal mortality ratio by three quarters between 1990 and 2015" and the goal of the "reduction by two-thirds of under-five mortality by 2015," it is vital to have a sufficient supply of suitably educated health workers. Midwives are a key part of this workforce, as it is they who often provide the first level of care for women and families and who work with communities to help promote health. They are able to recognize and take first-line action when complications arise. It is important that midwifery curricula are revised to embrace the concept of reproductive health in order to prepare midwives for their role and responsibilities in providing midwifery care within the broader concept of reproductive health. Without appreciation of the broader issues around reproduction and reproductive health, midwives will be hampered in their ability to offer the full range of services, including those that in the past were seen as beyond the confines of maternal and child health and family planning. Annexes 1 and 2 of this module have been prepared specifically to help review the current midwifery curricula in countries and to put steps in place to revise them or to develop new ones.

To meet families' needs related to reproductive health, appropriate services must be accessible and acceptable. Education on family health issues is required to help in the prevention of future problems in the reproductive health sphere. These services and education needs include information that is easily understood, skilled counseling, the early detection and management of health problems, and provision of appropriate care and rehabilitation.

Historical evidence has shown that a health system concerned with reproductive issues, based on midwifery care, helps in reducing maternal and child mortality and morbidity in a highly cost-effective way (Loudon, 1992). It is therefore suggested that well-educated midwives could serve as key providers of reproductive health care in order to improve

the general health status of women, men, and children, thus benefiting the whole of society. Finally, it is now well acknowledged that the critical intervention in reducing maternal morbidity and mortality and for ensuring a healthy start in life for the newborn is to have a competent health provider with midwifery skills at all births, i.e., a skilled attendant[1] (Koblinski et al., 2006; WHO/ICM/FIGO, 2004). The professional provider most able to offer all the skills required for providing effective care during normal inter-conceptional period, pregnancy, childbirth, and the postnatal period (including newborn care) is the midwife, although it is acknowledged other health practitioners may also possess some of the core set of essential midwifery skills. However, the skilled attendant, the midwife, needs to work within an "enabling environment," that is, to be supported by an effective health system and linked to a referral system for the management of obstetric and neonatal complications. It therefore follows that developing a competency-based curriculum for midwives that embraces the wider concepts of reproductive health is only part of what is required for building an appropriate professional cadre of midwives in order to achieve reproductive health for all.

It is acknowledged that in some countries a different name is ascribed to those who carry out the function and role of the midwife. Furthermore, in some countries the midwife (or country equivalent) may also have to carry out tasks in addition to those included in the scope of practice defined by the ICM in their core document, Essential Competencies for Basic Midwifery Practice (2010). For simplicity, the term "midwife" will be used throughout this document to refer to any person who functions in this occupational or professional role, whatever their title. However, the global variations in preservice preparation for the practice of the profession, and the lack of consensus in definition and scope of practice of the "midwife," limits what can be known about the role of midwives globally and their contribution to the skilled attendant workforce.

5.3 A philosophy of midwifery education

A midwifery education program should be based on an acknowledgement of the uniqueness of the individual, and the program must also promote equal rights regardless of sex, race, religion, age, and nationality. It should be committed to a life-cycle perspective of reproductive health, with a special focus on women's health and the needs of newborns. This means that it does not restrict the content of the curriculum to care during pregnancy, birth, and the postpartum and neonatal periods. It instead embraces the whole of a woman's life, and it also specifically addresses the circumstances of the country situation in which the family resides (e.g., specific health issues and concerns and epidemiological challenges). It should be a woman- and family-centered (men, children, adolescents) program, aiming to promote safe motherhood. The curriculum should increase the students' awareness of family health issues and sexuality within a framework of gender sensitivity on an individual and community level (Thompson 2004; Carolan and Hodnett 2007; Doherty, 2010).

The midwife must be prepared to deliver health services in a full variety of both urban and community settings, and at the various levels of the health system where services are delivered. A community-based perspective is offered in this guidance. The student midwife who is receiving clinical experience in community-based settings will be in contact with the people for whom she[2] will provide services and also those with whom she needs to collaborate in her practice, for

[1] A skilled attendant is an accredited health professional – such as a midwife, doctor, or nurse- who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth, and the immediate postnatal period, and in the identification, management, and referral of complications in women and newborns. (Making pregnancy safer: the critical role of skilled attendants. A joint statement by WHO, ICM, FIGO, 2004, World Health Organization, Geneva).

[2] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However, in a number of nations, men now enter this profession. The international definition has been updated to reflect a more gender-neutral language; however, this guidance uses the female gender for ease of use.

example, local leaders, women's groups, schools, and officials responsible for the provision of housing. Without a community focus, the future midwife risks being unable to grasp the realities of her clients' lives as they impact on the provision of reproductive health care. Nevertheless, clinical experience will need to be acquired in the full range of health care service settings, ranging from hospitals to community-based primary health facilities, to ensure that the students are exposed to a wide range of experience and have the opportunity to learn effective life-saving skills.

Women require care in pregnancy and childbirth and throughout their lifetime that is not only safe but that also meets their individual psychological, emotional, physical, social, and spiritual needs. The education of the midwife therefore needs to focus on meeting the holistic needs of the woman in a sensitive and competent manner, acting as her advocate and working in partnership with her, her partner, and her family to promote a safe and satisfying experience of childbirth and motherhood. The program must strive to prepare individuals who will be thinking, caring midwives with a sound knowledge base and competent clinical skills, by using student-centered learning methods that will develop critical thinking and also analytical and problem-solving skills. Students will be encouraged to reflect on their practice and take responsibility for their own learning, supported by educational and clinical staff. Students should be encouraged and motivated to develop into lifelong learners, capable of recognizing their own needs for continuing professional education and of taking every opportunity to meet them. Finally, the curriculum must also have a sound public health basis.

5.4 The ethics of professional practice

Fundamental to the professional practice of midwives is the professional ethic that underpins all that midwives do and how they function within society. The relationship the midwife has to women is critical to this ethical view. The general consensus of the global family of midwives is that this relationship is a partnership that is grounded in a belief in the normal processes of pregnancy and childbirth. Midwives believe that pregnancy and childbirth is a normal life-cycle event, but one that can in some (a minority of) cases become complicated and result in a life-threatening event.

Therefore, midwives see their professional duty and thus their primary function as acting at all times to ensure the well-being of the childbearing woman and her baby. To do this, midwives believe women should be empowered to assume responsibility for their health and that of their families. A core value is that midwives have confidence in, respect for, and trust in women and their capabilities in childbirth (ICM, 2008).

Historically, midwives have frequently been involved "with women" as agents of social change. Midwives have acted in partnership with women in many countries jointly to challenge a hierarchical and often paternalistic approach to health care. The primary aim of this social action has been to ensure a more equitable balance of power over women's bodies in order to maintain the basic principle of birth as a "natural life event."

In keeping with the characteristics of all social movements, the distinguishing feature of this collective action has been to represent the voices of those who have traditionally or historically been less well represented or underrepresented. In this particular case, the voices are those of women who do not wish to receive care for this natural life event designed with a medical and often male-dominated medical approach. The basic premise that underpins the professional ethic is that midwives and women together have shared beliefs and values and that "empowerment of women" for and during pregnancy, birth, and the transition to the new family dynamic is at the heart of appropriate midwifery care. This empowerment is facilitated by and through the close connections and relationship between midwives and women. Such beliefs must be at the heart of any program that aims to prepare students to enter the midwifery profession, and be reflected in all of the methods and strategies that define the program of study.

Midwives should be able to take on a more enabled, "for women" role. This then has implications for regulation, which should be "self regulated" to a point – but should also have input to that process from women themselves, and from fellow professionals (whoever is appropriate in each culture – general physicians, nurses, obstetricians). Midwives should be very involved in the process, and should possibly control it, but if they are the only ones involved, the danger is that a "for midwife" culture develops, protecting midwives and perpetuating problems…. The process needs to cut through that, and protect women from the possibility of that happening. The formal process can also be backed up by a less formal process (i.e., peer review), to ensure lots of midwife-to-midwife contact and learning. This "with-women/for-women" stance can then form a foundation for what "professionalism" looks like for midwifery. We cannot be "not professional"; as we then take on too much of the identity and shackles of the women we are meant to be working with. Neither can we be arrogantly detached from the individual, in the way that we have all seen obstetrics (and indeed midwifery) at its worst. We need to be able to form a "contract" with women, to deliver that contract (therefore to find ways around blocks and barriers in the society), and follow up on it, and at all the time respecting women's individuality and the culture in which she lives. This all implies enough education to do this well, and enough power to influence the system. This is what I would describe as "professional."

Source: Professor Mary Renfrew, author, professor, and chair of WHO Making Pregnancy Safer Strategic Review Committee 2003

5.5 Guidelines for midwifery education programs

5.5.1 - Program aims

Midwives are essential to promoting reproductive health in general but especially with regard to helping reduce both the very high global maternal morbidity and mortality rate and the unnecessary high toll of newborn deaths. The midwife is recognized as a principal protagonist in achieving these objectives. Therefore, priority must be given to ensuring the quality of education of midwives as well as to making sure that sufficient numbers of midwives are educated to meet the needs of the population.

The midwifery curriculum should prepare students to:

1. Become safe, competent practitioners who are able to practice autonomously to promote sexual and reproductive health.
2. Be caring and sensitive and able to work alongside women and their families in the community and in health facilities, adopting a partnership model to educate, advise, facilitate choice, and respond to individual needs.
3. Develop the ability to work well within a multidisciplinary team to promote reproductive health.

4. Build up good relationships and liaise with community leaders and other relevant personnel in the community in order to increase the uptake of women's reproductive health care, promote health education strategies, and organize a reliable plan for birth care in the event there is need of transport or referral to other health practitioners or higher levels of facility-based services.
5. Make a positive contribution to the reduction of maternal and infant mortality and morbidity by recognizing life-threatening conditions early and taking timely and skilled action.
6. Take responsibility for their own learning, by promoting access to appropriate clinical and theoretical support and encouraging the skills of reflection, critical analysis, and evaluation.
7. Reflect on their practice in order to promote learning from their experience and thus enhance the future care of women and their families.
8. Recognize that learning is a lifelong process and take every opportunity to keep up to date with new knowledge and research findings and to enhance their practice with all available forms of continuing professional education.
9. Develop into midwives who value their occupation/profession and contribute to the development of midwifery by advocating change, where necessary, and by conducting research aimed at improving the care given to women and their families.
10. Develop into effective managers of a caseload and of health facilities.

A glossary of terms related to midwifery education

Accredited/accreditation: The award of credits for educational achievement. The accumulation of the required number of credits at appropriate levels of academic achievement usually leads to an award.

Accredited/accreditation: A process and procedure of peer review by which an education program is acknowledged as meeting quality standards.

Advanced midwifery studies: The study of midwifery theory and practice at a level that is higher than that required for basic midwifery education.

Assessment: Planned methods of ascertaining the standards of knowledge and skills attained by students.

Competency-based education: Teaching, learning, and assessment activities that are sufficient to enable students to acquire and demonstrate a predetermined set of competencies as the outcome of learning.

Curriculum: A planned course of studies; the designated program of theoretical and practical experiences to be acquired over a period of time, leading to intended learning outcomes.

Diploma: A certificate awarded in acknowledgement of completion of a program of studies.

Degree: A status conferred by a college or university in acknowledgement of completion of a program of formal academic studies.

Direct-entry midwifery program: A program of midwifery studies that admits students who have not previously completed a program of prior health professional education.

Examination: A formal method of assessment in which the students undertake tests under controlled conditions and according to specific rules.

Intended learning outcomes: Specific statements identifying what the students are expected to achieve.

Module: Individual courses consisting of a number of hours of learning and a focused unit of content that a student is expected to undertake. Many programs are now modularized, that is, constructed of a number of modules to be learned over a specified time frame.

Placements: Clinical areas where students obtain practical experience.

Preceptor: A health care provider (midwife or other health professional) who offers direct supervision during clinical student placements, under the general supervision of the midwife teacher.

Problem-based learning: A method of teaching using problems as a basis for student activity.

Student-centered teaching and learning methods: Teaching and learning methods that actively involve the students in their own learning.

5.5.2 - Modes of entry into a midwifery program, and length of program

Current educational best practice emphasizes competency-based learning, in which an individual receives sufficient opportunity to acquire and to demonstrate a body of knowledge and a beginning, safe, level of performance in each of the skills that have been determined to be essential to midwifery clinical practice (Cowan, Norman, and Coompamah, 2005a; Mallaber and Turner, 2006; Pehlke-Milde et al., 2006; Klein and Fowles, 2009; Fullerton et al., 2010). Therefore, midwifery programs should be designed to accommodate, within reason, the opportunity for individuals to receive credit for prior learning (Scott 2007; Cubit and Leeson, 2009) and also to pace through the curriculum with accommodation for acceleration of learning or remediation of individual learning needs.

Countries may offer a variety of pathways for entry into the midwifery profession (Fealey et al., 2009; Bogren, Wiseman, and Berg, 2012). The program design may vary, but the competency-based outcomes of midwifery education should be equivalent. In other words, although there may be variability in the qualifications of students admitted to those programs (e.g., basic students, those who have prior qualifications in some allied health field, or those already fully qualified as nurses) and variability in the length of the course of midwifery studies, *the competency- based outcomes of midwifery education should be equivalent*. Individuals who qualify to be titled as a midwife according to the international definition should be educated to a common standard and a common set of competencies (Module 4).

Midwifery education programs based in universities follow academic conventions for the length of programs of study leading to the award of academic degrees. This is commonly up to four years of study at the baccalaureate degree level, and an additional one or two years for the post-baccalaureate certificate or the master's degree. A few countries have introduced the concept of doctoral preparation as the entry-into-practice level (Avery and Howe, 2007; Edwardson, 2010).

5.5.3 - Direct-entry midwifery programs

Students who are admitted to direct-entry midwifery programs will not have completed a basic nursing program. For those without a general nursing qualification the education program should extend over a period of time sufficient to accommodate the acquisition of basic health skills prior to the focus on midwifery studies. ICM standards call for a minimum of three years of theoretical and practical study for programs of this type. One of the two model curricula included in the annex to this Toolkit for strengthening professional midwifery in the Americas provides guidance for content and sequence for programs of this type.

These direct-entry programs have the advantage of being attractive to individuals who may not have an interest in the generalist program of nursing studies, but who, nevertheless, are attracted to midwifery as a practice occupation/ profession. Direct-entry programs are typically designed to introduce the content of the full curriculum of midwifery studies in a progressive fashion, as students acquire the basic theory and practice from the health sciences, integrated with a program of theoretical and practical content in midwifery studies. The core content of the program should be focused on the fundamental aspects of sexual and reproductive health and primary health care, complemented by the knowledge, skills, and behaviors that characterize the scope of midwifery practice. Some examples of subject matter would include:

- The biological and behavioral sciences;
- microbiology and infection control;

- pharmacology;
- health and ill-health and factors that contribute to or inhibit health, including nutrition and lifestyle issues; especially safe sexual health;
- the social determinants of health;
- human development and the life-cycle approach;
- philosophy of midwifery, including professional ethics;
- the primary health care approach and care plans;
- the disease process; diagnostic investigations; medical and surgical conditions that may complicate reproductive health;
- basic clinical skills, including the techniques of health assessment;
- interpersonal skills and counseling;
- care of the dying patient and grief and bereavement;
- the core content of midwifery practice across the reproductive cycle.

Clinical experience would be arranged to complement theoretical learning. Development of the student's critical thinking skills, self-awareness, and confidence are particularly important, and especially so in countries where education and schooling opportunities for girls may be limited or where strong gender differences exist in the education system.

5.5.4 - Midwifery education programs that build on basic nursing preparation

Students who are admitted to these post-registration programs will have already completed a program of basic nursing education. Applicants who have been out of the nursing workforce for some period of time may need an additional period of preparation (a "bridging module") to enable them to enter into student status again. They may also need an introduction to modern educational and clinical practices, including the use of computers and other digital technology.

One of the model curricula offered in the annex to this Toolkit for strengthening professional midwifery in the Americas is designed to be 18 months in length for those who are registered general nurses. The program leads to the award of a diploma or midwifery certificate. The previously acquired nursing competencies offer a foundation for, and underpin, the knowledge and skills of midwifery practice. This enables the midwifery educator and student to focus immediately and directly on the added theory and skills that are specific to the midwifery competencies that must be acquired. The 18-month length of the post-nursing curriculum is in accord with ICM Standards and *Guidelines for Midwifery Education* (2010).

5.5.5 - Combined programs of nurse and midwifery education

Nursing and midwifery education are often combined in a single program of study. The curriculum for the midwifery education component of this combined program should be of sufficient length to accommodate acquisition of the knowledge and skills that have been linked to safe and effective practice of midwifery. The midwifery content of this program is similar to that described for direct-entry programs, primarily so that all students (those enrolled in university-based programs as well as direct-entry students) can follow an educational pattern that is similar in length and content. The nursing foundation and/or the clinical practice experiences that form part of the program can be longer than

the additional 18 months that would be required to meet the ICM 3-year minimum standard for length of midwifery education programs, if considered necessary. It is particularly important that the minimum requirements for clinical experience in the midwifery curriculum are met and that the students develop into competent practitioners, whatever the mode of education. The ICM does not endorse this program design, primarily because a combined curriculum is rarely sufficient to fully prepare the graduate for comprehensive and quality practice in either the profession of nursing or midwifery.

5.5.6 - Curriculum models

Two generic curriculum models have been developed that translate the ICM definition of a midwife into an education program that can be adapted for use in any country. The curricula are presented in the annex to this Toolkit for strengthening professional midwifery in the Americas (rather than in this module).[3] The models propose a content outline that is independent of the structural design of midwifery education programs within a country's educational system.

The curriculum content proposed in the models is congruent with the WHO *Standards for Maternal and Neonatal Care*, which are part of the WHO *Integrated Management of Pregnancy and Childbirth Care* (IMPAC) package. The WHO standards cover the most relevant topics that need to be addressed for ensuring quality maternal and neonatal health services.

The content of the curriculum models also reflects the ICM core competencies for midwifery practice (Module 4 of this toolkit). However, the proposed content includes knowledge and skills that have been identified by the ICM as basic, i.e., those that would be expected of all midwifery practitioners, and might be characterized as core skills. It also contains some content that has been identified by the ICM to be *additional*, i.e., those that enhance the scope of practice, and that might be particularly important depending on the environment in which the individual practices (e.g., performance of vacuum extraction of the fetus). Those involved in developing a midwifery curriculum must be advocates to ensure that the regulatory authority for midwifery practice in the country (Module 2 of this toolkit) is aligned with the scope of practice as detailed in the ICM core competency materials.

5.6 Student considerations

There is little basis for establishing minimum requirements for screening and admission of students to programs of midwifery study. However, considerable wisdom has been acquired through many years of practical experience (McCarey, Barr, and Rattray, 2007). There are certain individual characteristics that facilitate the acquisition of a core knowledge base and the achievement of competency in the performance of clinical skills. These are presented in Table 5.1.

[3] The document can also be retrieved at: http://www.internationalmidwives.org/Whatwedo/Policyandpractice/ICMGlobalStandards-CompetenciesandTools/tabid/911/Default.aspx

Table 5.1: Student admission criteria

Age	There is no evidence to support a minimum age requirement for admission. However, students must have acquired a certain level of maturity and self-reliance. A minimum age of 18 is commonly established, but primarily because that is an age that is also linked to completion of secondary education, or, in some countries, the age of legal majority.
Education	ICM standards require that the students have completed a formal secondary school education (commonly lasting 12 years) and achieved the school completion certificates appropriate to their country. In those countries where 12 years of schools is exceptional, then 10 years of schooling could be considered, although this would not comply with ICM standards. In these cases it would be important (if not essential) to establish some form of entry test to ensure that the applicants have a sufficient level of literacy skills and comprehension as well as mathematical abilities. Some countries have experimented with offering foundation programs to applicants with 10 years of schooling to provide the opportunity to enrich the fund of knowledge and generic skills and/or to complete the full formal program of secondary school education, before entry into the midwifery program.
Literacy and numeracy	An entry test may be required to assess literacy skills and comprehension, including language, if the curriculum is presented in a second language. Mathematics ability and basic intelligence are often also tested (Rhodes-Martin and Munro, 2010).
Good health	It is consistent with an ethical foundation for midwifery practice that a student not have a current health condition that could be transmitted to the woman and her infant during the usual and customary delivery of health care services.

5.7 Infrastructure for establishing midwifery education

5.7.1 - Educational system and resources

The curriculum models that are offered in the annex to the this toolkit reflect a generic midwifery curriculum that may be reviewed and adapted to suit the particular circumstances in each country. It is appreciated that governments in countries where this program is adopted may choose to integrate it within their existing educational system. Appropriate educational sites may already exist, but these should be audited to ensure that they meet the requirements for implementing this curriculum. A review of resources required to implement this curriculum will be needed, and any necessary additional resources acquired to enable the program to be successfully implemented. *The ICM Standards and Guidelines for Midwifery Education* (2010) offers a valuable resource (Thompson, Fullerton and Sawyer, 2011).

5.7.2 - Regulatory body

If not already in existence, a regulatory body should be established that would be responsible for licensing midwives to practice. The regulatory body should also be a partner in the academic processes of validation and accreditation of midwifery programs to ensure standardization across the country and quality control. Another function of this body would be to monitor the outcome of preservice education programs and offer guidelines on education and practice, as appropriate. It would also maintain a register of qualified midwives (See Module 2 of this toolkit).

5.7.3 - District and regional involvement

District and regional health personnel, policymakers, managers, and providers (clinical midwives and, where available, medical practitioners with specific obstetric and neonatal competencies) should also be involved in the provision of midwifery education in their areas. District health administrators may have a direct role to play in allocating financial resources to support community-based education programs. Policymakers and local health managers may have an important role to play in enabling access to suitable clinical areas at different levels of the health service and in ensuring adequate numbers of up-to-date and competent staff who can mentor and supervise the students in the community and in clinical practice areas in health facilities. Their role may also extend to providing adequate resources and supplies required for good clinical care and assisting with the provision of residential accommodation and transport for both students and their academic mentors.

5.7.4 - Community leaders and women's involvement

In order to achieve the necessary partnership model it is important to find innovative ways of including community- and faith-based advocacy organizations, local families, and women, including representatives of local, district, regional, or even national women's groups in the program (Fox, 2003). In some places it will be possible to include such representatives on committees for developing and monitoring the education program. It will always be possible to invite such representatives to provide input into the program in some meaningful way.

5.7.5 - Educational institution

Midwifery education programs may be accredited and offered at the certificate, diploma, or degree level, depending on the local higher education structures. Whatever level is chosen it should ensure that midwives completing their program can take a full part in the health system and ideally should be at the same level as other health care providers in their respective country. Therefore, an educational institution capable of academic accreditation should be involved in both the development of the curriculum and in the provision of midwifery education.

It is likely that most programs being newly developed in countries in which the profession of midwifery is emerging will be initially offered at the certificate or diploma level. Degree- level programs will need sufficient midwife teachers and other teaching staff with an appropriate degree to teach midwifery and related subjects at this level, as well as sufficient applications from students with high general educational qualifications to enable them to study at the degree level. Regulatory bodies responsible for licensing midwives to practice should be partners in the academic processes of validation and accreditation of the educational program to ensure standardization, quality control, and an outcome of competent, caring midwives.

5.7.6 - Clinical practice experience and practice sites

Students must have sufficient supervised practice to acquire competency in all necessary skills prior to completing their program of study. There is no exact formula for establishing the ratio of academic studies to clinical practice. ICM standards require a minimum ratio of 40% theory and 50% practice. Some educators have recommended that a minimum of 60% of the program should be devoted to clinical practice.

Some countries have established standards for the minimum numbers of experiences with various clinical skills in both simulated and actual practice. Recommended minimums are associated with competency development, even though acquiring specific numbers of experiences does not necessarily mean that competency has been achieved by any individual learner. The theory of competency-based education would support an individualized program design so that the opportunity to acquire competency in clinical skills is customized according to need (Frank et al., 2010). For example, students may already possess certain competencies acquired through work experiences prior to entering the student role. These students should be allowed to demonstrate their skill, for purposes of verification and documentation, and then be allowed to concentrate on acquiring skills that are new to them. Similarly, some students will require additional time and practice before they can demonstrate their competence and confidence in performing a specific function.

In any circumstance, all clinical experiences must be conducted under the direct, and later, indirect supervision of a clinical teacher/tutor (preceptor or mentor). During clinical practice, experience and teaching should enable students to relate the theory of the topic(s) they are studying to the circumstances of practice.

All sites for student clinical practice must be assessed as appropriate for the education of student midwives. An audit of all practice sites should be conducted, using an agreed-upon format, to ensure that all necessary requirements for quality education are present, including sufficient and varied clinical experience. In all placements, experienced midwives or other appropriate qualified staff will be required to act as clinical teachers/tutors and instruct, supervise, and assess students in clinical practice.

Clinical experience will need to be acquired in the full range of health care service settings, from district or regional hospitals to community-based primary health care and maternity care facilities. This will ensure that the students are exposed to a wide range of experience and have the opportunity to learn effective life-saving skills appropriate and relevant to the place where the midwives completing their education will practice.

For example, during the labor and childbirth module, students should have experience in a labor ward of a district or regional hospital that is equipped to provide comprehensive obstetric care (including surgical management of complications) in order to learn the management of complicated cases and life-saving skills. The preconception, antenatal, postnatal, and gynecology experiences may also be acquired in higher level care facilities, depending on how these services are organized locally. Attendance at some hospital outpatient clinics would likely be required, in addition to community clinics, to extend the students' experience in family planning, sexually transmitted infections, and medical conditions such as diabetes, hypertension, and cardiac disease. A period of "free allocation" should be offered, to enable the students to fill gaps in their clinical experience and further improve their life-saving skills, as well as to develop self confidence.

5.8 Teachers of the midwifery education program

It is essential that this midwifery program be led by qualified midwives who have been specifically prepared for their role as teachers and who are both competent and confident midwifery practitioners as well as competent teachers. In order to maintain their clinical skills they should spend regular and frequent periods working with and supervising students in clinical practice. Midwife teachers require an in-depth knowledge of research-based midwifery, both theory and practice, and should also ideally be capable of conducting their own research. The midwife teachers also need a good knowledge of the principles and practice of education and should be comfortable with and committed to modern, participative approaches to adult education, which are widely accepted as being the most effective methodology (Knowles, Holton, and Swanson, 2005). Broadly, this means adopting a student-centered, rather than a teacher-centered, approach to education and using a range of teaching and learning methods that encourage students to be actively involved in their own learning.

Midwife teachers also need opportunities for ongoing professional educational development on a regular basis to enable them to keep up to date in both midwifery and education theory and practice. This is particularly important in order to improve their effectiveness and maintain their interest and enthusiasm (Campbell et al., 2010).

Midwives in current clinical practice serve important roles as clinical preceptors, under the indirect guidance of the teachers/tutors of the education program. The value of this service is immeasurable, because the participation of clinical teachers enables the academic institution to greatly expand the number of students who can be offered admission to the program. However, the skills of these clinical teachers; their ability to serve in the role of preceptor/tutor/mentor; and their capacity to offer supportive guidance, supervision, evaluation, and feedback are critical components in the quality of the educational experience. Academic teachers/tutors must find ways and means to provide “training for the trainers” in order to promote and maintain the standards of quality expected of the teaching faculty, and also as a way of acknowledging their invaluable service (Holland and Lauder, 2011; Durham, Kingston, and Sykes, 2012).

Other professionals will also be involved in the education of midwives. These may include, for example, obstetricians, pediatricians, nurses, and other medical staff, along with public health officers, pharmacists, epidemiologists, microbiologists, psychologists, and other appropriate subject specialists.

5.9 Resources for teaching and learning

Sufficient accommodation and resources for teaching and learning are essential. These include adequate classrooms, seminar rooms, and a library that is well-stocked with suitable books, journals, and other appropriate literature and learning resources, such as audiovisual aids, models, and charts. A selection of the equipment used in midwifery and obstetric care is an important asset for the skills-learning laboratory, along with the increasingly available simulation models for various tasks and procedures (Cooper et al., 2012). The ICM has developed a model list of equipment and supplies that may be useful to educators who are setting up a skills-learning laboratory (ICM, 2012).

Educational technology is an important asset for the teaching and learning environment. There are many educational aids (e.g., videos) that are available to support both teacher-directed and student self-help learning. Computers that

are linked to the Internet, where available, would be an additional resource for education in reproductive health. Some countries have acquired a level of Internet connectivity that accommodates the opportunity for students to access some (or all) of the curriculum material via the Internet, while remaining in the community to acquire clinical practice experience.

The World Health Organization prepares a large quantity of literature related to reproductive health that is very helpful for teaching and learning purposes. Education materials are also produced that are suitable for midwives. These include the midwifery education modules (WHO, 2006), and a number of other practice guides.

5.10 Teaching and learning methods

5.10.1 - Student-centered methods

Students should be active participants in their own learning throughout the program. Student-centered learning methods that promote active participation by the students include:

- Problem-based learning;
- case studies;
- discussion and other kinds of group work;
- seminar presentations;
- experiential learning (e.g., role-play, simulation);
- workshops;
- projects.

5.10.2 - Problem-based learning

The educational method of problem-based learning is a key teaching and learning strategy (Raisler, O'Grady, and Lori, 2003; Rowan, McCourt, and Beake, 2009; Schmidt, Rotgans, and Yew, 2011; Smithburger et al., 2012). Problem-based learning is a way of teaching that uses "real life" situations as a stimulus to initiate the problem-solving process. Ways of collecting the knowledge necessary to solve the problem are discussed and evaluated by the group and the teacher. Critical thinking is encouraged. The knowledge will usually include several disciplines, for example, one problem may involve biology, psychology, sociology, midwifery, and pharmacology, whereas another problem may require a different mix of disciplines. The necessary skills will also be identified and, in consultation with the teacher, plans are made for the students to learn these skills, initially on models, if appropriate, and then in clinical areas under supervision.

In order for problem-based learning to be effective, the teacher needs to act as a facilitator and provide the students with support and guidance to appropriate resources, although they will also be expected to seek out the information they require for themselves (Rowan et al. 2007; Rowan, McCourt, and Beake, 2008). The students will present their work based on problem-solving in seminars, case studies, and/or role play to their peers and teachers. Following new learning, the material is summarized and integrated into the students' existing knowledge and skills.

5.10.3 - Reflection

Reflection, which essentially involves learning from experience, is another mode of learning that should be promoted in the theoretical and practical aspects of the curriculum (Murphy, 2004; Wilding, 2008; Branch, 2010; Groot et al., 2012). The stages are often described as a cyclical process since reflection should lead to action and then further reflection (Figure 5.1).

This mode of learning requires the students to keep reflective diaries during their clinical practice and to select incidents to be critically discussed in groups when they are in class or with teachers in individual or small group tutorials. Reflective journaling allows the individual to review patterns of behavior that are characteristic of individual responses to situations. This internal review process, when combined with feedback received from others who observed a particular event or interaction, offers the opportunity to gain a wider perspective of how others perceive an individual's social-emotional response patterns, and perhaps to identify better (less emotional or more reflective) approaches. Reflection as a process can also be promoted during case study work and other classroom activities.

5.11 Assessment of knowledge and skills

The ultimate goal of student assessment is the promotion of best practice (Holmboe et al., 2010; Winters and Echeverri, 2012). A valid and reliable assessment strategy is essential to ensure that the students achieve the knowledge and skills required to be competent midwives (Taylor, 2009). The importance of using multiple means (approaches) and multiple methods (tools) for evaluation cannot be overstated (Norman et al. 2002; Fullerton and Ingle, 2003; Leung, Mok, and Wong, 2007; Bensfield, Olech, and Horsley, 2012). Various strategies are presented in Table 5.2.

Table 5.2: Assessment formats that may be useful for measuring knowledge and skills

Knowledge	
Examination items developed by the teacher	**Demonstration formats developed by the student**
Matching	Anecdotal recordings (also known as process recordings) - written reflections of a lived experience
Multiple choice	Exhibitions
True-false	Extended answer essay
	Oral essay
	Product items (e.g., portfolios and projects)
	Short-answer essays
	Written critique or review/formal paper
	Demonstration
	Discussion
Skills	
Clinical simulations	
Clinical demonstration	
Objective structured clinical examinations	
Standardized patients	
Performance items (e.g., clinical checklists)	

Sources: Norman et al., 2002; Newble, 2004; Nehring and Lashley, 2004; Kneebone, 2005; Oermann and Gaberson, 2005; Clifton and Schriner, 2010; Kaplan, 2010; Memon, Joughin, and Memon, 2010; Strupe, Huynh, and Haines, 2010; Su and Juestel, 2010.

Assessment strategies should be:

- Action-oriented - actively seeking solutions to problems, trying alternatives;
- teaching-oriented - focused on finding more effective ways to communicate observations and experiences;
- participatory - engaging students in the self-evaluation of their own progress;

- inclusive - including multiple means of assessment in order to provide as many opportunities as possible to gauge the teaching/learning process (Baig, Violato, and Crutcher, 2010);
- responsive - offering feedback, incorporating change;
- linked, of course, to the educational objective and the intended learning outcome.

The assessments should cover both theory and practice and include a range of methods.The outcomes of student assessment should document:

- A knowledge base for practice;
- cognitive abilities;
- communication skills;
- professional values;
- psychomotor and technological skills essential for delivering care;
- problem-solving, decision-making, and critical-thinking abilities;
- the ability to handle ambiguity and initiate and respond to change;
- the process of learning to learn;
- acceptance of responsibility for one's own actions and decisions;
- thinking and acting like a professional;
- a sense of commitment to be responsible for actions;
- awareness of the need for accountability for actions and decisions related to practice (cognitive dimension);
- acceptance of responsibility for their own care of women (value dimension).

A supportive clinical environment is essential to fair and impartial assessment. Students must feel free to learn. They must feel valued as individuals. They must be able to make progress at a pace that may vary from that of others. And they must also appreciate the assessment process as an assisting, not controlling, strategy.

5.11.1 - Assessment of theory

There will be need for *formative* assessments throughout the program of study, as, for example, during and on completion of each module or course (Cleland et al., 2010). There will also be need for *summative* assessment at the end of the program to assess overall learning and to demonstrate the integration of knowledge and skills (Embo et al., 2010). Formative assessment of student learning should include an assessment of the ability to engage in *critical thinking* (Bulmer Smith, Profetto-McGrath, and Cummings, 2009; Forneris and Pden-McAlpine, 2009).

5.11.2 - Assessment of clinical work

Clinical assessment is a process by which judgments are made about a learner's competencies in practice. In clinical practice, a student initially learns by observation, demonstration, and practicing under direct supervision. The student continues learning as she develops her skills under indirect supervision, until she is assessed as competent. In addition, the student gradually moves from simple skills to managing more complex situations that require the knowledge and skills to assess the situation correctly, correlate the data, make appropriate decisions, implement the correct actions competently, and evaluate the outcomes. A clear progression from simple tasks towards complexity will thus be practiced throughout the program, with a gradual increase in independence until the student is pronounced a competent practitioner.

Simulations of practice are often used in the early stages of the learning process. They may also be preferable under the circumstances in which direct observation may be too time-consuming (e.g., when seeking to observe management of critical skills that are used under circumstances that occur with low frequency) (Andrighetti et al., 2012). However, because simulations are removed from the actual context of the clinical situation, they do not reflect the very real and competing demands of the actual practice environment, such as time pressure and urgency of the decision-making process (Kneebone et al., 2004; Cowan, Norman, and Coompamah, 2005b; Branch, 2005).

Observations of students performing in the actual practice setting are the most direct method. Clinical skills checklists are useful for this purpose. Checklists are used as the external, objective evidence that the student has acquired the ability to translate cognitive knowledge into practical performance of a skill (the correct steps in the correct order, with consideration of client safety). These checklists can be used in simulated practice with anatomical models (Kaplan, 2010), with standardized clients (actor patients who offer scripted responses), and in actual patient-care situations (Rhodes and Curran, 2005; Paterson et al., 2004; Carlough and McCall, 2005).

Supportive supervision and feedback are keys to *formative* clinical assessment. Feedback must be:

- Precise and specific;
- inclusive of both verbal and visual dimensions;
- given at a point in time that it can be clearly linked to performance;
- adapted to the learner's style;
- inclusive of strategies to improve performance;
- documented carefully and completely.

Summative clinical assessments should be linked to expected standards of performance. Assessors may be mentors, midwife teachers, and, for some skills (e.g., those necessary for life-saving), medical staff. Assessors should themselves be trained to conduct student assessments in fair and objective ways (Reubenson et al., 2012).

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5.12 Making decisions about student performance

5.12.1 - Setting the pass or fail standard

Making decisions about student performance is essential to any assessment of competence. When assessments are used for summative purposes, the score at which a student will pass or fail also has to be defined. The methods by which these decisions are made should be documented, accountable, and defensible (Howley, 2004; Ricketts, Freeman, and Coombes, 2009).

Grading systems have been developed to reflect either normative or criterion-referenced pass or fail standards. *Norm-based evaluation* compares one learner's performance with the performance of other learners in the group. *Norm-based evaluation is clearly not appropriate when performance* ***must*** *be at a certain level* – as in health-professions education, where the public must be protected from practitioners who cannot perform to an agreed-upon standard. This approach to standard-setting would also be of particular concern in countries where there are a number of midwifery education programs. The pass or fail standard for students should not be dependent on the circumstances under which the students acquire their education, but rather, on the basis of a common, and justifiable, expected standard of performance (Stern et al., 2005).

Criterion-based evaluation requires that the students attain certain essential knowledge and skill and meet a clearly defined standard of performance that is established well prior to the time of assessment, and justified on the basis of safety or quality. There are several well-established methods for establishing a criterion-referenced pass or fail standard for both classroom and clinical achievement (DeChamplain, 2004; Downing, Tekian, and Yudlowsky, 2006; Cohen-Schotanus and Van der Vleuten, 2010; Sturmberg and Hinchy, 2010). These methods have, in common, a focus on the "borderline candidate," the individual whose performance is variable, and "on the margin."

If the student fails to achieve the required standard, the assessment must be repeated. Competency-based education schemes will provide the opportunity for the student to repeat the assessment, acquire additional (remedial) learning opportunities, and/or be tested in a different fashion (for example, substituting an oral for a written examination), but with the same outcome criteria. There is no general standard for the number of times that a student should be allowed to repeat any single assessment. Standards that are set by the individual midwifery programs should be established with consideration of fairness to other students, and consideration of the impact on the women who receive care from students during the learning process. The standards may need to be approved by the accrediting body (where available). The appropriate number of credits should be awarded after each successful summative assessment.

5.12.2 - Marking

Written assessments (also known as constructed responses) should be marked using well-prepared guidelines. A list of the major elements that students should include in the ideal answer should be prepared in advance. A decision about whether partial credit will be given should also be predetermined, such as for when the student provides some, but not all, of the ideal elements. It is helpful to write brief comments on each paper to point out the areas of strength and weaknesses, so students receive feedback on why their response received the score that it was assigned.

Each essay should be marked by a second person that preferably does not know the mark given by the first marker, to ensure marking consistency. Alternatively, to check for marking consistency, a second marker should mark a sample

of all students' scripts. It would be necessary to seek the opinion of an additional reader in the event that there is disagreement among those who mark these examinations.

Constructed-response items are perhaps easier for teachers to write. However, the marking of these items is very expensive in terms of time and effort, and the marking is subject to interpretation and subjectivity unless clear performance criteria have been developed in advance.

Selected-response examination formats (e.g., multiple-choice examinations) are objectively scored. There are many challenges to developing this type of examination, and teachers must be well educated in the item construction process. However, well-constructed selected-response examinations lead to answers that are either correct or incorrect. Scoring may be done by hand, although there are many computer-assisted methods (e.g., document scanners) that can be used for this purpose. Additionally, there are many software programs that can provide very valuable feedback about properties of the examination items themselves, including the degree of difficulty of each item, and the degree to which a correct response is more likely to be selected by the more competent respondent. This can help identify candidates who are likely to be attracted to common errors. Additional or remedial education can be undertaken with these students.

5.12.3 - Quality considerations in the selection of assessment tools

Clear written criteria and well-formulated assessment tools will be required for each assessment. There are a number of technical and practical considerations that are essential when selecting a tool (e.g., a standardized examination, a clinical checklist) that will be used for student assessment.

Validity refers to the relationship between the measurement tool and the purpose for which it is intended. That is, a valid tool is capable of measuring what it is intended to measure. Evidence in support of tool validity may include demonstration that the content of the tool (e.g., the statements or questions) has been selected (or affirmed) by experts in that content area, or has been linked to the evidence-based literature. There is also a certain logic that argues that a tool should have the appearance that it is relevant to the purpose. This is often called *face validity.* It serves the purpose of increasing the acceptability of the tool to those with whom it will be used.

Reliability refers to the reproducibility of results obtained from use of a tool. There is a certain degree of measurement error that is associated with any measurement instrument. Nevertheless, a reliable tool will generate similar results (within a certain degree of measurement error) when it is used again, with the same population, under similar circumstances, within a reasonable period of time between measurements. The tool is "trustworthy." The documentation that should accompany any measurement tool should provide the data that was generated when the tool was tested for reliability. There are a number of different approaches to the assessment of reliability. The types of measurement instruments used in student assessment are best assessed for reliability using the approaches known as test-retest reliability (when applied to an individual) and inter-rater reliability (when used by two or more assessors who are each independently assessing the same individual or group of individuals). An agreement of 70% between scores achieved on these repeated administrations (the upper limit of "modest correlation") is the minimal acceptable level of evidence of instrument and/or rater reliability (Reubenson et al., 2012).

Of course, even the most valid and reliable instrument will not be useful if the process for using the tool is too burdensome or too costly. The feasibility of using the tool must be carefully considered as a component of the tool selection effort.

5.13 Quality assessment

5.13.1 - Assessing quality

Quality in education is assessed by measuring what is provided and then comparing this to what is expected (Dulski, Kelly, and Carroll, 2006). If this evaluation reveals deficiencies or weaknesses, for example, poor staffing levels, poor standards of teaching, or inadequate resources, genuine attempts must be made to correct the problems. Mandatory or voluntary accreditation programs are a common strategy used for this assessment (Smith et al., 2008; Avery, Germano, and Camune, 2010).

5.13.2 - Evaluation of program by student

The students should have planned opportunities to evaluate the program at regular intervals throughout the course. Methods of evaluation may include:

- Informal group discussion between students and teaching staff;
- written comments and/or questionnaires;
- informal interviews with a random selection of students.

The evaluation should include all aspects of the course. These include the experience and supervision in clinical areas, the mentoring system, teaching staff and methods of learning, availability of appropriate resources, conduct of assessments and strategy, support given to students, and facilities available to them during their program.

Data obtained from evaluations should go minimally to the head of the department of the institution offering the course and to those responsible for the day-to-day management of the program. These individuals are usually required to respond to evaluations and student feedback with appropriate decisions regarding the ongoing development of the program. Finally, evaluation reports are often required by the board of examiners where these exist, and sometimes by the accreditation and regulatory bodies (Carroll, Thomas, and DeWolff, 2006). However, these latter bodies often require that such reports be kept on file for use as evidence when the time comes for re-accreditation of the program or formal validation visits/inspections.

5.13.3 - Auditing of clinical placements

Specific tools should be devised for an annual audit of clinical areas where students are assigned for experience. These audits will address the availability of personnel, equipment, and supplies that are essential to the provision of health care services that are safe and of high quality. Minimum requirements should be identified for student placements. These minimum requirements can be ascertained from the information obtained from the audits. (Note that students should not be used to substitute for or to augment facility staffing levels.) Choice of placements for students will then depend on the outcome of the audits, together with previous students' evaluations of the placements, if they have been used for past students.

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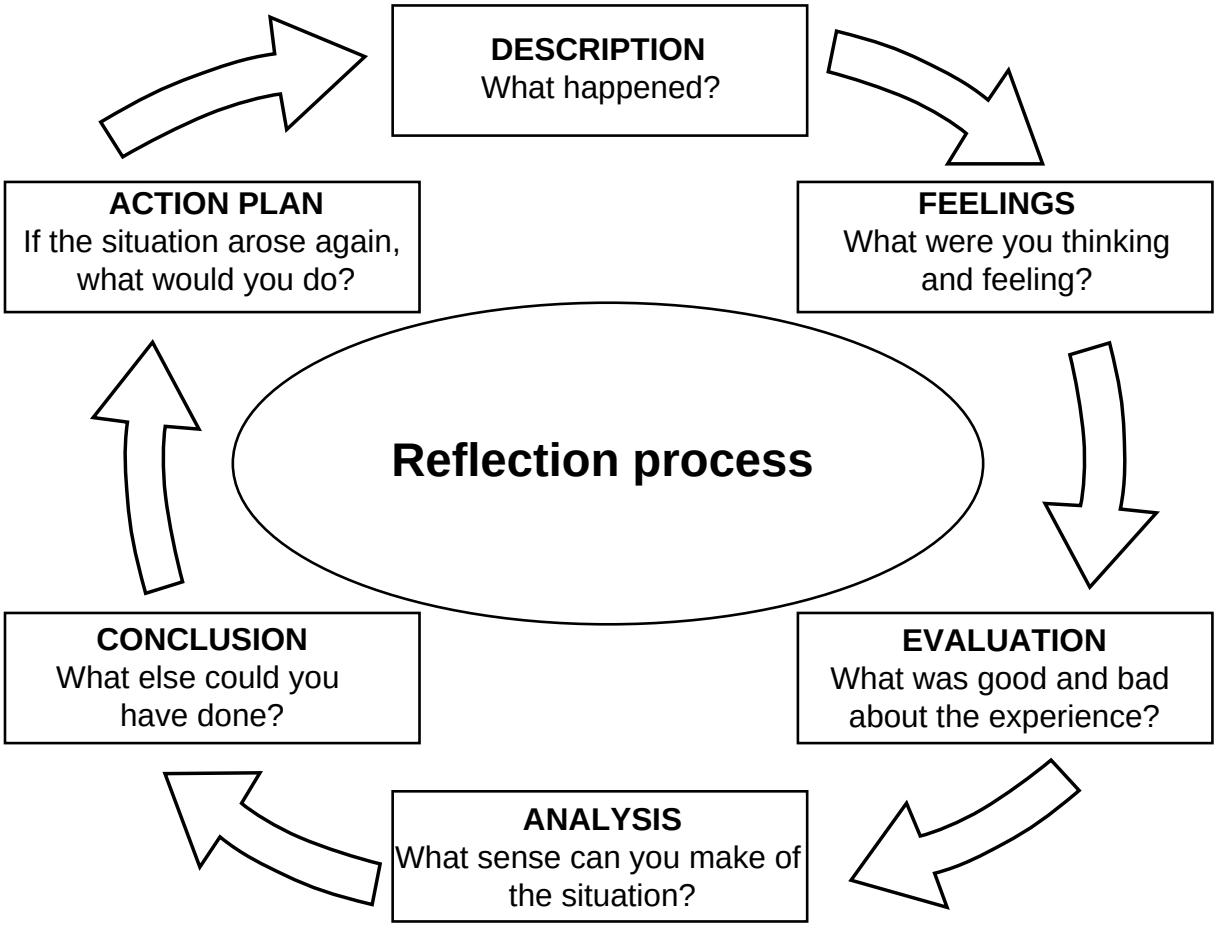
Figure 5.1: Reflective cycle



Annex 5.1: Framework for evaluating the curriculum

This checklist can be used to assess the curriculum and identify where the curriculum needs strengthening. In completing the assessment checklist it is important to:

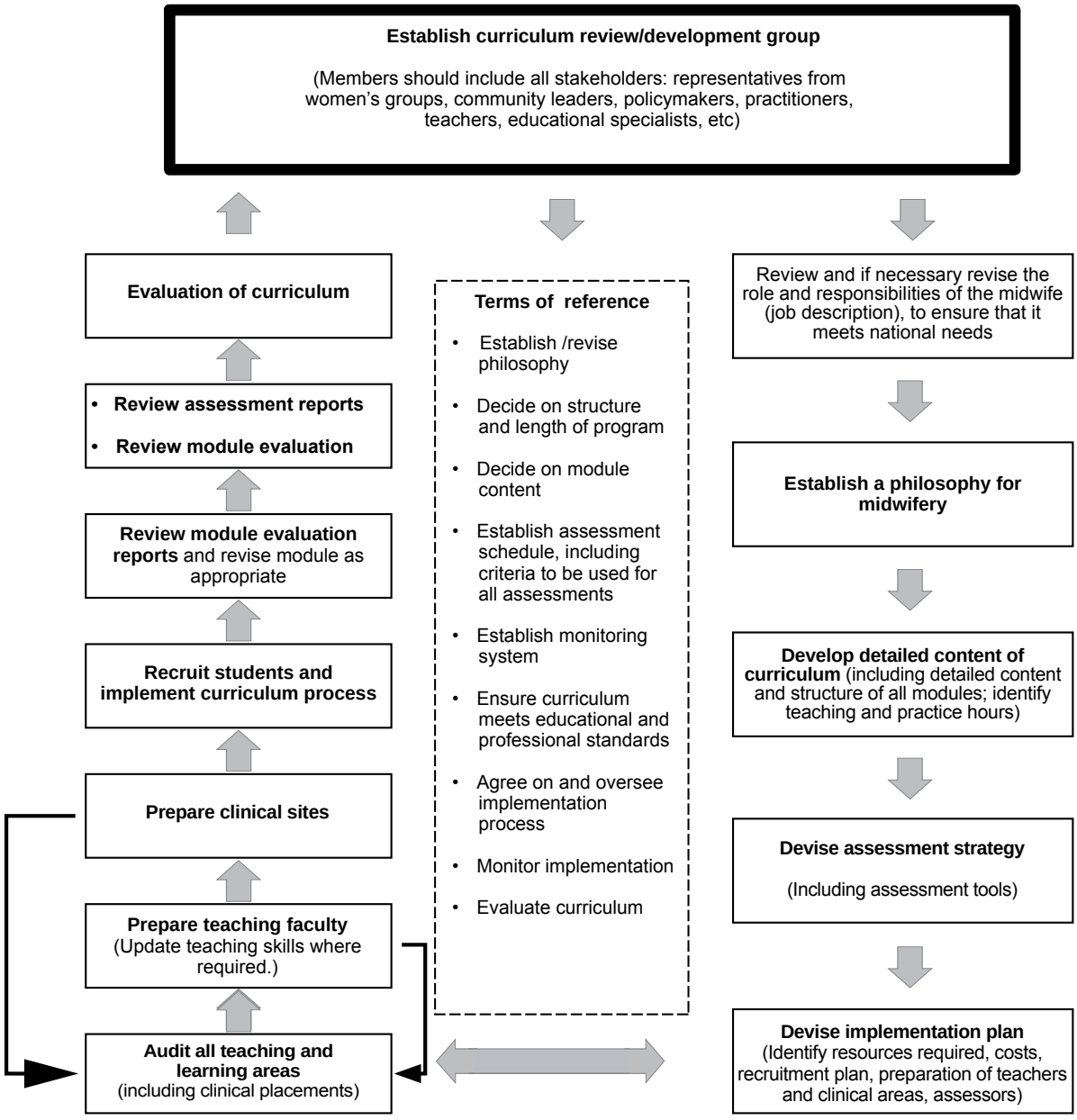
- Check the written curriculum document and all assessment tools and guidelines;
- obtain the view of current and recently completing students, teachers, and program leaders;
- obtain the view of the midwives in clinical practice who supervise students;
- obtain the view of the educational institution supervising the curriculum;
- obtain the views of the regulatory body and professional association, where such exists;
- observe teaching and learning being undertaken;
- observe students in the clinical areas;
- review student records;
- review teaching and learning resources.

	Yes	No	Not known
The curriculum has been reviewed and revised in the last five (5) years.			
Minimum entry requirements established for the program are in place and being followed. (Insert appropriate criteria here).			
A teacher-to-student ratio has been agreed upon, and it conforms to national norms and international standards.			
The curriculum requires approval by the midwifery regulatory authority (the body established by the government to oversee midwifery and grant the right to practice).			
The curriculum is delivered in, or has the approval of, an appropriate educational body/ institution.			
The curriculum is at the educational level equivalent to the curriculum of other health care practitioners.			
The curriculum is based on sound educational theories of adult learning that foster the critical-thinking and problem-solving skills of students.			
The curriculum has a clear philosophy of midwifery that values midwives working with women in a partnership and recognizing pregnancy and childbirth as a natural life event for most women.			
The curriculum is organized to ensure students can link theory to practice; practice placements allow them to practice what they have been taught in the classroom.			
The curriculum is led by an experienced midwife teacher who has a background in midwifery and has been trained as a teacher.			
Teaching and learning resources are adequate and expose students to recent research findings.			
Students have opportunities to practice in the clinical area under the direct supervision of an experienced midwife and have their practice assessed.			

Annex 5.1 (continued)

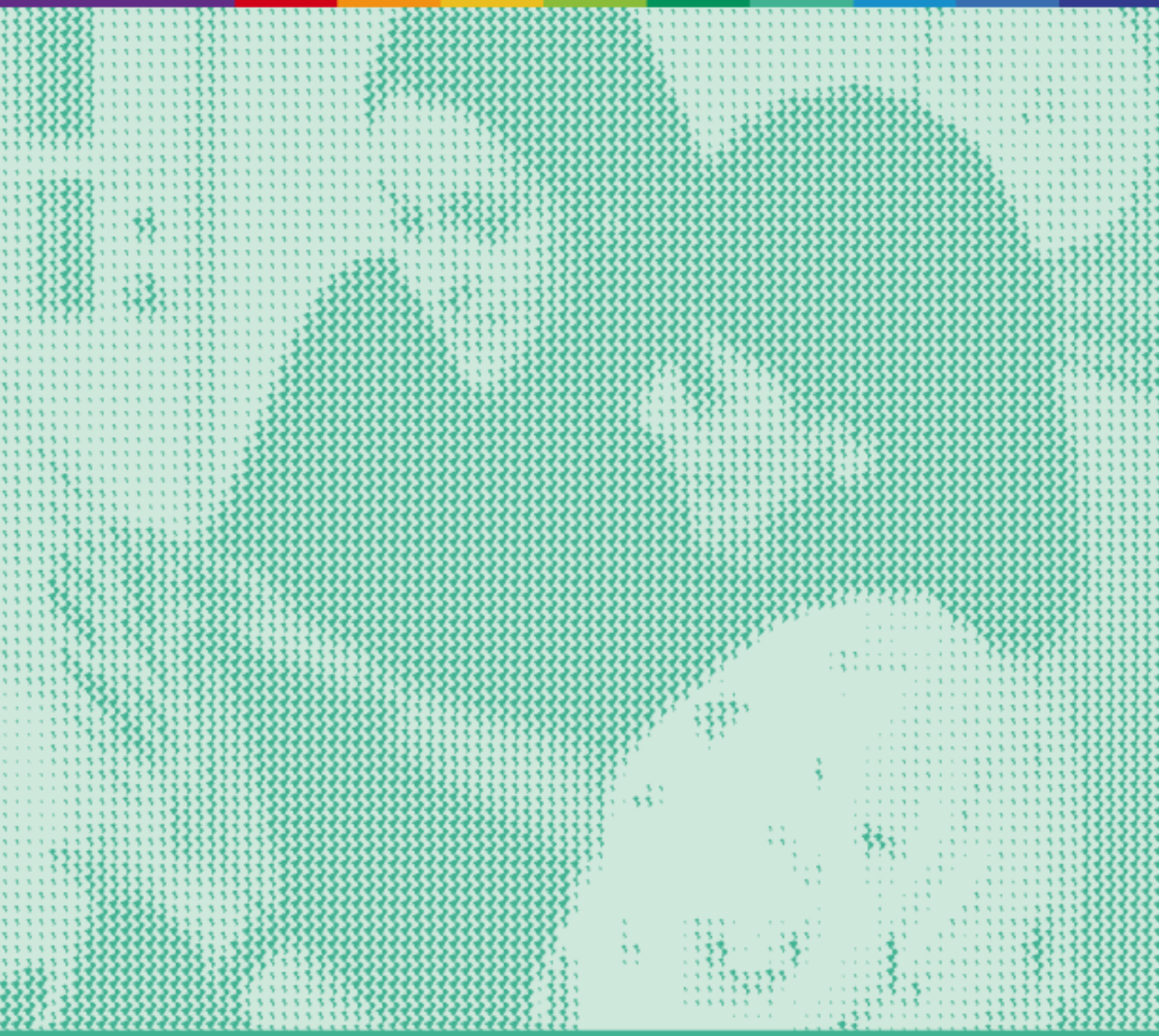
	Yes	No	Not known
On completion of the education program, midwives are able to practice as autonomous/ self-directing practitioners (able to practice as outlined in the International Definition of a Midwife).			
On completion of the education program, midwives are able to practice as a fully participating member of a multidisciplinary team.			
On completion of the education program. midwives are able to provide midwifery care in any setting: community, clinic, health facility, hospital, or client's own home.			
On completion of the education program. midwives are able to provide all essential life-saving skills to women and newborns.			
All assessments are clearly identified in the curriculum, and assessment points are known to the students.			
Clear criteria have been set for all theory and clinical assessments.			
All assessors, including clinical assessors, have been specially prepared for their role.			
The curriculum has a clear and transparent quality improvement mechanism; students are able to give feedback to teachers.			
All assessment tools have been tested for validity and reliability.			
Student records ensure that individual progress can be tracked throughout the program.			

Annex 5.2: Essential steps in curriculum development to ensure fitness for purpose



Module 6

Developing effective programs for preparing midwife teachers



6.1 Introduction

The World Health Organization (WHO) is committed to reducing significantly the maternal morbidity and mortality associated with childbirth. Part of the WHO's strategy to meet this goal is the provision of the services of a skilled attendant at every birth. However, available data on the proportions of skilled attendants indicate that much remains to be accomplished in many countries if that goal is to be attained (WHO, 2006). Well-trained, competent midwives are a primary cadre of skilled attendants. Increasing the number of midwives available to provide high-quality maternity care is critical to achieving the skilled-attendant objective (Koblinsky et al., 2006). However, to accomplish that, there must also be enough well-prepared midwife teachers to meet the education needs of each country. In turn, therefore, the provision of effective, high-quality programs for the education of midwife teachers is essential. The guidelines in this module have been developed to help countries review and enhance the quality of existing midwife-teacher programs, or to prepare new such programs. This module in the Toolkit for strengthening professional midwifery in the Americas is complemented by modules to assist nations in developing an enabling policy environment that promotes best practices in midwifery and maternity care through the enactment of enabling legislation and by modules to encourage high standards of practice through education, supervision, and the assessment of continued competency.

6.1.1 - Aims and rationale

The quality of education provided for the preparation of midwife teachers has a major influence on their ability to educate safe and competent midwives or other health workers responsible for the provision of skilled care for pregnancy and childbirth. At present, there are broad differences around the world in the methods and approaches used to prepare midwife teachers and in the standards established for entry into the teaching role. Some midwife teachers have had little or no education to prepare them for this responsibility. Some countries have established generic teacher programs for the preparation of teachers from various disciplines. However, this type of teacher-education program rarely provides preparation for the specific skills required of midwife teachers, who have both an academic and clinical teaching role. Midwives may not be represented on the committees that plan these programs, or they may not serve as mentors or role models for the midwife-teacher students. Similarly, prospective midwife teachers may have had very limited clinical experience as a midwife following their basic education before taking on a teaching role.

In countries with restricted resources, the shortage of midwife teachers is a substantial problem. This shortage, and the heavy demands made upon available medical and midwifery staff involved in teaching and clinical supervision, means that teachers of other disciplines, such as nursing or medicine, often play a major part in the education of midwives, even though they themselves are not midwives. Understandably, they can only teach midwifery theory based on information derived from the limited textbooks that may be at hand. These teachers may not be capable of transferring what is learned in theory to what is applied in practice, nor of teaching specific midwifery skills and supervising students in their practice of these clinical techniques. As a result, all too often, the midwife students' education is inadequate to prepare them for their role as practitioners, because they have not acquired the appropriate clinical competence necessary for safe practice. Attention to the recruitment and education of midwife teachers is therefore crucial to improving the education of midwives and, in turn, promoting safe motherhood.

The aims of these guidelines for the development of education programs for the midwife teacher are:

- To provide information and tools to assist countries with limited resources to plan, implement, and monitor high-quality programs for the education of midwife teachers;
- to promote the preparation of sufficient numbers of midwife teachers with a high level of competence both in practice and education to meet the education needs of the country;
- to provide a range of options for the education of midwife teachers, such as sharing programs and resources with other disciplines or even other countries, thus providing economically viable courses of a high standard.

6.2 Guidelines for teacher-education programs

A glossary of terms related to midwife-teacher education

Intercountry cooperation for the education of midwife teachers: Two or more countries plan and implement a shared program for the education of midwife teachers.

Mentor: An experienced midwife based in a clinical area, or a midwife teacher based in a school of midwifery, who provides support, guidance, and supervision to the student midwife teacher.

Midwife teacher: A qualified, competent midwife who has successfully completed a recognized education program to prepare her to teach midwifery.

6.2.1 - Entry requirements

The purpose of establishing entry requirements for admission to midwife-teacher education programs is to promote equity and justice when considering the qualifications of individual applicants. There are certain factors that facilitate this role transition, and certain considerations that are essential for any teacher who will assume the responsibility for supervising others in a competency-based clinical practice role. These are presented in Table 6.1.

Table 6.1: Admission considerations

Age	There is no evidence to support a minimum age requirement for admission. However, applicants are likely to be several years older than basic students, because they will already have completed a program of midwifery education and also have acquired some years of clinical practice experience. Countries will decide on a maximum age for midwives starting the midwife-teacher program. This will depend on a range of factors, including retirement age.
Education	Applicants should already have acquired a good general education, normally of 12 years duration. The prospective midwife teacher should have attained the appropriate school-leaving certificates of the country in which she[1] was educated, including studies in a science subject. They should also be fluent in the mainstream "lingua franca" of the region (e.g., English, French, Spanish, Chinese) because much of the literature to be studied is written in those key languages.
Midwifery qualification	Applicants should possess the credential that is appropriate in their country that acknowledges that they have successfully completed a basic program of midwifery education, and have demonstrated the achievement of good standards in both theory and practice.
Practice experience	A minimum of two years full-time (or part-time equivalent) recent clinical experience as a midwife, in addition to the time spent in the preservice education program is recommended. The clinical experience obtained during the years of midwifery practice should be carefully reviewed. If experience is limited (e.g., less than an average of about one delivery a month), further midwifery practice should be obtained before the candidate is considered for the program. If she has only practiced as a midwife in a community setting, experience in a hospital would be a distinct advantage before embarking on the teachers course, and vice versa.
Good knowledge of basic midwifery and a good record of standards of practice	These criteria can be assessed through various means. Applicants can be requested to present any evidence that they may have available to them that reflects their achievement of these criteria. Examples include: • Scores on examinations for entry into practice (such as the registration or certification examinations that are required in some countries); • records of peer reviews obtained during supervision of their practice; • evidence of participation in programs of continued midwifery education; • written letters of reference from midwives and other health professionals who have had recent opportunity to observe the applicant in the performance of tasks within the scope of the midwifery role.
Motivation to be a midwife-teacher	An interview may be required of all applicants. The interview questions would focus on the applicant's motivation to become a teacher, i.e., the reasons she aspires to take on this role, with respect to serving students, childbearing families, and the community.The interviewer should ask for a self-assessment of one's aptitude for teaching, willingness to conform with the philosophy of the program, and ability to cope with the theory and practice requirements of the program. If an in-person interview is difficult to arrange because of distance or expense, a written application that addresses these same questions could be extended to include a section on education, for example, writing an essay on the students' own experience of teaching in clinical practice, or her personal concept of education in midwifery.
Good health	It is consistent with an ethical foundation for midwifery practice that a student not have a current health condition that could be transmitted to the woman and her infant during the usual and customary delivery of health care services.
Optional criteria	Other criteria may be decided locally, based on the specific circumstances of the country situation.
Exemption criteria	Criteria for exemptions to parts of the program could be established by the program, and considered during the admissions review. For example a midwife who has acquired advanced midwifery knowledge by undertaking further study of midwifery at a recognized higher academic institution or who has gained experience in practice at a level higher than basic midwifery preparation may be exempt from study of certain content in the model teacher-education curriculum.

[1] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However, in a number of nations, men now enter this profession. The international definition has been updated to reflect a more gender-neutral language; however, this guidance uses the female gender for ease of use.

6.3 Suggested frameworks for midwife-teacher programs

The models described below represent options that may be adopted or adapted as appropriate to the country situation in terms of resources, available personnel, and the quality of the applicant pool. The elements that are essential to the various models are described, and the common core of a teacher-education program is detailed in the sections that follow. The models and options that are described may be selected in line with the prior qualifications and experience of applicants who are eligible for admission to the teacher-education program. The methods by which the content is delivered, e.g., classroom-based or Web-based instruction, does not alter the content of the program, and all programs must have supervised teaching practice with midwifery students. As with any education program, the length is influenced by the amount of content and of required supervised clinical teaching in an enabling environment, the availability of qualified teachers and teaching supplies, the caliber and needs of applicants, and the political demands of the country or region.

6.3.1 - Program structure

6.3.1.1 A stand-alone teacher-education program

The midwife-teacher education program may be designed as a free-standing, competency-based, continuing education program that seeks to verify midwifery clinical competency and focus on developing midwifery-teacher competencies. These programs may be structured as full- or part-time programs of study. They are typically a minimum of 9 to 12 months in length for full-time study, which includes time to absorb content and apply it during supervised teaching of both theory and clinical practice. The program will include a focus on midwifery clinical practice for those students whose clinical competencies need to be updated, and the foundations for teaching and learning in a competency-based midwifery-education program for all students. Clinical practice is included to enable student teachers to apply theory to practice and maintain and extend their clinical skills, while supervised teaching practice is an essential part of a midwife-teachers program.

6.3.1.2 Teacher education as an academic focus of study

Some academic institutions offer teacher-education programs that are embedded within advanced programs of nursing or midwifery education. These are typically referred to as “academic minors” offered within graduate programs of study. Four units of study that cover the content areas described in section 5.5.2 of this module are typically offered: a) competency-based teaching methods and strategies, b) curriculum design, c) evaluation methods, and d) administrative and legal aspects of teaching. Each unit of study will vary from 30 to 45 hours of theoretical content, and an associated period of supervised teaching practice that is typically calculated at a ratio of 3 hours of practice for each 1 hour of credit.

6.3.2 - Options for midwife-teacher programs: further exploration

There are a number of options that can be applied in designing a stand-alone midwife-teacher program. The first of the two options presented below represents a two-part program that seeks to first strengthen the clinical midwifery skills of the future teacher and then, building on that competency, foster capacity in teaching and student evaluation. The second option shortens the program of study to focus on teacher education, assuming that the teacher-candidates have already acquired and demonstrated proficiency in midwifery clinical practice.

6.3.2.1 Option 1: Two distinct parts: advanced/post-basic midwifery studies and teacher-education studies

The rationale for dividing the program into two separate parts, focusing first on midwifery (Part 1) and then on education (Part 2), is to ensure that the midwife teacher has an in-depth knowledge of midwifery theory and competence in practice before embarking on the education part of the program. This is an essential requirement for midwife teachers (Williamson, 2004). This option has many advantages, not the least of which is that it also offers the opportunity for some midwives who wish to extend their midwifery knowledge but do not wish to become teachers to complete only Part 1 of the program. This should be encouraged, because better-educated midwives in clinical practice would not only promote higher standards of care but also provide more effective teaching and supervision of midwife students in the practice areas. Another advantage of opening Part 1 of the program to all suitable midwives is that this would increase the number of participants and therefore help make the course more viable. It should be made clear, however, that midwives who wish to become teachers must complete both Parts 1 and 2 of the program. Midwives who have already successfully completed an advanced/post-basic midwifery studies program that meets the criteria agreed to by the institution offering the program can be exempt from Part 1.

Part 2 of the program (education studies) would normally be started within a few weeks of completing Part 1. If this part is not started within five years of successfully completing Part 1, the midwives would normally be required to provide evidence that they had recently updated their midwifery knowledge. Also, if they have not been in clinical practice for a large part of this time, the midwives must arrange immediately prior to commencing Part 2 to spend a period of time in clinical practice and have a reference from a clinical supervisor to testify that they are clinically competent in all aspects of midwifery practice.

The following alternatives for design of Option 1, Part 2 (education studies) may be considered:

- A program designed only for midwife teachers;
- a multi-disciplinary program which would include student teachers from other health-related disciplines, e.g., nursing, physiotherapists etc. (Copperman and Newton, 2007). This may be necessary if there are insufficient midwife teacher students to make the program viable, although other options are discussed in section 10, including inter-country co-operation;
- a multi-disciplinary program to include midwives, other health-related staff and also professionals from other disciplines who are going to teach adults, e.g., history, literature etc.. Sharing resources between a number of disciplines makes the program viable.

Whatever the type of option selected, it is essential that a senior midwife teacher be fully involved in all aspects of the planning, implementation, and delivery of the program.

Where multidisciplinary programs are offered, it is recommended that there be a core curriculum that would be attended by all students, plus special modules for the students from the different disciplines. In those special modules, the students from a particular discipline can be taught by a tutor from their own subject field or have the opportunity todiscuss with the tutor the application of the core content to their discipline-specific area. Teaching practice would

also be arranged and supervised by the specialist tutor. Therefore, a midwife teacher on the staff of the institution conducting be arranged and supervised by the specialist tutor. Therefore, a midwife teacher on the staff of the institution conducting the midwife-teacher program would supervise midwife-teacher students. In addition, the student teacher should also have a named midwife teacher in the teaching placement site who can act as a mentor and supervisor.

6.3.2.2 Option 2: Integrated advanced midwifery theory, education, and practice studies

Advanced/post-basic midwifery theory, practice, and education studies would be included throughout the midwife-teacher program.

The advantages of Option 2 are:

- Midwifery theory, practice, and education can be integrated throughout the program;
- there is less risk of midwives being appointed to teaching posts after completion of only Part 1 (i.e., only having advanced/post-basic midwifery studies and no educational competencies).

The disadvantages of Option 2 are:

- There is less flexibility because the integrated nature of the course would make it more difficult to open the advanced midwifery studies part of the program to other midwives;
- there are substantial cost and resource implications of providing separate programs to update midwives in clinical practice;
- the integrated program design means it would be more difficult to give exemptions to midwives for previous advanced midwifery studies;
- both advanced/post-basic midwifery and education would have to be studied in the same location. (Option 1 offers a certain flexibility for the location of studies. If there are no centers of excellence for both the midwifery and education parts of the program in the vicinity, it would be possible to base each part of the program in separate areas. *This flexibility could be particularly important if programs are designed to be shared between countries)*;
- with the integrated model there is a greater need to have a structured program that allows students to build their competency in both in-depth midwifery and education simultaneously. (Option 1 offers more flexibility in the delivery of the specific parts of the program, e.g., it could be designed as a classroom-based course or delivered partly by distance learning technologies (Anshu et al., 2008; Vitale, 2010));
- the integrated model may have a detrimental effect on preregistration (basic) student midwife programs because the student midwife teachers would be involved in teaching basic student midwives during their teaching practice and before they have developed completely their in-depth midwifery knowledge. Therefore the student teachers may have an inadequate knowledge base during their initial teaching practice.

6.4 Education institution, recognition of completion, and staff required for the midwife-teacher program

6.4.1 - Education institution

It is proposed that the education of midwife teachers fit into each country's existing education system. The program may take place in any institution that has the appropriate staff, facilities, and resources to offer such a course or program of study. This could be, for example, a university, college, or other suitable institution that can award diplomas, degrees, or certificates of completion.

6.4.2 - Accreditation of learning and recognition of program completion

All midwife-teacher programs must be accredited. In this sense, accreditation refers to the granting of credit or recognition for the course of studies (Hovenga, 2004; Avery, Germano, and Camune, 2010). In the broader sense, accreditation refers to a process through which the academic institution itself is acknowledged as meeting a predetermined set of standards for quality education (Pincombe, Thorogood, and Kitschke, 2003; Cueto et al., 2006; Carroll, Thomas, and DeWolff, 2006; McLean, Blackwell, and Stoskopf, 2006; Smith et al., 2008).

Ideally, additional pathways should be developed that would enable midwife teachers to progress academically after they complete the midwife-teacher program, should they wish to do so. These pathways would enable the student to acquire enough credits at the appropriate level to be awarded an academic degree that is higher than the one at which the midwife teacher program is established. The student progression should lead eventually to an academic (doctor of philosophy [Ph.D.]) or clinical doctoral degree (academic credentials vary by country). This is a particularly important consideration, as midwives with degrees in midwifery and related subjects are required for midwifery education, especially to teach in advanced/post-basic midwifery programs and in midwife-teacher programs. Similarly, midwives with degrees in education or clinical practice are needed to teach in midwife-teacher programs, and for curriculum design and development, so that countries with restricted resources can critically review and develop their own curricula for all midwifery programs.

6.4.3 - Staffing issues

6.4.3.1 Advanced post-basic midwifery studies component of the program

Midwife teachers

It is essential that midwife teachers take a lead part in programs for the education of midwife teachers. To enable them to do this, they must be well prepared for their role. It is mandatory that they have successfully completed a recognized advanced midwifery program at the diploma or degree level and an education program leading to a recognized higher-level academic degree. If suitable programs are not available at a country where the midwife-teacher program is based, it is recommended that midwife teachers selected to teach in the teacher program be educated by attending a suitable program in some other country.

Other teaching staff

- Lecturers in biological and behavioral sciences;
- medical staff experienced in obstetrics, neonatal pediatrics, public health, and other relevant subjects, who would teach both theory and practice;
- other specialist lecturers, including, nutritionists, pharmacists, epidemiologists, researchers, and senior managers of health services.

6.4.3.2 Education part of the midwife-teacher program

Midwife teachers

Midwife teachers with the required qualifications and expertise would be involved in teaching the core curriculum of the education part of the program. They would be responsible for applying the principles of education taught in the core curriculum to midwifery education. They would also arrange teaching practice placements for the midwife-teacher students and monitor and assess their progress during practice teaching, both in the classroom (or other teaching venue) and in the clinical areas.

Other disciplines

Lecturers who have specific and related expertise could be involved in teaching courses during the education part of the program. Their areas of expertise could include, for example, principles of adult education, teaching and instructional technologies (e.g., use of the Internet for curriculum delivery; development of audiovisual media), and evidence-based assessment methods.

6.5 A model curriculum for a midwife-teacher program

6.5.1 - Program and course faculty

A faculty team should be established to plan the curriculum and develop the program. Subsequently, those team members should also be responsible for monitoring and evaluating the program and for further developing it in response to their findings.

Members of the program team might include practicing midwife teachers, senior midwives from clinical areas, student midwife teachers, medical staff, educationalists from the higher education sector, a nurse teacher, an administrator, and a librarian. Individuals with particular expertise may be invited to attend some meetings and share their special knowledge. Midwife teachers should be particularly well represented at all team meetings.

6.5.2 - Philosophy of education

The philosophy that underpins the program should be clearly stated. That philosophy should be based on the considerations outlined below, and on any other additional factors that are considered important in the context of the country in which the program will be established. The philosophy should be reflected throughout the development and implementation of the program. Therefore, it should be realistic and attainable. Therefore it should be realistic and attainable.

In considering the philosophy, the team may wish to reflect on:

- The philosophy of midwifery care;
- national and local health care policies that affect midwifery care;
- other policies and factors that affect women and infants, especially their health and well-being;
- the philosophy of education;
- education policies that affect the preparation of midwife teachers;
- other policies and issues that affect midwives and their education;
- international perspectives (e.g., those in Strategic Directions for Nursing and Midwifery Services 2011–2015 (WHO, 2010));
- the influence of research on the program;
- choice of curriculum framework.

6.5.3 - Curriculum framework/model

The model that is selected for design of the curriculum reflects and emphasizes the values and beliefs within the institution and the staff's approach to education. The core elements that underpin the organizational design or strategy that is selected can be represented graphically. A model framework is offered as Figure 6.1.

6.5.4 - Aims and intended learning outcomes

The overall aims would specify what the teachers are striving to achieve in the program (Johnson-Farmer and Frenn, 2009). Fundamentally, the intended outcomes of the program would reflect the midwife-teacher competencies outlined by the ICM (2008).[2] They are followed by more specific aims and intended learning outcomes for each part of the program (i.e., each module, course, or unit of learning), stating what the students are expected to learn.

6.5.5 - Content of the program

The following considerations underpin decisions made about program content:

- The knowledge and skills needed to enable midwives to become effective teachers;
- the arrangement and delivery of this knowledge and skills in a program;
- evaluation methods and strategies to determine the degree to which the aims and intended learning outcomes have been achieved.

[2] The World Health Organization is currently developing a statement of midwife teacher competencies. Publication is anticipated in 2013.

6.5.5.1 Midwifery studies

In order for midwife teachers to teach midwifery theory and practice effectively, it is essential that they have an in-depth knowledge of midwifery and related subjects and also that they be skilled practitioners. The program should be designed to build on and extend existing knowledge and skills. The knowledge and skills required by midwife teachers are outlined below, but countries may wish to add or delete subjects to meet their own criteria for the selection of curriculum content. These competencies for midwifery teachers are based on the midwifery philosophy, values, and model of care (Thompson, 2002). They are consistent with expected competencies promoted by educators of other health-related disciplines (Yeates, Stewart, and Barton, 2008; Duvivier et al., 2009; Molenaar et al., 2009; da Silva Campos Costa, 2010; Stenfors-Hayes, Hult, and Dahlgren, 2011; Srinivasan et al., 2011).

Theory:

General areas of content include:

- Study skills;
- critical thinking;
- behavioral and biological sciences related to the practice of the midwife;
- the research process;
- values and ethics (including development of a personal philosophy of teaching);
- epidemiology, community health issues, health policies, and provision of services;
- advanced, research-based midwifery and related subjects, including family planning, gynecology, and women's health issues;
- evidence-based midwifery practice;
- life-saving skills;
- professional issues in midwifery, e.g., quality improvement, clinical audit, legislation, regulation, supervision, ethics, and international perspectives.

Clinical practice:

Suggestions for clinical practice include:

- Carefully planned periods of clinical experience to achieve learning outcomes (the student, in discussion with her tutor and clinical supervisor, may formulate learning contracts to meet her individual needs (Annex 1); experience in the community and first-level health facilities as well as in the hospital should be considered);
- visits to clinical areas to collect data for teaching and learning sessions;
- clinical teaching;
- observation and supervised practice to learn life-saving skills;

6.5.5.2 Educational studies

The content to be considered for this part of the program includes:

- Theories of teaching and learning;
- adult-learning theories and principles;
- the qualities of an effective teacher;
- communication skills, both verbal and nonverbal;
- curriculum design and development (English, 2010):
  - Writing program, course and clinical objectives;
  - curriculum mapping (selecting appropriate content for purpose);
  - placement and sequencing of classroom theoretical content and clinical experiences.
- Assessment and evaluation:
  - Methods and strategies for evaluation of theoretical and clinical evaluation learning;
  - key elements in construction or selection of assessment tools (e.g., examination blueprinting, examination item-writing, validity, reliability);
  - setting pass or fail standards;
  - providing feedback.
- Management issues in education;
- the practice of teaching, including ethical and legal aspects;
- continuing personal professional development.

This content might be organized within instructional units that are presented as specific courses to be accomplished in a specified period of time (such as an academic semester), or as learning modules that can be completed at a self-paced rate of progress. Careful planning must occur to be certain that the content is delivered in a logical sequence, and that the number of courses (or modules) that a student undertakes at any one time represents a balanced academic workload. Courses (or modules) that contain the requirement for clinical practice experience are particularly time-intensive.

6.5.6 - Placements for teaching practice

Theoretical and clinical teaching experiences would need to be supervised initially and the students will require constructive feedback from their mentor/supervisor. As the student teachers gain competence and confidence towards the end of teaching practice, they will be able to teach without supervision. It is also suggested that the students participate with their peer group in micro-teaching sessions, in which they will receive constructive feedback before starting to teach students in a school of midwifery (Pattison et al., 2012; Sullivan et al., 2012).

6.5.6.1 Selection of institutions for teaching placements

It is helpful if staff in institutions being considered for teaching placement (including nongovernmental organizations) complete a questionnaire to provide the organizers of the teachers program with a profile of their institution. Selection of sites for teaching placements will depend on criteria that include:

- Type of health facility and the range and volume of services conducted in the setting that lend themselves to teaching experience for students (diversity of learning experiences), including experience of complications requiring life-saving skills;
- statistics regarding the care of childbearing women and their infants (e.g., number of delivery beds and number of deliveries per annum) to determine volume of experiences available;
- access to community facilities and staff involved in maternal and child health in the community;
- equipment, supplies, and resources available for midwifery, obstetric, and neonatal care (to ensure an enabling learning environment);
- facilities available for didactic instruction (e.g., classrooms, discussion rooms, other teaching rooms, computer laboratories);
- the number of midwife-teacher students that could be accommodated in the setting;
- the number and cadre of students of other health occupations or professions who are also placed in the setting for their own learning (so that learning can be collaborative and not competitive);
- the number and the experience of the midwife and medical staff interested, prepared, and available for clinical teaching and supervision of student teachers;
- resources available for teaching and learning (e.g., teaching aids, models, audiovisual aids, library facilities, computers);
- the proximity to the student teacher's place of residence and transport, if required;
- residential accommodation for the student teacher, if required.

Each student teacher requires a placement in an institution where midwifery education takes place. Some countries may wish to give students experience in a second institution, perhaps towards the end of their program, when they have gained confidence. An experienced midwife teacher in the institution where students are placed will be selected to be her mentor/supervisor.

6.5.6.2 Preparation of mentors/supervisors

It is recommended that mentors/supervisors be prepared for their role in supervising and assessing student teachers by the institution responsible for the preparation of midwife teachers.

Areas to be considered in the preparation of mentors/supervisors include:

- Information about the student-teachers program;
- experience required by students during their placement; they should be involved in all aspects of the midwife teacher's role, as well as teaching in theoretical and clinical areas;
- role of the mentor/supervisor;
- assessment procedures and tools for assessment of theoretical classroom and clinical teaching;
- liaison with a midwife teacher in the institution where the teachers course is based.

There should be ongoing dialogue between the midwife teachers and the mentors/supervisors to discuss the program, students' progress, and any problems encountered. A partnership approach benefits both parties but especially the students.

6.5.6.3 Arrangement of teaching practice

Ideally, there should be short periods of orientation and observation in the teaching placement the first weeks of the teachers program, followed by longer blocks later. Clear learning outcomes should be formulated for each period in the teaching placement. Students should also be encouraged to keep a reflective journal and write up a number of significant incidents that have occurred, for example, how she (or one of the tutors) dealt with a student who was disruptive in class, or a relationship problem that has occurred between staff. Reflection on and discussion of these incidents with their peer group and tutor on return to their classes (without revealing names of the individuals concerned) promotes learning from the incidents (Aronson, 2011). The use of learning contracts formulated by the student and discussed with her mentor/supervisor during teaching practice placements also aids learning (Annex 1).

Assessments of teaching, in both in the theoretical and clinical components, will be required. The responsibility for assessment of student progress should be shared by the student teachers, the faculty from the program, and the student's mentor/supervisor. If distance and travel present challenges to direct supervision, mentors and supervisors should be asked to write interim and final reports on their students' progress.

6.6 Teaching and learning strategies

Midwife teacher students are adult learners, so they will bring a wealth of life and professional experience to the course. It is widely acknowledged that adult students learn most effectively when they are actively involved in their own learning (Knowles, Holton, and Swanson, 2005; Merriman, 2008). Student-centered methods promote this type of involvement, and it is becoming increasingly apparent that they are the most effective teaching/learning approaches (Bash, 2005). They also help students to take responsibility for their own learning and develop into lifelong learners, an essential characteristic for midwife teachers.

Student-centered learning methods that promote active participation by the students include:

- Problem-based learning;
- case studies;
- discussion, and other kinds of group work;
- seminar presentations;
- experiential learning (e.g., role-play, simulation);
- workshops;
- projects.

Teacher-centered methods include:

- Lectures;
- demonstrations;
- tutorials.

Problem-based learning is an approach to adult learning that uses "real life" situations as a stimulus to initiate the problem-solving process. Ways of collecting the knowledge necessary to solve a problem are discussed and evaluated by the group and the teacher. Critical thinking is encouraged (Raisler, O'Grady, and Lori, 2003; Moore, 2008; Rowan, et al., 2007). (See Module 5 for an expanded discussion of this topic.)

This educational method of learning is particularly appropriate for midwife teachers because it makes active use of their existing knowledge of midwifery, education, and related subjects; extends their knowledge and skills in the context in which the knowledge is to be used; and promotes independent, reflective learning. Experiencing this learning method in their education will help them to use it effectively for their students once they are qualified teachers (Rowan, McCourt, and Beake, 2009; Polyzois, Claffey, and Mattheos, 2010).

6.7 Assessment strategies

A valid and reliable assessment strategy is essential to ensure that the students gain the knowledge and skills required to be competent midwife teachers. The assessment strategy should include both theory and practice in both the midwifery and education parts of the program. A decision has to be made about whether there will be formal examinations during and/or at the end of the program, continuous assessment throughout the program with no examinations, or a combination of both continuous assessment and examinations. In a modular program it is usual for the students to be assessed during and/or on completion of each module, and a range of assessment methods should be used throughout the course.

6.7.1 - Validity and reliability of assessments

Whatever assessment strategy is selected, it is important that assessments are:

- Suitable for the knowledge or skills being assessed (i.e., valid);
- at an appropriate level;
- well spaced throughout the program;
- marked/assessed using clear criteria and well-formulated assessment tools;
- marked/assessed by teachers who are subject matter experts;
- repeated if the student fails to achieve the required standard.

Current educational best practice emphasizes competency-based learning (see Module 5 in this toolkit). Competency-based education schemes will provide the opportunity for the student to repeat the assessment, acquire additional learning opportunities, and/or be tested in a different fashion (for example, substituting an oral for a written examination), but with the same outcome criteria. There is no general standard for the number of times that a student should be allowed to repeat any single assessment. Nevertheless, clear criteria must be formulated for repeated examinations. They must be devised keeping in mind the intended learning outcomes and also the relationship between teacher competencies and the well-being of the clients (students and patients) who will be served by the teacher-graduate. These criteria must be clearly known to all parties.

6.7.2 - Methods of assessment

Methods of assessment need to be varied, allowing for an individual adult learner to demonstrate a depth and breadth of learning acquired not only in class but also through previous life experience. Examples of assessment methodologies include:

- Essays;
- research critiques;
- seminar presentations, followed by discussion and written summary;
- midwifery case studies;
- projects;
- examinations;
- observation of clinical practice, followed by discussion.

Assessment of new learning in the field of educational theory and practice should focus more directly on teaching and learning. Four examples of assessment are given below:

Teaching resource portfolio

The portfolio would include examples of materials developed by the student teacher, in preparation for a teaching assignment (class or course). Examples of such material include:

- Learning objectives;
- target audience;
- lesson plan;
- written assignment;
- teaching aids prepared by the student to promote learning during the class, including a rationale for choice of aid and explanation of how it will be used.

This could include, for example, an analysis of three teaching methods that the student has used or has observed, during her teaching placement, identifying the strengths and weaknesses of each and discussing their use in midwifery education.

Reflections on teaching practice

The student could be asked to record a number of significant incidents that occur during a teaching practice placement (e.g., an occurrence in the classroom or clinical area, or a relationship issue that emerged). The student will reflect on these incidents, using the reflective cycle (Figure 6.2), and specify, following analysis, what was learned from the incidents, and what action could be taken if similar situations arose again.

Assessment of clinical practice

The teacher student could be required to design a tool for a clinical assessment, using best practice principles for the development of measurement instruments (Oermann and Gaberson, 2009; Raykov, 2010). The teacher student would explain and justify the design, conduct a clinical assessment (under supervision), give feedback to the student, complete the assessment form, and write a critique of her own performance as an assessor and of her tool.

Teaching assessments

Students could gain experience in conducting assessments of the teaching skills of their peers. In turn, the students will receive similar assessments from both their their peers and their mentor/supervisor. Constructive feedback would be an essential element of this exercise. Both theoretical classroom and clinical teaching should be assessed.

6.8 Quality assessment

6.8.1 - Quality in education

Quality in education is assessed by measuring what is provided and comparing this to what is expected. If this reveals deficiencies or weaknesses in the provision of education (for example, low staffing levels, poor standards of teaching, or inadequate resources), genuine attempts must be made to correct the shortcomings. The quality of programs that prepare teachers of midwives has a direct impact on the quality of the education offered to student midwives (Taub et al., 2010). Teacher education programs should be reviewed, at a minimum, for best practices in:

- Policy (fairness, ethics, gender equity);
- staff (sufficient in number, current in knowledge and skills, effective at their task);
- courses (comprehensive in scope, evidence-based content);
- marketing (broad outreach, accessibility options);
- teaching and learning (variety of approaches, multiple means of assessment);
- outcomes (achievements at both individual and program levels).

6.8.2 - Evaluation of the teacher-education program and its component courses

The students should have the opportunity to evaluate individual courses at regular intervals during the program and also the program as a whole. Methods of evaluation may include:

- Informal group discussions with teaching staff;
- written comments and/or questionnaires;
- a random sample of unstructured interviews;
- exit interviews;
- graduate surveys.

Data obtained from evaluations should include all aspects of the program. This information should go to the administrative team that is responsible for responding with appropriate decisions regarding the ongoing development of program components. Results of evaluations, and action plans based on this information, should be shared with other appropriate authorities in the institution in which the program is located.

6.8.3 - Individual performance review

Annual individual performance review is recommended for all staff members who contribute to the program for the education of midwife teachers on a regular basis. A senior staff member in the department would normally carry this out. Strengths as well as any weaknesses would be identified and strategies devised for continuing personal professional development.

6.9 Resources

6.9.1 - Education institution

Adequate resources are essential to a well-run midwife-teacher course. These resources include a full complement of well-trained teachers, librarians, audiovisual personnel, and administrative staff. It also includes well-equipped classrooms, seminar rooms, a range of audiovisual and other teaching aids, computer facilities, and a well-stocked library. Office and study space should be available for teachers, students, and staff. A means of transport to teaching placements might be necessary in some circumstances. There should also be a linkage (e.g., telephone, Internet) between the site of the teacher-education program and other programs for preparing teachers of adult and higher education, if these programs are not offered in the same institution.

6.9.2 Placements

An adequate number of suitable clinical placements will be required to provide students with midwifery experience, including life-saving skills, and for clinical teaching. Placements in schools of midwifery and/or nursing where there are student midwives and/or nurses studying midwifery will also be required for teaching practice.

The number of student teachers assigned to each placement must match the amount of experience available there. Most placements will only be able to offer sufficient experience and good supervision for two or three student teachers. The education institution organizing the teachers course will therefore need to form links with several different clinical areas and schools of midwifery that could be used for student placements. The criteria for selection of institutions have been presented in Section 5.7.6 of this toolkit.

6.10 Options for the provision of programs for midwife teachers

Many countries find it difficult to secure the necessary resources to provide appropriate education programs for the preparation of midwife teachers. However, having enough well-prepared teachers is essential if countries are to train knowledgeable and competent midwives who are capable of providing safe and skilled care for women and their infants. This section therefore includes a number of options for the education of midwife teachers that nations may wish to consider.

6.10.1 - Option 1: National programs

Each country provides its own program(s) for the preparation of midwife teachers:

- For midwife teachers alone;
- for midwife teachers together with other health care professionals who are preparing to become teachers of their professional group, e.g., nurses, physical therapists, etc.;
- for midwife teachers, other health care professional groups, and professionals in other disciplines who are preparing to teach adults such subjects as history and economics.

It is important to note that only the education part of the program could be shared with other professional groups. The advanced midwifery studies part of the program would have to be completed before the student enters the sequence of teacher-education studies.

6.10.2 - Option 2: Intercountry programs

Restricted resources may make it impossible for some nations to offer programs for the education of midwife teachers. It is therefore suggested that two or more countries in the same region combine their limited resources and offer one program that they share. A larger number of students would help to make the program viable.

This program may be:

- Be sited in one country;
- be sited in two countries, with, for example, the advanced midwifery studies part of the course in one country and the education part in the other country;
- have the education part of the program shared with other disciplines from the participating countries.

With all these options, funding would be agreed upon and shared between participating governments.

Issues to consider if intercountry programs are planned include the following:

- Selection of the country or countries where the course would be based;
- the use of distance learning for part or all of the midwifery studies part of the program; special arrangements would need to be made for clinical experience, including life-saving skills;
- the feasibility of organizing the program so that students return to their own country for the main teaching practice placements;
- the potential for the need to teach in more than one language;
- cultural differences that might exist between or among participating countries (these can enrich the program, but may also lead to misunderstandings);
- strategies for including the input of all the countries wishing to share in the provision of the course in the planning and ongoing development of the program;
- ways to assure agreement on the curriculum and on all other key issues (e.g., external accreditation of the program, the diploma or degree that would be awarded) so that all graduates of the program achieve a common designation that is recognized and respected in all participating countries;
- ways of establishing good communications between countries participating in the provision of the midwife-teacher program;
- costing and agreements between countries on budgets.

6.10.3 - Option 3: The involvement of developed countries in the education of midwife teachers

Countries with more resources and experience of educating midwifery teachers may offer study places to midwife-teacher students from low-income countries and countries with little experience with midwifery-teacher programs. This is not the best long-term solution for the education of midwife teachers from countries with restricted resources, but it may be an interim measure to help establish a local teachers program (Herberg, 2005; Wright et al., 2005). Midwife teachers who are educated in this way could be prepared to teach in a future national teachers course, or supervise student teachers in their placements.

The involvement of another country could also be arranged in a number of other ways, for example, to provide consultants/advisers, visiting lecturers, assistance with the development of distance learning packages, assessment and evaluation of the program, and exchange visits for students and staff. A prerequisite for this model would be good skills in the language in which the course is taught.

6.11 Continuing professional development of midwife teachers

On completion of the midwife-teacher program, the midwives should be up to date in evidence-based midwifery practice and the theory and practice of education (a self- and peer-assessment checklist is presented in Annex 2). The evidence that underpins both clinical and educational best practices is continually emerging and evolving, requiring a commitment to lifelong learning (Joyce and Cowman, 2007). This can be especially difficult for those without access to good library facilities and information technology. The midwife teacher who works in isolation from professionals from other institutions may have fewer opportunities to share ideas and participate in discussions with peers. This can contribute to that teacher's loss of up-to-date knowledge, motivation, and enthusiasm. Opportunities for regular periods of continuing education for midwife teachers are therefore essential. It is recommended that all midwife teachers have a minimum specified period for continuing personal professional development at regular intervals, e.g., every three years.

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Figure 6.1: Curriculum model

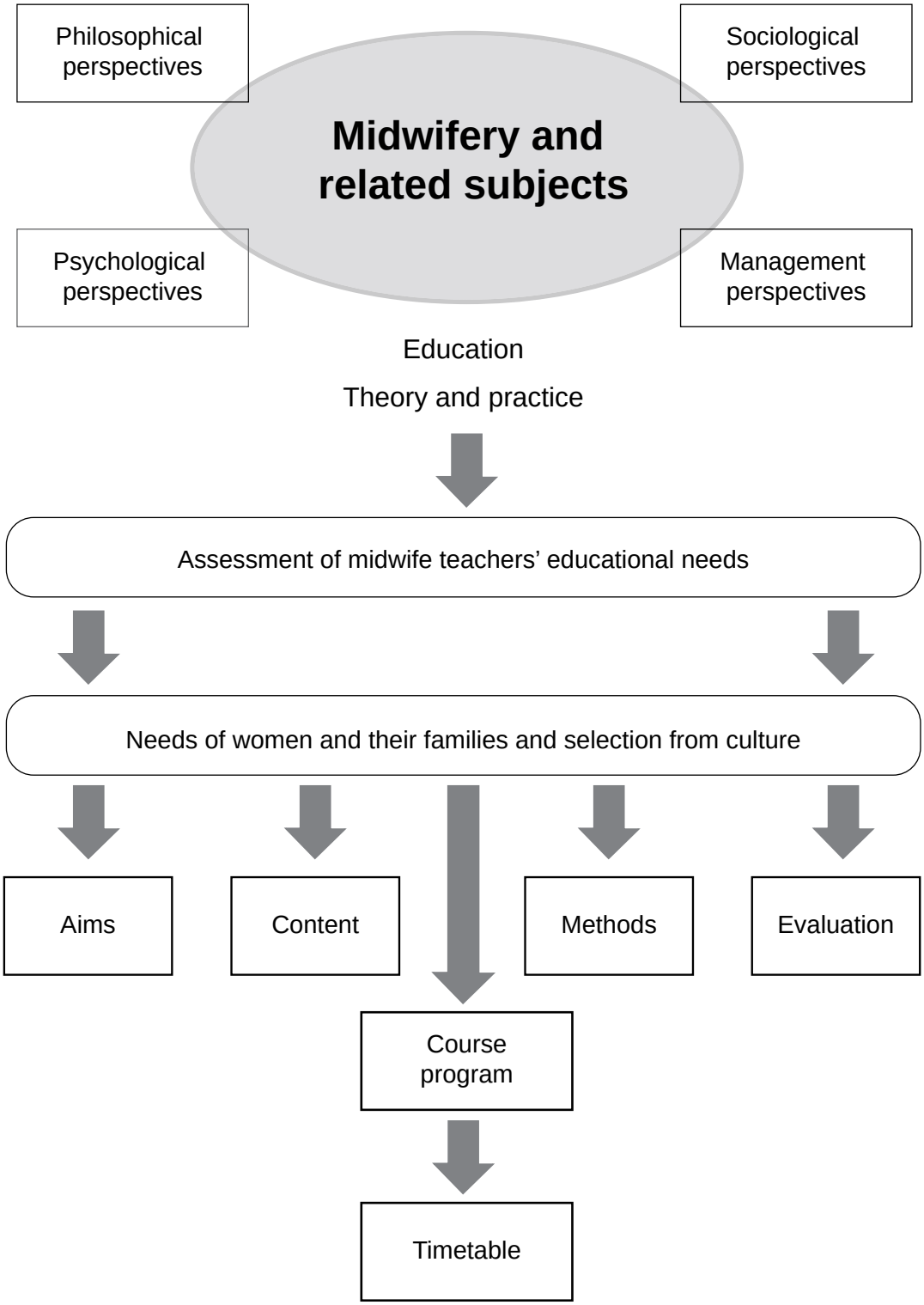
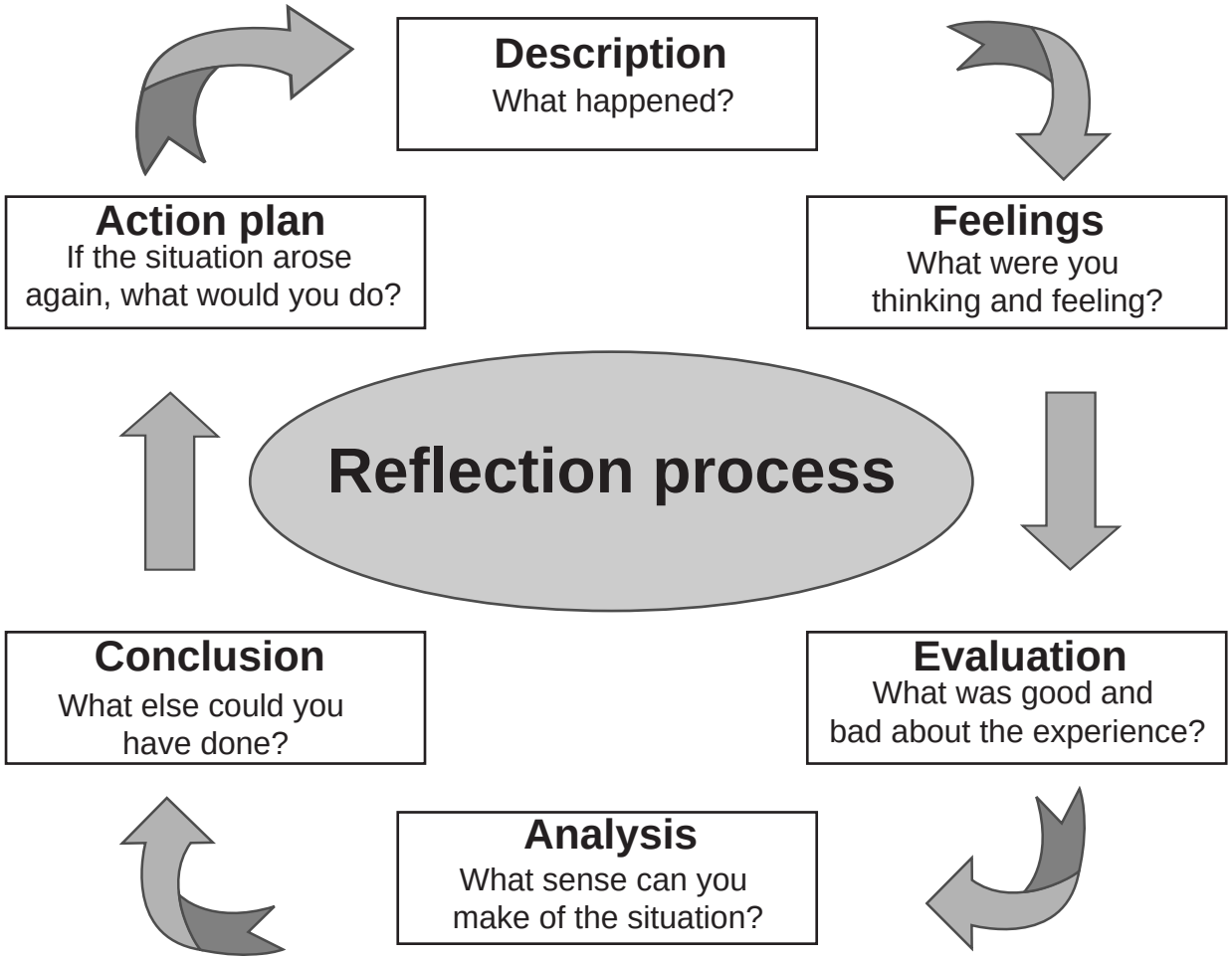


Figure 6.2: Reflective cycle



Annex 6.1: Learning contract

The following is an example of a learning contract form

Learning objective: _____

Strategy: _____

Learning resources:

Who can help? _____

What is available? _____

_____

_____

Evidence of accomplishment: _____

_____

_____

_____

Signature of student: _____ **Date:** _____

Signature of tutor/ mentor: _____ **Date:** _____

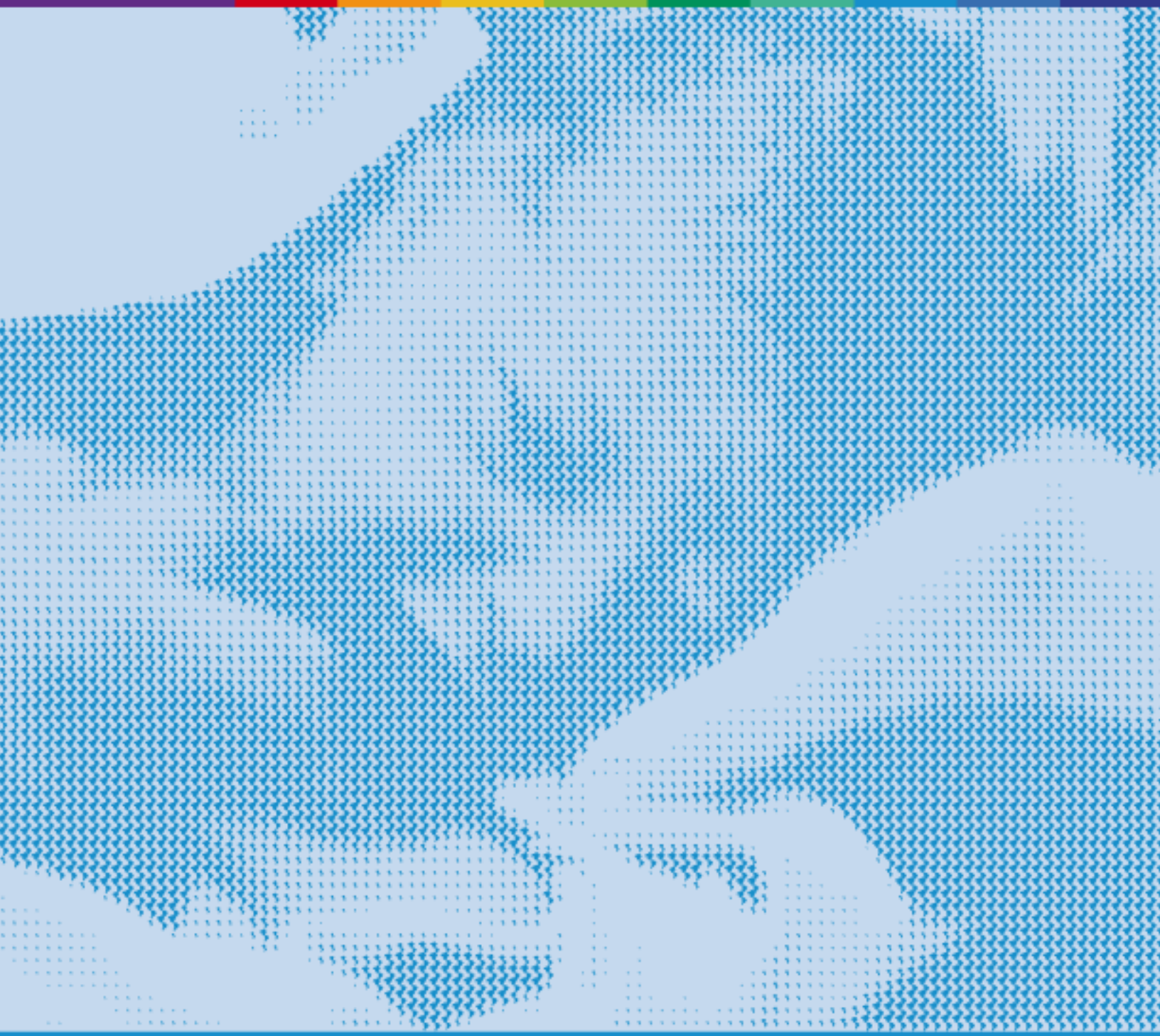
Annex 6.2: Midwife teacher competence

The following checklist can be used as a self-assessment form or as part of teacher assessment profile. The skills list is extended to include the knowledge that the teacher must possess in order to practice this skill to the level required and also the attitudinal traits that should underpin the practice.

Skill	Knowledge	Attitude	Always	No	Unsure
Practice all clinical midwifery skills to mastery level.	• Biological and social sciences underpinning midwifery to advanced level; • midwifery subjects to advanced level; • applies research findings in practice.	• Reflective practitioner; • empathetic; • women and newborn focused; • applies professional ethics.			
Conduct simple research using qualitative and quantitative methodologies.	• Basic epidemiology; • basic statistics; • analytical framework; • research resources.	• Thorough; • thoughtful; • analytical.			
Teach students effectively.	• Leaning styles; • teaching and training methodologies; – theory; – clinical.	• Patient; • good sense of humor; • logical.			
Assess students fairly.	• Assessment strategies.	• Considerate; • develops rapport easily.			
Clear accurate, concise report and record-keeping.	• Report-writing; • national legislation on record-keeping.	• Careful; • truthful; • accurate.			
Management.	• Educational management theories; • timetabling and scheduling; • curriculum design and development; • curriculum-monitoring; • curriculum-evaluation.	• Trustworthy; • collaborative; • methodical; • calm.			
Good communicator.	• Communication techniques; • presentation methodologies; • listening techniques; • counseling techniques.	Person-centred.			
Intercultura competence	• Cultural taboos and customs; • cultural identity.	Respectful.			

Module 7

Supervision of midwives



7.1 Introduction

Wherever in the world midwives are working they can benefit from supervision and the support of a supervisor (ideally, also a midwife). Midwives carry the weight of responsibility for the mothers and babies that they care for and therefore can feel very vulnerable when faced with challenging situations. When midwives embrace supervision, they find it helpful to their professional purposes by feeling supported in their practice.

The aim of this module is to demonstrate the wider benefits of supervision. It will explore how the introduction of supervision of midwives could influence the safety of mothers and babies worldwide, and it will provide guidance on developing a supervisory system where none currently exists. Other modules in this toolkit support this information.

7.1.1 - What is supervision?

The actual word supervision has many meanings. The usual dictionary definition is “to oversee.” The term “supervisor,” when used in business or clinical practice applications, typically refers to one’s immediate superior in the workplace, that is, the person to whom one reports directly in the organization. The dictionary definitions also offer care, protection, and guidance as elements of supervision. These terms are a much better fit when defining the supervision of midwives.

There are many different models of supervision used within different professions. This section will take a brief look at some of these models, but the emphasis in this module is on the supervision of midwives, using a supportive model of supervision.

A glossary of terms related to supervision

Clinical governance: A framework to promote excellence in clinical care using management.

Clinical supervision: Supporting professionals, usually in a group, using mentorship, preceptorship, and reflective practice.

Continuous quality improvement: A process by which an assessment is made of individual and/or group practice, and compared to external standards of safe and effective practice, and, when indicated, recommendations are generated for enhancing quality of care.

Critical incident analysis: A process in which those involved in a difficult clinical situation engage in discussion of the circumstances that may have affected the outcome, in the interest of identifying factors that can be modified in order to promote better outcomes.

Mentorship: A developmental process that occurs when a less experienced partner, referred to as a mentee or protégé, is guided by a more experienced person, who assists the mentee to gain insight into new situations or experiences, through the integration of prior learning.

Preceptorship: A supportive process that occurs when a more experienced person works alongside another to provide clinical support and direction to a learner who is acquiring new skills (student preceptorship) or to a newly qualified practitioner who is making the transition to the role of independent practitioner.

Professional self-regulation: Taking personal responsibility for adhering to statutory rules, regulations, and guidelines for midwifery practice.

Reflective practice: Providing the opportunity to review one’s practice either in a group or individually.

Statutory supervision: A formal process of clinical oversight and review of practice according to standards that is required by statutory regulation; a system of supervising midwives within a regulatory framework.

Supportive supervision: Offering support and guidance through mutual engagement in dialogue about issues of clinical practice.

7.1.2 - Supportive supervision

Supportive supervision is a description of the way supervision can be carried out to provide maximum support to midwives. The challenges of working independently can be overwhelming. Just knowing that someone is there for you personally has great value, even if that person is simply someone with whom you can discuss your ideas or questions, or someone with whom you can speak after having had a difficult or challenging experience. The ability to share your concerns in these circumstances can be very beneficial.

Change occurs at a rapid rate in modern health services. This can be very stressful for midwives, especially if it means a change in practice or work area. The supervisor of midwives is well placed to advise and guide midwives who are challenged by change.

Mutual respect between supervisors of midwives and midwives is needed if there is to be a benefit from supervision (Gluck, 2007; Kaplan, Mestel, and Feldman, 2010). Working in partnership will enable the greatest benefits to be gained from supervision and will extend the effectiveness of the supervision process not only to midwives but also to the mothers and babies for whom they care. A midwife should feel more confident in her[1] practice when supported by a supervisor of midwives.

7.1.3 - Statutory supervision of midwives

The purpose of statutory supervision of midwives is to protect the public and to support and promote good midwifery practice (Nursing and Midwifery Council, 2002). Midwives in many countries can practice independently (i.e., autonomously), meaning that they are not required to refer clients to a doctor unless there is deviation from normal or there are complications (Skår, 2009). It is therefore essential that there are supervisors of midwives to facilitate safe, autonomous midwifery practice.

The term statutory supervision refers to the system of supervising midwives within a regulatory framework. Government authorities create statutes (laws) that govern the practice of midwives in the specific country (see Module 2). “Midwives acts” or “nurses and midwives acts” are examples of these statutes as enacted in the United Kingdom. The earliest regulation influencing midwives in the United Kingdom was introduced with the passage of the Midwives Act in 1902. The Midwives Act required that all midwives be registered with the government in order to be eligible to practice. That act, and the role of registered midwives, has been regularly updated since that time.

The act(s) established a statutory body to regulate midwifery. That entity was responsible for keeping the register of midwives and for regulating education and practice of the profession. Later legislation introduced codes, rules, and educational requirements for midwives. Supervisors of midwives were made responsible, through statute, for monitoring adherence to the rules and codes.

The introduction of supervision of midwives resulted in improvement in standards for midwifery and created a situation in which women were more likely to receive care from safe practitioners. Midwives were obliged to have their name on a roll (a registry) and to announce their intention to practice each year so that the midwifery inspectors could evaluate the appropriateness of that request. Midwifery supervisors were required to report to a “local supervising authority” (LSA) officer any midwife whose standards were considered unsatisfactory and who was thus a danger to the public. The LSA officer had the authority to suspend the midwife from practice in such cases.

[1] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However, in a number of nations men now enter this profession. The international definition has been updated to reflect a more gender- neutral language; however, this guidance uses the female gender for ease of use.

Statutory supervision continues to this day but with the underpinning value of supportive supervision. The supervisors monitor the practice of midwives in their place of work, although not necessarily directly. They meet annually with midwives for a one-on-one supervisory review to discuss practice issues and professional development. Supervision is a means of supporting midwives' professional practice through access to a named supervisor of midwives who is responsible for monitoring the practice of the individual midwives on her caseload.

7.1.4 - Clinical supervision

Clinical supervision takes a somewhat different approach from statutory supervision of midwives (Cummins, 2009). The term refers to a "bottom-up" rather than a "top-down" process of creating opportunities and systems for supervising midwives. Each of the elements of clinical supervision can be adapted and applied to the setting of any country, making them useful to midwives worldwide (Clements, Streefland, and Malau, 2007). Clinical supervision is a term that covers many aspects of supporting and developing professionals. Clinical supervision can be provided for individual practitioners, or as a method for reviewing and supporting groups of midwives who work in a common practice site (Livni, Crowe, and Gonsalvez, 2012). The primary methodologies in clinical supervision are mentorship, preceptorship, and reflective practice (Mills, Francis, and Bonner, 2005).

7.1.4.1 Mentorship

Mentorship is a developmental process that occurs when a more experienced person works alongside a less experienced partner, who is referred to as a mentee or protégé (Mills, Lennon, and Francis 2006; Hodges, 2009). All midwives, including those enrolled in preservice education and those who have already qualified for practice, bring a rich body of prior learning and experiences to their education or clinical practice settings. Mentors assist the mentees to incorporate the richness of these personal assets into a new education or practice application.

A mentor acts as an adviser, guide, teacher, and counselor in the clinical workplace, by listening, showing empathy, establishing trust, and affirming the experience of the mentee. This allows the mentee to move from a state of dependence to self-directed practice. Mentorship is an element of clinical supervision that fits well with midwifery. Mentoring the learner is accepted practice in midwifery in most countries (Latham, Hogan, and Ringl, 2008; Jones, Maxfield, and Levington, 2010).

7.1.4.2 Preceptorship

Preceptorship has become widely accepted as a valuable means of assisting the newly qualified midwife (Lackey, 2007; Holland et al., 2010) and also the midwife who has assumed a new clinical posting (Ledema et al, 2010). Preceptorship is intended to support the transition from student to qualified practitioner. It can also be very valuable in assisting a qualified midwife (i.e., a midwife already authorized to practice) to make the adjustment to a new practice setting and environment. The midwife works alongside a mentor (who may be another midwife or other equally or higher- qualified health care provider) for a specified amount of time, sharing the same shift patterns wherever possible. Midwives value and desire this period of initial support to consolidate their skills and knowledge. It helps to increase confidence in personal abilities, regardless of the placement setting. It has been shown to influence the philosophy of care and improve retention of staff, perhaps as a result of the midwives' feeling more supported (Boon et al, 2005).

7.1.4.3 Reflective practice

It is widely accepted that clinical supervision aims to identify solutions to problems, improve practice, and increase understanding of professional issues. Reflective practice is an approach to reviewing one's practice either within a peer group or individually with a skilled supervisor as a part of clinical supervision (Ralston 2005). The choice of approach depends upon a number of factors, not least personal choice, but also access to supervision, length of experience of the peer group practitioners, and the availability of supervisory groups within a busy health service (Duffy, 2008).

- *Group supervision* is when an individual, designated as supervisor, meets for reflective practice with a group of peers. It is useful when discussing current practice within a specified work area rather than an individual'spractice (Severinsson, Haruna, and Friberg, 2010). It can be used successfully within midwifery supervision but it is not a replacement for the one-on-one supervisory review. The team approach appears to have been successful in some studies, bearing in mind that demonstrating the impact of clinical supervision on patient care is problematic since it is difficult to measure. One study that evaluated the impact of clinical supervision found that there was continuous improvement in the overall quality of care and improved patient satisfaction when team supervision was used (Hyrkäs and Lehti, 2003). It did vary, however, in the five different areas where the study was undertaken, emphasizing that personalities will produce variations.
- *Peer group supervision* is an approach in which group members (typically up to six members) share dual roles, serving as both the supervisor and supervisee. This mutual support group approach offers the opportunity to receive support not only from a designated supervisor but also from peers who may well be sharing many of the concerns expressed with this group. This is particularly effective when colleagues are working together in stressful environments (Deery, 2005).
- *Individual supervision* is one-on-one supervision and is used in many professions where there is involvement in the general care of others (Falender et al., 2004). It is more useful in circumstances in which it might be considered inappropriate to discuss issues with more than one person. This approach works particularly well with midwives who need to reflect on their personal approach to practice.

The supervisor is able to provide feedback or direction during these reflective sessions, whether group or individual, to assist in development of skills and theoretical knowledge to improve competence (Ralston, 2005). The supervisor is there to listen and support but also to confront the supervisee when issues, doubts, and insecurities arise and to take action if the reflective discussion suggests that a midwife is practicing sub-optimally or is demonstrating a lack of confidence following a critical incident or because of personal circumstances.

7.1.5 - Cross-supervision

Cross-supervision is a term that describes the process in which a supervisor supports practitioners who are working in a different practice area. This could be a supervisor of midwives supervising midwives in a different hospital or community from that of the supervisor's regular area of practice, or simply a supervisor of midwives based in a hospital supervising midwives who work in the community.

Cross-supervision can be necessary when there are no supervisors of midwives available at one area and a request is made to a supervisor of midwives from another area to provide cover. The distance involved will vary from area to

area and country to country. It is very likely that there will be areas where direct access to a midwife needing help and advice is impossible because of locality and lack of transport. Communication by telephone may be an option in these circumstances. This approach is perfectly acceptable for giving advice, and it is very reassuring for the midwife wanting to have a second opinion in an emergency.

7.2 Why supervision?

By supervising, nurturing, developing, and empowering midwives through supervision, the women and babies they care for will, in turn, receive a higher level of care from safe practitioners. There are two ways to address the circumstances when midwives do practice sub-optimally, despite the support and professional development offered through supervision. First, the supervisor can provide more support and specific professional development in the attempt to improve practice. However, when circumstances indicate that performance is unlikely to improve, or in the instances of unsuitable practice, then, after thorough documentation of events, the midwife can be removed from the registry roles.

7.2.1 - Providing support for midwives

Supervision is offered from a much more supportive perspective in the present day than it was when statutory supervision was first developed more than a century ago. Supervisors of midwives act as guides and counselors to the midwives on their caseload. They are available for advice about practice issues or to listen when midwives have had to deal with a difficult situation. They support the professional development of midwives and meet regularly with them to share their concerns, help them reflect on their practice, and consider their goals for the future.

The common aim of all midwives and supervisors of midwives is to provide the best possible care for mothers and babies. The most effective ways and means to provide that level of care will be the basis of communication between supervisor and supervisee. Regular contact and discussion will promote a mutual regard and commitment to meet regularly.

Supervision has been shown to be a positive approach to the support of practice not only for midwives but also for other professions (Hall, 2007). Supervision can even have a restorative effect, particularly in circumstances where professionals work in stressful or challenging work environments (Abbott et al., 2006). The support provided by supervisors has also been shown to have a positive impact on job satisfaction and patient care outcomes and to reduce levels of burnout, emotional exhaustion, and depersonalization (Hyrkäs, Appelqvist-Schmidlechner, and Haataja, 2006; Edwards et al., 2006; Larsson, Aldegarmann, and Aarts, 2009).

7.2.2 - Protecting the public, mothers, and babies

Protection of the public was a main objective of statutory supervision, as envisioned during its original design, and that objective certainly remains relevant to present-day health care service delivery. The relationship between the concepts of supervision of midwives and the protection of mothers and babies can be difficult to grasp since it is an indirect mechanism. However, there is evidence that midwives who work in an environment in which they can be supervised

and supported are less likely to make errors in clinical judgment or practice. Nevertheless, despite this support, there

will be instances of sub-optimal practice. These can occur at many levels, from the midwife who puts in less effort to the midwife who does not continually evaluate the safety and quality of her practice, accept responsibility when error occurs, or take action to correct her unsafe practice.

Clinical workload cannot be predicted in midwifery practice. Even with careful planning, there will inevitably be periods when there are insufficient staff to care for everyone. More incidents happen when midwives are working under pressure, when circumstances entice them to take shortcuts that might compromise safety in pursuit of expediency.

Midwives working in isolated communities, where there are barriers to the accessibility of emergency obstetric care, inevitably have difficult decisions to make. The lack of technical supervision and inadequate in-service or continuing education has been identified as the main cause of poor quality care in some practice settings (Warwick, 2010).

Midwives who have been involved in challenging situations with a poor outcome may be anxious about returning to the workplace, although many do not have a choice in this matter. Whatever the circumstances, they need support in coming to terms with what has happened. They will be helped during this time by receiving assurance that they will have the opportunity to receive further training related to the incident, so that they can prove both to their supervisor of midwives and to themselves that they are capable of practicing safely. Such support through supervision means that women and babies will receive safe and competent care from midwives who, without this, could have continued to practice sub-optimally or practiced insecurely and without confidence.

7.2.3 - Enabling lifelong learning

A commitment to lifelong learning is required of midwives so they can continually develop, update, and modernize their practice in line with new and emerging evidence. Ongoing education is essential to sustained personal professional development.

The notion of professional development is crucial to maintaining standards of practice and ensuring that practice is current, evidence-based, and safe. It is recognized that experience can enhance practice but not if it is a repetition of the same experience year after year with no new learning. Experiential learning has enormous value, compared with watch and learn principles (Fowler, 2008).

The supervisor of midwives can support the midwife in determining what additional education is relevant to her individual needs. A professional profile of learning activity should be kept in order to record the way in which a learning activity has informed and influenced personal professional practice. This assists the supervisor in monitoring the professional development of a midwife.

A midwife who is committed to delivering quality health care services should be expected to independently undertake a regular set amount of study during her working life (Joyce and Cowman, 2007). Country midwifery regulatory boards may establish a minimum number of continuing education units to be acquired over a specified period of time either as standard for practice or for reauthorization for practice.

7.2.4 - Promoting professional self-regulation

Midwives generally have an understanding of occupational and professional regulation, defined as the statutory rules, regulations, and guidelines for midwifery practice that are formulated for the country by the authoritative body established for that purpose (see Module 2). Professional self-regulation is a related process, but perhaps less well-understood by the individual midwife. The true meaning of accountability, i.e., taking personal responsibility for adhering to these regulations, and further, taking additional personal responsibility for monitoring the quality of personal practice, may not be clear to all midwives.

There may be some conflict between midwives' understanding of accountability for their own practice in whatever environment they are practicing and where accountability is shared under the circumstances when midwives are carrying out the instructions of medical staff. Regulatory guidance should include an explanation that accountability cannot be either delegated to or borne by others. Rather, it simply rests with the individual practitioner (Kenyon, 2009). Discussion with the supervisor of midwives may be helpful in order to gain greater clarity and understanding (Plant, Pitt, and Troke, 2010).

Midwives are sometimes placed in the position of serving as advocates for women who wish to exercise personal choices that might not be in keeping with local policy. For example, it is standard and expected practice in some countries to give birth in a birthing facility. However, a mother may wish to stay at home to give birth. This may present a dilemma for the midwife who wants to support the mother in her choice of a home birth, but at the same time, would not be practicing in compliance with the policies and protocols of the employer. This is an example of a circumstance in which midwives may wish to seek the help of their named supervisor or another local supervisor. The supervisor can help by supporting the midwife in continuing to care for the woman in her home and giving advice about documenting the woman's decision and the guidance that the midwife has given her. The supervisor can also support the midwife after the event in initiating a review of local policy in light of new evidence (Berggren, Barbosa da Silva, and Severinsson, 2005).

The level of availability of services can also inhibit a woman's choice. For example, access to emergency obstetric care services may be very limited in some countries. A woman who experiences an obstructed labor and is best served by transferring to a facility that is far distant or requires payment of fees or the consent of family members may challenge a midwife's responsibilities, both as a midwife and as an employee. The midwife will need to urgently seek out the support of a supervisor of midwives, to assist in decision-making and taking action.

7.3 Benefits of supervision to the wider organization

7.3.1 - Supporting clinical governance

Clinical governance is a framework through which organizations are accountable for continually improving the quality of their services and safeguarding high standards of care (Scott, 2009; Arulkumaran, 2010). The intention of clinical governance is to create an environment in which there is excellence in clinical care and in which risk management is practiced throughout the organization. Midwifery supervisors support the clinical governance framework by acting as an advocate for the mother and baby and monitoring the professional performance of midwives (Som, 2007). This promotes a safe standard of midwifery practice that enhances the quality of care.

Supervisors of midwives fulfill their role of protecting the public by being aware of the current safety culture in their work areas and by being prepared to inform senior health managers of the risks that arise when maternity units are not staffed with sufficient numbers of professional staff and support staff. The supervisor of midwives who takes the public protection role seriously will also recognize the need to inform senior managers of the risks being taken within their area of management.

However, risk management is a responsibility shared by both supervisors and practicing midwives. Upholding professional accountability maintains the safety culture of the midwifery profession. This means that midwives should acknowledge any limitations in their knowledge and competence, and decline duties or responsibilities they are unable to perform in a safe and skilled manner. It is however, often difficult for the practicing midwife to act on this principle, particularly when there is no one else to carry out the tasks, and therefore, a clients' needs will not be met.

High standards of care can also be supported through a program of supervisory audits (Johnson, Jefferies, and Langdon, 2010). Supervising authorities can arrange supervisory audit visits to each maternity center in facilities and in communities. The manner in which midwifery is practiced in these settings can be evaluated against established standards of practice, such as the WHO Making Pregnancy Safer standards (WHO, 2006). The auditor, as an outside assessor, is in a position to recommend remedial action in the circumstances where there are unacceptable variations in clinical midwifery practice, or care is inappropriate for women's needs.

Professional self-regulation and lifelong learning are also key themes of clinical governance. These have already been described as integral to the supervision of midwives, promoting and developing safe practice, and disseminating good, evidence-based practice and innovation. Supervisors have a role in supporting this framework for continued professional development and refreshment of midwifery knowledge.

7.3.2 - Supporting continuous quality improvement

Continuous quality improvement (CQI) is a process by which an assessment is made of individual and/or group practice, and compared to external standards of safe and effective practice, and, when indicated, recommendations for enhancing quality of care are generated. The interest of maternity services in engaging in a CQI process is to provide the evidence that quality-related activities are being performed effectively. This should promote confidence among administration, peer providers, and the public that quality care is being offered.

Clinical audit may be viewed as an element of, or the same as, quality assessment and should be an integral part of all health care delivery and continuous quality improvement activities. Such endeavors may include peer review, quality studies, and audit of all types (de Reu et al., 2009).

The systems used for quality control in health services are based on clinical standards, evidence-based practice, and learning the lessons from poor performance. A program of supervision of midwives and supervisory audit can serve as an important component of these quality control systems.

Module 3 of this toolkit discusses the development of national standards for midwifery practice. It supports the theory that if standards are to be set for midwifery practice, then midwives should be part of the multidisciplinary collaboration in producing these standards. A supervisor of midwives who is also an active midwifery practitioner would be well placed to represent midwives on the working body that establishes these standards.

Evidence-based practice is crucial to any program of quality improvement activities within clinical governance. Supervisors of midwives have a responsibility to monitor midwifery practice. Regular monitoring of midwifery practice by supervisors who work in the clinical environment can help to identify the potential for risk and take action to address it.

Supervisors must ensure that the practice within their own clinical area is evidence-based (Spiby and Munro, 2009). They must also challenge practice that is performed out of a sense of tradition, and without any evidence. Supervisors are also expected to ensure that midwives understand the meaning of evidence-based practice and know where and how to find evidence and evaluate it adequately, thus being able to differentiate between poor- and high-quality research studies (Gordon et al., 2008).

Critical incident analysis is a process in which those involved in a difficult clinical situation engage in discussion of the circumstances that may have affected the outcome, in the interest of identifying factors that can be modified in order to promote better outcomes in the future (McCool et al., 2009; Vachon and LeBlanc, 2011). Critical incident analysis is a vital part of the supervisor's role (Arvidsson and Fridlund, 2005; Schluter, Seaton and Chaboyer, 2008). All untoward events involving midwives should be recorded, investigated, and monitored by supervisors. This is one mechanism by which supervisors can assist midwives to learn the lessons from poor performance.

Many institutions have regular perinatal audit meetings, designed to review the outcomes of clinical care and identify possible areas for improvement. These are excellent arenas for supervisors of midwives to monitor midwifery practice and take appropriate action where sub-optimal care has been demonstrated. Perinatal audit meetings provide opportunities for multidisciplinary discussion into lessons learned from audit and to debate how poor outcomes can be avoided in the future.

7.4 Models of supervision

Two models of supervision are offered for consideration. The first is applicable to midwives who practice in developed countries and conduct facility-based births. The second model is intended for midwives working in developing countries. The discussion will focus on how supervision contributes to well-established health organizations and also address the practicalities of supervision within less-developed communities.

7.4.1 - Supervision for all midwives

A formal program of supervisory review provides dedicated time for midwives to meet regularly with their supervisor and reflect on their practice over the preceding period of time. An annual review is recommended if this is feasible. Meetings can be arranged more frequently if needed or if desired by the midwife. Midwives who are concerned about any aspects of their practice can discuss these issues frankly, knowing that these discussions are confidential and that they are the opportunity to receive support and guidance, rather than criticism. Midwives should also be able to speak with their supervisor as, and when, they need or want to. It is an advantage if supervisors of midwives hold clinical posts, so they have the opportunity to work alongside the midwives they supervise and have more regular contact on an informal basis.

The supervisory review is an opportunity to discuss professional development. The supervisor can serve as a sounding board, offering advice and guidance, and helping the individual midwife to make decisions. The supervisor of midwives

is, in fact, responsible for facilitating opportunities to maintain and advance their skills and to develop new skills, knowledge, and competencies.

Midwives who have been involved in a challenging situation are encouraged to meet with their supervisors and reflect on how the emergency was handled, the events leading up to it, and the outcome. The role of the supervisor in these situations is to provide support for the midwife, and to protect the best interest of the midwifery profession and the clients who are served. Dealing with some very serious circumstances may benefit from the assistance provided by another supervisor, who can be asked to carry out a supervisory inquiry, while the named supervisor provides support for the midwife, helping to identify any gaps in knowledge or weaknesses in practice. These gaps can then be addressed through appropriate learning, supported by the supervisor of midwives in the work area liaising with the local midwifery education department if academic input is required.

7.4.2 - Supervision of midwives conducting facility-based births

Where midwives conduct facility-based births, or births in women's homes close to a birthing unit, there is usually ready access to a supervisor of midwives. Structured programs of monitoring and supervision of midwifery practice can be developed and implemented without great difficulty under such circumstances.

Record review is one of the tools that can be chosen for monitoring midwifery practice. Record-keeping in midwifery is well established in most developed countries. These records must be accurate, be contemporaneous, and provide a good account of the care given (WHO, 2006). Supervisors of midwives are responsible for ensuring good record-keeping standards, regularly checking the midwifery records in their place of work and providing feedback to midwives on their standards of record-keeping. This assists midwives in improving their notes (including the electronic medical record) (Maust, 2012) and helps them give a clear account of the actions they took in emergency situations.

7.4.3 - Supervision of midwives working in developing countries

Access to a supervisor of midwives can sometimes be problematic in a developing country because of distances involved and the rural nature or remoteness of some regions. However, communication does not need to be in person. The use of Internet technology and telecommunication can enable the necessary contact (Xavier, Shepherd, and Goldstein, 2007). The key principles of supervision, support, and reflection on practice can be facilitated in this way. Personal visits can be supplemented by periodic contact through other means in order to provide midwives with advice, guidance, and support in their practice.

Reviewing practice through maternity records can be difficult in countries where the production of such records is limited. However, supervisors of midwives can be responsible for introducing record-keeping and training midwives in these standards.

Equipment and premises can be inspected by supervisors during their visits to rural areas, to ensure that they are well maintained and adequate for the needs of the community. The emphasis of such supervision visits should, however, be placed on support and professional development needs and ways of "being there" for the midwives when they are in need. These emphases provide a confidential framework for a supportive relationship between supervisors and midwives wherever they are working.

7.5 How to plan for and develop a supervision system

This subsection describes a series of steps that countries can use to plan, develop, and introduce a system for thesupervision of midwives.

7.5.1 - Providing a regulatory framework and standards for supervision

The first essential in developing a system for the supervision of midwives will be to consider the introduction of regulation of midwifery practice that can be supported by supervision. This regulation makes it possible to set a formal agenda for the creation of standards for supervision. These standards, in turn, form the basis for a education program for midwife supervisors.

Regulation is addressed thoroughly in Module 2 of this toolkit. The autonomy of midwives differs from country to country, and state to state, so the level of regulation will vary accordingly. The level of regulation must be sufficient to support a robust system of supervision throughout the period of time over which the midwife is authorized by law to carry full responsibility for mothers and their babies. The standards for supervision can be created by a multidisciplinary team, on which there is strong midwifery representation. The standards would be developed to reflect the rules and codes laid down by this midwifery regulation.

7.5.2 - Selection of supervisors of midwives

Personal and professional qualifications for individuals selected to serve as supervisors should be based on these standards. Supervisors of midwives will be fully qualified midwives, ideally with at least three years of experience. Other qualities that would be ideal in a potential supervisor are that the individual be:

- Approachable;
- clinically experienced;
- in touch and up to date;
- willing to take action.

Additional expectations of potential supervisors are that they be:

- Committed to woman-centered care;
- a source of professional knowledge and expertise;
- able to resolve conflict;
- sympathetic and encouraging.

Supervisors of midwives provide professional leadership, so midwives with leadership skills and qualities will be excellent candidates. Good leaders support, challenge, and provide vision (Hyrkäs, Appelqvist-Schmidlenchner, and Kivmäki, 2005). They possess certain characteristics such as self-belief and self-awareness. They have personal integrity and are politically astute. Supervisors need to be able to confirm a midwife's ability and create opportunity

for reflection and willingness to engage in a change process, when necessary. Leadership uses the processes of mirroring and reflecting, helping supervisees consider their own thinking and see their own behaviors in a new way, so that they understand their personal strengths and weaknesses more clearly. It will be impossible to find all these characteristics in one midwife but, by finding a group of midwives with these combined characteristics and qualities, the team of supervisors will be an asset to the organization and the midwives within it.

The ability to maintain confidentiality is implicit in the role of the supervisor of midwives. A midwife must feel assured at all times that discussions with a supervisor of midwives will remain confidential. There will always be times when the supervisor of midwives may need to take action in the interest of safety, in which case a discussion would be held about the need to share the information that the midwife has given.

In order to avoid confusion between management and supervision, supervisors should be appointed to clinical, rather than managerial, roles and titles. Managers will often have budgetary responsibility that will affect the resources for services. In contrast, the prime focus for the clinical midwifery supervisor will be midwifery practice, and not the organization. However, the pool of applicants will dictate the final selection.

7.5.3 - Preparation of supervisors of midwives

A specialized education program must be created for those considered as potential supervisors of midwives. Initially, a decision is needed on the appropriate level of education for the program. It is suggested that that level be one step up from the level for midwifery preparation. So, if midwives are educated at the certificate level, then a diploma- level program would be appropriate, and if midwives are educated at the diploma level, then supervisors should be prepared at the degree level, and so forth.

The education program should be broad-ranging, including covering the concepts of political awareness. Supervisors need to be conscious of the overarching political climate and national health services policies that influence clinical practice, as well the local politics that shape an area's provision of maternity services. When health policies are made both locally and nationally, the supervisor will be expected to lead midwives in the implementation of those policies, such as might be the case with the local introduction of a new national screening program.

The length of the education program should be in line with the content. Programs offered at the degree or diploma level should comprise at least one semester. Self-directed learning will be appropriate in many educational institutions. Additional study days can be arranged in order to offer opportunities for shared learning with other potential supervisors.

An experienced supervisor of midwives should support and guide the student supervisors on the activities and practical elements of supervision. Obviously, this step in the development of a supervisory system can only happen once the system of supervision has been established, and a cadre of experienced supervisors is available to serve in this role.

The education program should incorporate the following topics:

- Supportive supervision;
- role of the supervisor of midwives;
- purpose of supervision;

- leadership;
- influences on supervision;
- empowerment and advocacy;
- proactive supervision;
- decision-making and problem-solving;
- organization of supervision;
- models of supervision;
- legislation;
- accountability;
- professional standards;
- supervisory partnerships;
- clinical governance and risk management;
- supervisor's role in professional development;
- fitness to practice;
- identifying alleged misconduct;
- conducting an investigation.

Much of the syllabus can be covered by the use of case studies and examples. Development of a learning portfolio should be encouraged. Assessment can be conducted either by written assignment with an oral presentation or by portfolio assessment.

7.5.4 - Appointment of supervisors of midwives

The potential supervisor will be eligible for appointment as a supervisor of midwives upon successful completion of the education program. The appointment system should allow some leeway for final selection of candidates, so that if any doubts about a midwife's ability to perform as a supervisor of midwives have been identified, there is no obligation to appoint the individual to that role. This is not an unusual situation since selection through interview does not necessarily identify an applicant's weaknesses.

7.5.5 - Allocation of caseload

Experience in developed countries would suggest that a caseload of 10 to 15 midwives to one supervisor of midwives is reasonable. However, this could be too burdensome if the distance between facilities is great and access to supervisees is limited. Allocation will therefore be determined according to the available number of supervisors and the logistics of accessing supervisees, bearing in mind that the supervisor still has to fulfill her substantive post as a midwife.

7.5.6 - Choosing a supervisor

The supervisory relationship will benefit from a midwife being able to choose her own supervisor whenever possible (Catherine and Stewart-Moore, 2006). The perceived quality of supervision has been shown to be higher in those cases where supervisees have chosen their supervisors (Edwards et al., 2005). However, it is likely there will a need for some sort of assignment or allocation process in the earlier years, while the supervisory system is being introduced. Once a supervision system is well established, the system leaders may find the opportunity to add their names to the list of available supervisors of midwives from which midwives can select their personal, named supervisor.

7.5.7 - Making contact

Supervisors of midwives will receive a list of names of midwives allocated to them and/or the names of midwives who have selected the supervisor to serve in that role for them. The supervisor should try to make informal contact as soon as possible with each supervisee for the purpose of introduction and to start the process of communication. The practicing midwife would find it much easier to contact the supervisor in time of need if the two of them have already established a relationship. Arrangements for a formal get-together should ideally be made at the time of first contact. The supervisee can use the formal meeting to bring the supervisor up to date on details of her career progress to this point in time, her aspirations, and her concerns about midwifery practice.

The relationship is considered established at this point. Nevertheless, relationship development is an essential component of effective supervision (Cerinus, 2005). Building a relationship is not possible in all circumstances. Therefore, there must be the possibility of opting out when either the supervisor or the supervisee recognizes that their relationship is not a good fit, so a change of supervisor can be arranged.

7.5.8 - Responsibilities of the supervisor of midwives

The supervisor of midwives takes on the responsibilities previously described within this module. Supervisors will constantly, and often subconsciously, monitor the practice of all the midwives in their practice area. This attitude of being constantly “practice aware” will prompt the supervisor to see that all practice is current, evidence-based, and in compliance with standards (Modules 3, 4, and 8 offer additional guidance). Supervisors will be empowering leaders in their maternity service. Midwives will recognize that their supervisors are also sources of information, guidance, and support.

The principal responsibility of a supervisor is to monitor midwifery practice, which is carried out in several ways:

- Working in the clinical areas with midwives;
- auditing records and assessing clinical outcomes;
- contributing to clinical audit, including conducting confidential inquiries into maternal deaths and stillbirths;
- meeting with midwives to discuss practice;
- investigating clinical incidents.

The provision of support to midwives is of equal importance. This is achieved by:

- Meeting regularly with the midwives on her allocated caseload to discuss practice;
- responding to requests from midwives for advice and guidance on clinical issues;
- being available to act as a sounding board when midwives need a second opinion;
- supporting midwives who have had a challenging clinical experience;
- reflecting with midwives on their practice;
- encouraging midwives to reach their goals;
- arranging appropriate professional development for midwives;
- acting on information received when a midwife reports sub-optimal practice.

Some countries have enacted the requirement that midwives have to notify their intention to practice as a midwife every year. Supervisors of midwives receive and process the notification forms from the midwives on their caseload to verify that statutory requirements have been met in these circumstances.

7.6 Expectations of supervision

7.6.1 - Midwives' expectations

Midwives' personal experience will dictate their own expectations of supervision. Those who have received supportive, caring supervision are most often very positive about supervision and willing to promote it in any arena. In contrast, there will be midwives who have received punitive supervision within a hierarchical environment. Even though this could have happened many years before, these midwives may find themselves unable to see anything positive about supervision because of their deep-rooted feelings.

The supervision relationship must have the essential elements of mutual respect and confidentiality if it is to be most effective. Therefore, it is important that midwives carefully consider the selection of their supervisor. They should choose a supervisor with whom they believe they can form an open and honest relationship. The chosen supervisor should, in turn, be able to appreciate the environment in which the midwife is currently practicing.

Midwives who feel empowered by their supervisor of midwives feel able to empower their clients in turn (Hermansson and Mårtensson, 2011). The supervisory decisions perceived as empowering are the ones made by consensus between the supervisor and the midwife (Matthews, Scott, and Gallahger, 2009).

Where midwives have ideas for changing and improving practice, supervisors of midwives can empower the midwives to introduce such change and support them in their initiatives, acting as their advocate with senior staff. Professional confidence is enhanced when the midwife feels that she is valued and supported by her supervisor and that her achievements have been recognized.

The opportunity to change supervisor can be taken by the midwife if the supervisory relationship does not achieve what either the midwife or the supervisor expects, provided that there are others available (McGilton, 2010). Some midwives have reported that their personal supervisors were not supportive and that they felt they did not want to stay in midwifery because of this (Curtis, Ball, and Kirkham 2006). The supervisor herself may consider that a change in the supervisory relationship is necessary if there is no rapport or confidence in the supervisory relationship. Some have suggested that there is a benefit to changing the supervisor every few years. Others suggest the need for a longer-term relationship.

7.6.2 - Supervisors' expectations

Supervisors also stand to benefit from supervision. They themselves have a personal supervisor to support them as clinical practitioners and to assist them in working through a difficult supervisory issue. Service in the role of supervisor can help an individual to gain greater insights into her own personal issues, strengths, and weaknesses. Supervisors can gain personal satisfaction from their role, which offers the opportunity to share the excitement of supervisees as they grow and develop in their own professional practice.

Supervisory networks can be established. These networks can provide peer support for the supervisors. Supervisors are well positioned to identify good practice in their own areas and to share this with supervisors in other maternity centers. Similarly, they can learn of examples of good practice in other units that can be adopted within their own area. A supervisor of midwives should also be a member of any multidisciplinary forum that influences maternity practice in her own community and country.

7.6.3 - Women's expectations

The women and families served by midwives stand to benefit from supervision. Nevertheless, most women in countries where supervision is already well established have little knowledge of the supervisory system. There is much that remains to be accomplished in communicating the potential benefits of midwifery supervision to the women whom midwives serve. Supervisors should be available to women who feel they need an advocate when they are concerned about the care they are receiving or the type of care they would like to receive. For example, a woman may be seeking a home birth in a geographic area served by a local midwife who feels too inexperienced to provide that service and refuses the request. The supervisor may be able to link the woman and the midwife to another service provider who can meet both the service needs of the woman and the educational needs of the midwife. Women in lesser-developed communities and countries may benefit from having the assistance of a supervisor of midwives to introduce or expand availability to a professional service, such as family planning.

Supervisors in community settings will be called upon more often than in areas where midwives are conducting births in facilities where assistance is more readily available. Midwives working in isolation in the community will use the supervisor for advice when it is necessary. The women for whom these midwives provide care should be made aware of the source of this guidance. This creates the opportunity to promote the value of midwifery supervision to women in the community.

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Annex 7.1: Checklist for introducing supervision of midwives

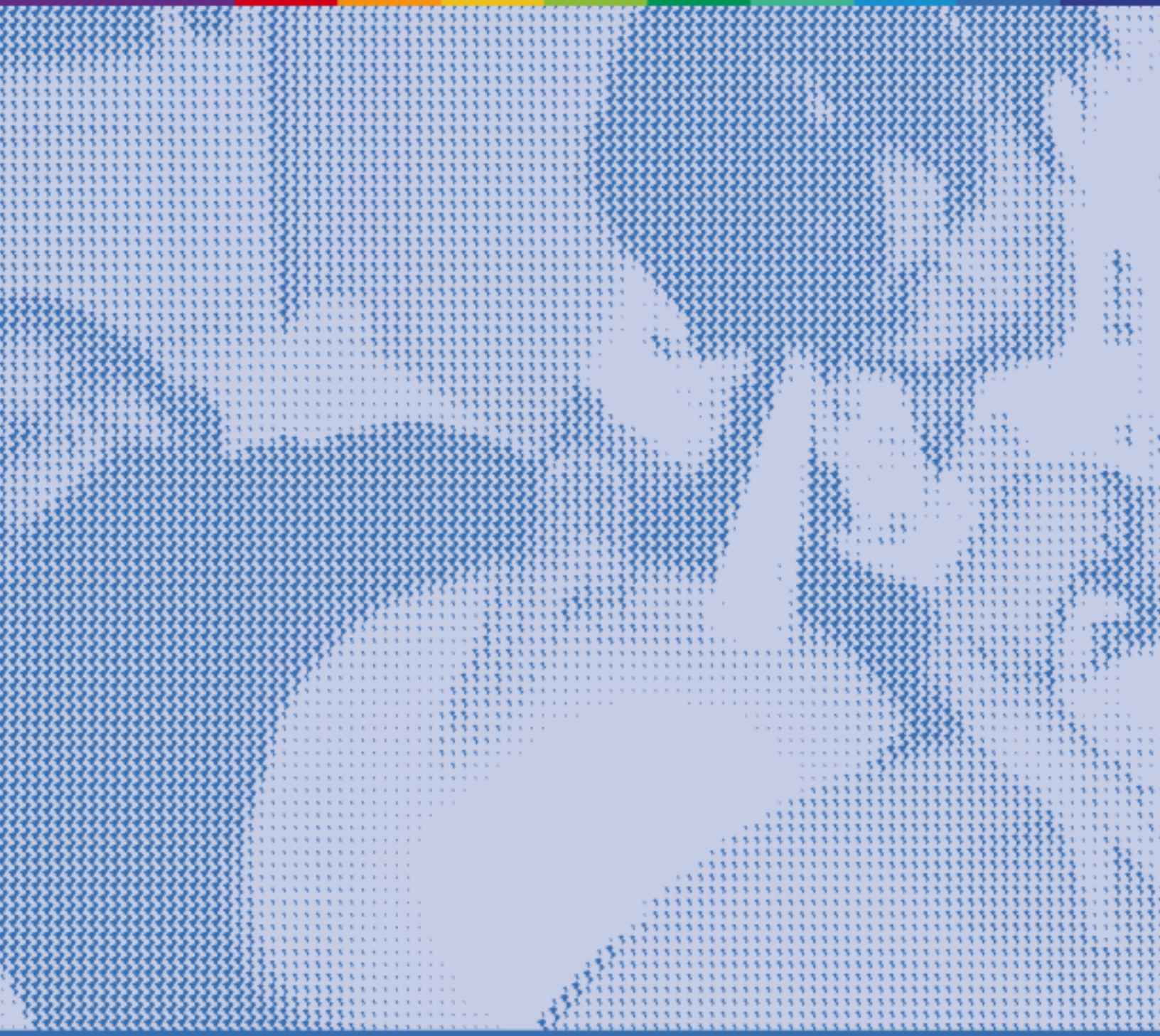
Stage	Question	Yes	No	Action Required
1. Providing a regulatory framework and standards for supervision.	Is there regulation for midwifery practice against which standards for supervision can be set?			
	Does the regulation provide rules and a code of practice so that supervisors can monitor implementation?			
2. Selection of supervisors of midwives.	Is there a statement of qualifications and a job description designed for the supervisor of midwives?			
	Is there a national definition (agreed upon by all stakeholders) of a supervisor of midwives?			
	Has a selection process for supervisors been determined?			
	Are those responsible for selection aware of the qualities they require in the candidates?			
3. Preparation of supervisors of midwives.	Has the level and length of the education program for supervisors of midwives been agreed upon nationally?			
	Has an educational program been prepared that contains all the essential elements required for training supervisors of midwives?			
	Have mentors been prepared to support potential supervisors during their education?			
4. Appointment of supervisors of midwives.	Is there an appointment system for supervisors of midwives that does not include automatic appointment on successful completion of the education program?			
5. Allocation of caseload.	Is there a locally agreed-upon ratio of midwives to supervisor that does not exceed 15 in developed areas and is much smaller in less-developed areas, according to availability?			

Annex 7.1 (continued)

Stage	Question	Yes	No	Action Required
6. Choosing a supervisor.	Wherever possible, are midwives able to choose their own supervisor from a list of those available?			
7. First contact.	Is there ample opportunity for the supervisor to make informal contact with each of the midwives listed on the supervisor's caseload in order to initiate regular communication with those individuals?			
8. Ongoing contact.	Is there a locally agreed-upon system for facilitating midwives having regular contact with their supervisor that never falls below the minimum of one meeting per year, and much more frequently in rural areas?			
9. Responsibilities of the supervisor of midwives.	Are all supervisors of midwives aware of the prescribed list of responsibilities set at both the national and local level?			
	Is there ample opportunity for supervisors to audit and review standards of midwifery practice?			
	Are the majority of supervisors clinically based so that they are able to monitor midwifery practice?			
	Are the supervisors able to provide support for all the midwives on their caseload?			
	Is there a system that provides midwives with access to at least one supervisor at any time for advice and guidance on clinical issues?			
	Do the supervisors take responsibility for supporting midwives with their professional development?			
	Is there a clear process for a supervisor of midwives to investigate sub-optimal practice?			
	Do supervisors of midwives keep appropriate records of their supervisory activities?			

Module 8

Monitoring and assessment of continued competency for midwifery practice



8.1 Introduction

This module in the Toolkit for strengthening professional midwifery in the Americas focuses on the individual midwife engaged in clinical practice. The module is based on the assumption that the midwife has been educated for entry into practice according to the criteria for educational “best practice”; that the midwife receives appropriate supportive supervision for her work, including the opportunity to participate in an ongoing program of continued professional development; and that the midwife practices with the enabling environment of policy, regulation, and standards that are set forth in the companion modules in this toolkit.

The purpose of this module is to propose strategies for monitoring and evaluating the continued competency of midwives in current practice, in order to promote maintenance of the highest standards of quality in practice, across the professional life-span. The module offers a framework for consideration of the determinants of health care provider performance according to established standards of practice. That framework affirms that competency assessment is only one of several issues and factors that must be addressed simultaneously when building health system capacity for safe motherhood. Ethical values, professional attitudes, and behaviors should also be assessed as components of professional, high-quality midwifery care.

8.2 The definition of professional competence

8.2.1 - An operational definition of professional competence

The theoretical and practical definitions of professional competence are discussed in Module 4 of this toolkit. Fundamentally, competence can be defined as the combination of knowledge and of psychomotor, communication, and decision-making skills that enables an individual to perform a specific task to a defined level of proficiency (Fullerton et al., 2011). Competence would be objectively measured through a process of structured assessment, using objective standards of professional practice (knowledge, skills, and abilities) as the criteria of quality, in order to document an acceptable level of performance.

8.2.2 - An evolving definition of competence over a professional lifetime

The definition of competence is not static; rather, it is differently defined over an individual’s professional lifetime. The midwife will need to acquire new information and new skills in order to continue to provide safe, high-quality care. Some of the key considerations in defining lifetime competence are:

- Every individual practitioner continually progresses back and forth on the continuum from novice to expert (Burger et al., 2010; Gardner, 2012). When individuals have initially acquired a skill (whether cognitive or practical), the skill must be reinforced from time to time in order to maintain a similar level of competence. Additionally, new skills are continually emerging, as technology advances. Very experienced practitioners may be novice learners of new skills (Anderson, 2009). The degree to which one manages a situation independently, or with consultation, changes under these circumstances.

- Similarly, the knowledge base that underpins professional practice is continually evolving. The concept of competence requires that emerging knowledge be incorporated within the body of learned knowledge, and that the individual evaluate that new information for any implications it may have for application within practice.
- Competence may be perceived by self or others as demonstrating safe practice behaviors (Armstrong, Spencer, and Lenburg, 2009). Safe practice includes following standards outlined in practice guidelines (Scott, 2009); awareness of personal limitations of knowledge and experience and asking for assistance; utilizing strategies that minimize harm to self or patients (e.g., using appropriate precautions in the presence of potential exposure to infection); and thinking critically in every circumstance (i.e., in any particular circumstance, knowing the principles that underpin whatever actions are selected).
- Competence may also be perceived as ethical practice (Vanaki and Memarian, 2009). The definition of ethical practice is to a large degree defined by universal understandings of concepts such as human rights and equal justice. However, ethical practice, individually defined, may reflect personal religious, moral, and cultural values. These latter may lead an individual to elect not to participate in certain aspects of client care, leading to "de-skilling" (Bradshaw and Merriman; 2008), or to the decision not to acquire or maintain competency in selected practical skills. Nevertheless, the ethical principles of equity and beneficence would compel the individual to offer guidance about how these aspects of care could be legally and practically obtained from other providers.

8.2.3 - The distinction between competence, capability, and performance

There is an essential distinction between competence and performance, and the former should not be inferred from the latter (Scotland and Bullough, 2004). Competence refers to an individual's capability (the potential) to perform. Performance refers to what an individual does in the actual context of professional practice, i.e., the actual behavior that is observed. Performance can be affected by the practice environment, which can either enhance or constrain the ability to translate the capacity for competent practice into actual behavioral outcomes. Therefore, any attempt to measure the construct of competence through the observation of performance must carefully consider the context of practice. This understanding necessarily implies the importance of using multiple means and approaches to the measurement of both professional performance and the concept of professional competence.

8.2.4 - The relationship between competence and confidence

It has already been noted that individuals move forward and backward along the continuum of competence, from novice to expert clinical practitioner, across their professional lifetime, as new skills are acquired or previously learned skills are reinforced. Confidence – the self-assessed level of comfort in actual performance of a particular skill – is similarly variable. An individual may be capable of performing a skill in a manner that meets all objective criteria of safe practice (for example, performing all components of a skill in the right order and in the correct manner, as documented by use of an objective clinical checklist) while, at the same time, not feeling personally at ease when doing so (Davis et al., 2012). This personal unease may lead to reluctance to perform this skill when called upon to do so in the course of personal practice.

Similarly, it may be the case that an individual has acquired both competence and confidence in performing a certain skill (Jordan and Farley, 2008), but, because the opportunity to perform the skill in actual practice is limited, has lost some degree of either attribute. This applies to both low-volume/low-occurrence events and critical (life-saving) skills (Bhuiyan et al., 2005). The clinical event that requires use of a particular skill may occur with low frequency (for example, the need to perform bimanual compression of the uterus to stop a hemorrhage). It may also occur because the policies of the clinical environment in which an individual practices restrict performance of that skill to another cadre of provider. Such a circumstance can lead to de-skilling (a lesser degree of competence) or to a diminishing sense of personal confidence in the ability to perform the skill safely, if called upon to do so. Competence and confidence can both be fostered through continued professional education and supportive supervision (Vernon, Chiarella, and Papps, 2011).

8.2.5 - Critical thinking as a characteristic of continued competency

Midwives develop a personal practice style over time. Individual practice is influenced by personal experiences (e.g., what worked in one circumstance, but not in another) and also by personal preferences (e.g., what seems to be a more comfortable way of practice to the individual and more acceptable to the women and families whom she[1] serves). Most importantly, individual practice is influenced by the individual's analysis of her clinical encounters and experiences and the lessons learned from this reflective thinking. This process involves critical thinking, which is a particularly important characteristic and ability of competent midwives, both initially and over the professional lifetime.

Characteristics of critical thinking include analysis, inference, reasoning, interpretation, evaluation, and open-mindedness. Critical thinking implies a combination of abilities required to define a problem, select information that is pertinent to the solution of the problem, recognize the assumptions that underpin a proposed resolution of the problem, and judge the validity of the information under consideration (Riddell, 2007). Critical thinking is different from creative thinking. Creative thinking involves the generation of new ideas, rather than the largely retrospective, reflective, and evaluative process that defines critical thinking (Seymour, Kinn, and Sutherland, 2003). The process of critical thinking can be developed through such activities as questioning, debate, and reviewing case studies (Edwards, 2003; Brunt, 2005; Finn, 2011). However, the talent for creative thinking is a personal ability. Based on the wisdom they have acquired over a professional lifetime, creative midwives can generate new ideas and proposals that can advance the art and science of clinical practice and lead to new models for clinical care.

[1] The use of the female gender reflects that in many countries midwifery is seen as exclusively open to women. However in a number of nations, men now enter this profession. The international definition has been updated to reflect a more gender-neutral language; however, this guidance uses the female gender for ease of use.

8.3 The measurement of competence

A glossary of terms related to professional competence

Clinical practice guideline: A recommendation for a way of practice, based on strength of the evidence that supports a particular approach to patient care.

Competence: The combination of knowledge and of psychomotor, communication, and decision-making skills that enable an individual to perform a specific task to a defined level of proficiency.

Capability: An individual's capacity (the potential) to perform.

Evaluation: A process and procedure for formal assessment of the outcomes of learning or performance.

Monitoring: An ongoing, periodic assessment of performance in accord with standards.

Performance: What an individual does in the actual context of professional practice, i.e., the actual behavior that is observed.

8.3.1 - Why measure competence?

There are compelling and complementary rationales for the measurement of competence. They include:

- Initial and ongoing assessment of the competence of a midwifery practitioner is consistent with the ethical principles that underpin professional practice.
- The measurement of competence is an essential component in the measurement of educational outcomes. Examples include the end-of-program academic assessments conducted in preservice, in-service, and continuing education programs.
- Competency assessment is an integral part of the certification and recertification processes of midwifery providers in some countries. Examinations are often used to determine qualifications for initial entry into practice of a specific occupation or profession, and, in some circumstances, for permission to continue to practice (relicensure). The examinations offer an objective and common standard on which to base these decisions. Some countries also authorize midwives to practice based on evidence that the individual has passed an examination in another country with a score that is equivalent to the standard required for practice in the new legal jurisdiction (Nichols, Davis, and Richardson, 2010; Saltman et al., 2012).
- Competency assessments are useful in planning for new services. They would be essential in determining the appropriateness of expanding the scope of practice for an existing cadre of practitioners. For example, it may be thought to be desirable to add a newly emerging skill to the scope of practice of midwives. This skill can be incorporated into preservice education. Midwives in current practice should be able to demonstrate competence at a level equivalent to that of the new graduates.

- Similarly, a country government may think it to be useful and desirable to create a new cadre of practitioner (e.g., an auxiliary midwife) who is prepared to perform some of the skills that are within the scope of practice of a more qualified professional. It would be important to assess the degree to which the new practitioners can competently perform each of the skills that are selected for inclusion in this newly defined scope of practice. Equivalent skills should be judged equivalently.
- Competency assessments could be useful in selecting new staff and in supervising current staff. Any organization would be required to document that all staff can perform their duties and functions at a level consistent with quality standards, and to facilitate a program of continued quality improvement. This is also an organizational risk management strategy.
- Standards are continually updated. It is critical that practicing midwives have the opportunity to acquire relevant information about changes in practice, and then demonstrate their competence in newly acquired (or amended) ways of practice.
- The measurement of competence is important for individual performance improvement, in accord with the personal accountability that should characterize professional practice. This includes self-monitoring of personal competency in the performance of new skills that have emerged through the evolution of evidence- based practice (Perrier et al., 2010). It includes personal re-assessment prior to re-engagement in a limited or full scope of midwifery clinical practice (e.g., for midwives who have been disengaged from clinical practice and now wish to rejoin the workforce). It is also fundamental to the personal practice of any midwife who supervises the clinical practice of others.

8.3.2 - The timing of competency assessments

Formative assessment occurs at the time of initial learning and also whenever new knowledge or new techniques (skills, procedures, guidelines) are introduced into professional practice. Formative assessment is a common component of preservice and in-service education.

Summative assessment occurs at the junctures between the completion of structured learning programs and the authorization to engage in individual clinical practice. Summative assessment processes are commonly anticipated and understood as best practices in education (Cleland, 2010). They are also in common use by regulatory authorities as a “gatekeeper” mechanism for initial entry into practice (e.g., as with certification or licensure examinations).

The continuous evolution of the science that underpins professional practice, along with the ongoing movement along the continuum of both competence and confidence in practice, underpins the importance of periodic competency assessment. Formative and summative assessments, in the context of both monitoring and evaluation, should continue to occur across the professional lifetime.

8.4 Monitoring professional competence

8.4.1 - The distinction between monitoring and evaluation

Monitoring and evaluation are both conducted from time to time and over time. However, monitoring often refers to the process, and evaluation more often refers to the assessment of *outcomes*. This module focuses on the monitoring of *individual* midwives as professional practitioners. In that context, monitoring offers the opportunity to verify that the individual practitioner continues to take actions that promote continued adherence to guidelines and/or standards of practice established for the occupation/profession of midwifery. Examples of monitoring include a review of "currency in practice," i.e., a review of how recently any individual has had the opportunity to perform certain tasks (some or all of the knowledge, skills, and abilities (KSAs) defined for the midwife (see Module 4)).

Evaluation offers the opportunity to verify that the individual midwife continues to demonstrate competency in the performance of tasks related to her scope of practice, by demonstrating safe performance of KSAs, using objective performance criteria. These methods of evaluation are more fully discussed in Module 5. Evaluation is, of course, also a much broader concept. Evaluation can also address outcomes and impact of the profession of midwifery on the public health. For example, evaluation might include measurement of the level of maternal and neonatal mortality following the introduction of fully qualified, professional midwives into the health care workforce.

8.4.2 - Monitoring midwifery competencies according to international or country-specific guidelines

Development of a program to monitor midwifery competency involves the identification of the knowledge, skills, and abilities that should, in the ideal, be maintained by the individual practitioner. The first task in establishing a program of monitoring midwifery competencies is to select the KSA list that is most appropriate and most relevant to the purpose. These lists of KSAs form the monitoring guidelines.

Some countries invest in the education of fully qualified midwives, but, in addition, have created other (lower-level) cadres of birth providers who have acquired some, but not all, of the KSAs associated with the practice of midwifery. These lower-level cadres would have a different set of KSAs. However; each cadre would be expected to perform the skills on that specific list according to an explicit standard of quality practice. There is a fuller discussion of this issue in Module 4 and Module 5 of this toolkit.

In a very limited sense, job descriptions and clinical practice guidelines (Tillet, 2009; Qaseem et al., 2012) might be considered "standards" of practice, because they describe the tasks that the midwife is expected to do (and to do well) in that setting (Freeman and Griew, 2007). Job descriptions developed at the facility level should neither limit nor exceed the tasks that are authorized in the country's regulatory guidelines for midwifery practice (Module 2).

8.4.3 - A model for monitoring midwifery competencies

A process for monitoring the quality of the practice of professional midwives is offered in this module. An ICM document, *Essential Competencies for Basic Midwifery Practice* (2010), has been used as the resource for the KSA list. A partially developed example of self- and peer/supervisor-assessment tools is presented in the annex to this module.

The tools can be used in the review of an individual midwife's currency in the knowledge, skills, and abilities expected of all midwives (global, basic, essential competencies). These excerpted tools are intended to serve as guidelines or models to use when developing similar tools for monitoring purposes.

Before any of these tools can be used by any other cadre of skilled birth attendant, the competency statements must be reviewed and amended to reflect the overarching statutory authority for the scope of practice of the specific health cadre in that jurisdiction. In other words, the competency statements must be "leveled," that is, specifically adapted to reflect the statutory authority for any lower-level cadres of birth attendant that may be authorized to practice in a specific country.

Professional midwives who wish to use the monitoring tool as an external criterion against which to assess their own personal practice should use the entire list of competency statements, which can be obtained from the ICM website (core documents) at www.internationalmidwives.org. This would provide the opportunity to assess personal practice in reference to "best practice" as defined for the international midwifery practitioner. It would also be appropriate to use a document that has been adapted for use within the country of practice, as that country-specific list would reflect the scope of practice to which any individual practitioner is held professionally accountable.

Regulatory authorities may choose to be even more selective as they adapt the list of competency statements. It may prove useful for countries to identify, from among the entire list of competency statements, those that are most *critical,* or *most directly relevant*, to the country situation. For example, if country-based vital statistics indicate that postpartum hemorrhage is a major contributor to maternal mortality, then it may be important that all categories of skilled attendants be educated to perform the set of intrapartum and postpartum management tasks (skills) that are directly related to the prevention and management of postpartum hemorrhage. And therefore these particular skills might be specifically chosen to be included in the monitoring process, perhaps to the exclusion of others. (Module 2 of this toolkit describes the process that needs to be followed to ensure that these selected skills are authorized within the statutory authority for the practice of midwifery in that country.)

Strategies for selecting subsets of the knowledge, skills, and abilities statements

- Content experts can review the competency statements and make a selection of KSAs, based on consensus. Content experts can include:
  - educators who are knowledgeable about the current and emerging context of practice;
  - administrative representatives who are knowledgeable about country standards of practice;
  - representatives of professional association interest groups;
  - midwifery clinicians (who should always have a voice in the process).

It might also be considered important to include the consumer and student midwife perspective in the review process. These representatives would not, of course, speak as content experts.

- Survey methods might be employed. The ICM competency statements were developed using the Delphi method. This method involves sending out a series of review lists, each one having been edited (with specific tasks either added or taken away) based on the responses received from the previous review. Survey participants could reflect the same interest groups as noted above.

If the country has taken steps fully to delineate the KSAs that define professional midwifery practice in that country, it might be sufficient simply to compare the full list of competency statements to the KSA statements that are delineated in the country's regulatory document(s).

The primary issue to be considered in any adaptation (or adoption) of these monitoring tools at the country level is that the monitoring process that is supported by use of this tool be feasible, targeted, and cost-effective. It is not useful to design a process that cannot be implemented because of pragmatic limitations related to time constraints and financial burden.

8.4.4 - Methods and strategies for implementing a program of monitoring professional competence

Monitoring should occur on a periodic, but regularly scheduled, basis. There is no explicit guideline for the period of time between reviews. An important purpose can be served by conducting a review once each year. The (excerpted) model tools provided for this process address both competence and confidence, as defined in Section 2.4 of this module.

The individual monitoring tool is designed as a self-assessment exercise (Annex 8.1: *Monitoring Midwifery Competencies Self-Assessment Tool*). The process of self-reflection is a key component in the use of the individual self-assessment tool (Duffy, 2008). Self-assessment is the ability of a midwifery practitioner to reflect on her own performance strengths and weaknesses, and to conduct a review of her own performance, in order to identify learning needs and improve performance. Self-assessment has been demonstrated to be related to quality improvement (Price, 2004).

The monitoring review can be conducted by any single individual. This might be appropriate or most feasible for the midwife who is engaged in private practice, or, as is common in developing-country health care settings, for midwives who function without direct supervision or the availability of a colleague to guide their performance.

The self-assessment review can be conducted using the entire set of ICM basic competencies (obtained from the ICM website, as previously noted). The individual midwife can simply select the list of competency statements, transpose them into the model tool that is provided in the annex, and conduct the personal review. Any KSA that is not relevant to midwifery practice in her country can simply be omitted (i.e., not transcribed into the assessment tool). On the other hand, the individual practitioner may make note of the specific KSA as a function in which other midwives engage, and then set a personal learning goal related to acquiring that particular competency. The individual should also develop an individual learning plan for any applicable competency statement for which she has indicated that her knowledge or skill is not current or that her level of confidence in performing the skill has diminished.

However, the individual midwife may wish to engage a group of her peers in a *voluntary* group process, so that each group member can benefit from the discussion and feedback that could be received from others engaged in their own individual assessments. A peer would be any active midwifery practitioner who works in a similar practice environment and context. For example, home birth practitioners would select their peer from among other midwives who also conduct home births in the same community. Midwives who work in facilities would select their peers from among midwives who also work in that facility, or in another facility of similar size and level of care.

The monitoring tool can also be used within the context of a *structured* (perhaps mandated) group process in which the individual self-assessment tool would be used, and that self-assessment would be augmented by a second review conducted by someone who is qualified to provide review and feedback (Annex 8.2: *Monitoring Midwifery Competencies Peer or Supervisor Assessment Tool*). For example, it could be used by members of a facility-based midwifery staff. Feedback can be received from peers and also from supervisors. The assessment tool designed for peer and supervisor feedback requires that the person providing feedback also acknowledges the manner in which her knowledge of another's practice was acquired, and therefore, how relevant that information might be to the review process. The development of a personal learning plan is the intended outcome of this structured review, as it was for the process of individual self-assessment.

The most desirable competency monitoring program would result in an assessment being conducted for every single practitioner (the "population"), and certainly, self-assessment can occur at the population level. Practical considerations of time and resources may dictate that peer and/or supervisory reviews could be conducted among some, but not all, of the practitioners in any service setting or any country. There is no guideline that can be suggested to support the identification of an appropriate "sample size" under these circumstances. Consideration might be given to conducting peer or supervisory review among midwives who request such a review, following an individual self-assessment of midwives who function in settings where peer or supervisory support is limited. It might also be possible to establish a rotation system, so that some proportion of the active practitioners is reviewed at least one time within a time- limited review cycle.

8.5 Evaluating professional competence

8.5.1 - Evaluation as a component of the monitoring process

The evaluation process discussed in this module is a very *narrow discussion*. It has already been noted that individual midwives will need to acquire new information and new skills in order to continue to provide safe, high-quality care over their professional lifetime. It has also been noted that midwives develop a personal practice style over time, based on the lessons that they have learned from past experiences. In the context of this module, evaluation is linked to the assessment of the currency of a fund of knowledge, and also to the initial determination, or reaffirmation, of the ability to perform a clinical skill according to an objective standard. The ultimate goal of evaluation is the promotion of best practice (Ring et al., 2005; Hamilton et al., 2007).

There are several methods of assessment of midwifery knowledge. Evaluation methods selected for knowledge assessment among midwives in practice should offer the midwife the opportunity to draw on the entire range of experiences that have informed her fund of knowledge. These methods might include performance reviews, chart audits, and peer critique, similar to the monitoring process described above. Assessment of the cognitive domain should also include an assessment of the ability to engage in critical thinking, discussed in Section 8.2.5.

Sources of information that can be used to assess clinical performance

- Learner assessments of their own learning;
- service users/community assessments of quality of service;
- trainer assessments of acquisition of knowledge and skills;
- proxies for health outcomes derived from routine service delivery statistics.

Source: van der Vleuten et al., 2010

Observations of midwives performing in the actual practice setting are the most direct method for evaluating individual clinical performance (Paterson et al., 2004). These observations can be made even more objective by use of observational checklists (Hettinga, Denessen, and Postma, 2010). The checklists are used as the external, objective evidence that the midwife has acquired the ability to translate cognitive knowledge into practical performance of a skill (the correct steps in the correct order, with consideration of client safety).

These checklists can also be utilized in simulated practice using anatomical models (Harvey et al., 2007), with standardized clients (actor clients who offer scripted responses) (Panzarella and Manyon, 2007), and through computer modeling (Rhodes and Curran, 2005; Laschinger et al., 2008; Schultz et al., 2011). A number of such checklists have been developed; many are contained in the midwifery education modules published by WHO.

The question to be asked when selecting an appropriate checklist is whether the objective of the evaluation task is to evaluate “all” steps in a procedure or only those steps that are critical to safe practice (“sentinel scores”) (Carlough and McCall, 2005). The latter approach is, of course, more efficient and less costly, and does not diminish the effectiveness of any evaluation that is focused on quality of care.

Evaluation of the affective and/or behavioral domain (attitudes, feelings, values, and personal traits) is necessarily subjective. It is therefore more difficult to conduct, but of equal importance to quality of care. Attitude questionnaires can be administered, and the results incorporated into the self-reflection process. Reflective journaling allows the individual to review patterns of behavior that are characteristic of individual responses to situations. This internal review process, when combined with feedback received from others who observed a particular event or interaction, offers the opportunity to gain a wider perspective of how clients and peers perceive an individual's social-emotional response patterns, and perhaps to identify better (less emotional or more reflective) approaches. Client satisfaction surveys can often also yield valuable information about perceived quality of care (Glick, 2009).

8.5.2 - Sources and resources for performance evaluation tools

There is likely little need to develop an entirely new measure of midwifery provider performance. A first consideration is that the development of new measurement tools is an exact science, and, when done well, is often a lengthy and costly process. A second factor is that there are abundant examples of these tools, which might need only minimal adaptation to the local context in which they will be used.

Sources of performance evaluation checklists

- The WHO midwifery education modules (2006) contain a number of checklists;
- education programs develop tools to measure progress of students through the program of study;
- professional midwifery associations have developed self-assessment and peer-assessment tools (such as the ones excerpted in this module);
- nongovernmental organizations engaged in specific skills enhancement interventions have developed specific tools (e.g., for particular procedures such as performance of active management of third stage of labor, or insertion of an intrauterine device).

The challenge is simply to identify the available resource(s), and then to apply appropriate criteria to help select the most suitable measurement tool (further discussed in Module 5).

Strategies to make these resources more available and more accessible

- Education programs can work collaboratively with the professional midwifery association and with NGOs that operate within the country to create a resource library in some common place (e.g., a physical library or an Internet (URL) address);
- professional associations (both international associations and country associations) can establish similar types of libraries;
- listservs (Internet discussion lists) can be initiated, with a focus on dissemination of information about evaluation resources;
- NGOs can place their measurement tools on their websites, along with information about the properties of the tools and case studies of their application.

8.6 Taking action

8.6.1 - Creating a personal learning plan

A personal learning plan should emerge from the results of monitoring and evaluation of personal performance. A personal learning plan should focus on updating the fund of knowledge, incorporating information from recent evidence- based research. It should also address updating the level of skill (competence) and regaining (or reaffirming) personal confidence in performing skills; this is particularly true with critical skills that may prove life-saving in certain circumstances (i.e., low-volume, high-risk, or critical skills).

Progress in implementing the learning plan can be documented through the compilation of personal journals or portfolios. Journaling is a reflective practice technique that involves looking back over what has happened in practice in order to grow professionally (Blake, 2005; Lasater and Nielsen, 2009). Portfolios contain both quantitative and qualitative evidence of learning activities in which the individual has pursued the objectives stated in the learning plan (Byrne et al., 2007).

Peer-to-peer and/or supervisor discussion and feedback also contribute to self-learning. Whenever possible it is helpful to discuss clinical practice issues (e.g., new information emerging in the literature, or a particular situation or event that occurred in clinical practice). Engaging in such discussion at the time an event occurs (critical incident debriefing) might be most useful, and is certainly a part of the ongoing professional monitoring process (McBrien, 2007). However, it is also useful to engage in this discussion at any time that the opportunity presents itself. The periodic monitoring process can provide that opportunity.

The ultimate objective of any monitoring and evaluation process and of self-reflection, discussion, and feedback is the enhancement of critical thinking, so that, when the unexpected event occurs, the practitioner is prompted to generate a rational, evidence-based clinical decision. Figure 1 offers a framework for engagement in the critical thinking process.

8.6.2 Contributing to data about the midwifery profession

An ideal monitoring program will generate data that can be used to measure (evaluate) the contribution of the midwifery profession to the health of the nation, that is, the outcomes of comprehensive professional midwifery care (Walker, Visger, and Levi, 2008; Duncan and Murray, 2012). The design of a monitoring plan should include strategies for transmitting the results of such reviews to a centralized database. These data would, of course, not be linked to individual practitioners, but rather, only to sociodemographic descriptors that, in the aggregate, describe the profile of midwifery practitioners in the country (Vincent et al., 2004; Pelletier and Diers, 2004). The design of the monitoring program would also provide for periodic analysis of these data, including linkage with information contained in other health information management systems (such as hospital statistics and client outcome data). Data of this type are essential to monitoring progress toward global Millennium Development Goals as well as country-specific maternal/child health priorities. Such data are also critical to documenting the contribution of a country's midwifery professionals to the goals and objectives of safe motherhood.

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Figure 8.1: A framework for engagement in critical thinking

Think about the situation...

- What thing(s) went according to your management plan?
- What issue(s) caused you concern or made you feel uncomfortable?
- What thing(s) did you do right when the issue or challenge presented itself?
- What could you have done differently, that might have led to a different outcome?
- If you had one additional thing at hand (e.g., a person, a piece of equipment, a particular supply) how might the situation have turned out differently? Why would that thing have helped?
- If you could rethink one decision, what would your new decision be?
- What difference would that have made to the outcome in this case?

Annex 8.1 - Monitoring midwifery competencies self-assessment tool - Excerpt

NOTE: This excerpt contains only a very limited number of knowledge, skills, and abilities statements drawn from the ICM *Essential Competencies for Basic Midwifery Practice*. The excerpt is offered only as a *model* of the tool, demonstrating the areas of assessment and the approach to measurement. The complete list of competencies (2010 version) can be found as a core document at http://www.internationalmidwives.org.

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
Competency #1: Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health, and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families.								
The midwife has the knowledge and/or understanding of.....								
methods of infection prevention and control appropriate to the service being provided.								
human rights and their effects on health of individuals (includes issues such as domestic partner violence and female genital cutting.								
Additional statements follow….								
Professional behaviors.								
is responsible and accountable for clinical decisions and actions.								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
acts consistently in accordance with professional ethics, values, and human rights.								
Additional statements follow….								
The midwife has the skill and/or ability to:								
assemble, use, and maintain equipment and supplies appropriate to setting of practice.								
record and interpret relevant findings for services provided across all domains of competency, including what was done and what needs follow-up.								
Additional statements follow….								
Competency #2: Midwives provide high-quality, culturally sensitive health education and services to all in the community in order to promote healthy family life, planned pregnancies, and positive parenting.								
The midwife has the knowledge and/or understanding of....								
growth and development related to sexuality, sexual development and sexual activity.								
female and male anatomy and physiology related to conception and reproduction.								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a comprehensive health and obstetric/ gynecologic and reproductive health history.								
perform a physical examination, including clinical breast examination, focused on the presenting condition of the woman.								
Additional statements follow….								
Competency #3: Midwives provide high-quality antenatal care to maximize health during pregnancy, and that includes early detection and treatment or referral of selected complications.								
The midwife has the knowledge and/or understanding of...								
anatomy and physiology of the human body.								
the biology of human reproduction, the menstrual cycle, and the process of conception.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take an initial and ongoing history each antenatal visit.								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
perform a physical examination and explain findings to the woman.								
Additional statements follow….								
Competency #4: Midwives provide high-quality, culturally sensitive care during labor, conduct a clean and safe birth, and handle selected emergency situations to maximize the health of women and their newborns.								
The midwife has the knowledge and/or understanding of....								
physiology of first, second, and third stages of labor.								
anatomy of fetal skull, critical diameters, and landmarks.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a specific history and maternal vital signs in labor.								
perform a focused physical examination in labor.								
Additional statements follow….								
Competency #5: Midwives provide comprehensive, high-quality, culturally sensitive postnatal care for women.								
The midwife has the knowledge and/or understanding of...								
physical and emotional changes that occur following childbirth, including the normal process of involution.								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
physiology and process of lactation and common variations, including engorgement, lack of milk supply, etc.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a selective history, including details of pregnancy, labor, and birth.								
perform a focused physical examination of the mother.								
Additional statements follow….								
Competency #6: Midwives provide high-quality, comprehensive care for the essentially healthy infant from birth to two months of age.								
The midwife has the knowledge and/or understanding of...								
principles of newborn adaptation to extrauterine life; e.g., Apgar scoring system for breathing, heart rate, reflexes, muscle tone, and color.								
basic needs of newborn: airway, warmth, nutrition, attachment (bonding).								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
Additional statements follow….								
The midwife has the skill and/or ability to....								
provide immediate care to the newborn, including cord clamping and cutting, drying, clearing airways, and ensuring that breathing is established.								
promote and maintain normal newborn body temperature through covering (blanket, cap), environmental control, and promotion of skin-to- skin contact.								
Additional statements follow….								
Competency #7: Midwives provide a range of individualized, culturally sensitive abortion-related care services for women requiring or experiencing pregnancy termination or loss that are congruent with applicable laws and regulations and in accord with national protocols.								
The midwife has the knowledge and/or understanding of...								
policies, protocols, laws, and regulations related to abortion-care services.								
factors involved in decisions relating to unintended or mistimed pregnancies.								
Additional statements follow….								
The midwife has the skill and/or ability to....								

Annex 8.1 (continued)

ICM Essential Competencies	Competence			Confidence				
				Self-rating of confidence in current knowledge OR safe performance of this task item				
Knowledge, skill, or professional behavior (KSB)	I have *not* updated my knowledge, OR I have *not* performed this skill safely within the past year	I have updated my knowledge, OR I have performed this skill safely *at least* one time within the past year	I am current in my knowledge, OR I have performed this skill safely on more than one occasion within the past year	Not at all		Somewhat		Very
				1	2	3	4	5
assess gestational period through query about LMP, bimanual examination, and/ or urine pregnancy testing.								
educate and advise women (and family members, where appropriate) on sexuality and family planning post abortion.								
Additional statements follow….								

NOTE: This excerpt, containing only a very limited number of knowledge, skills, and abilities statements drawn from the ICM *Essential Competencies for Basic Midwifery Practice*, is offered only as a model of the tool, demonstrating the areas of assessment and the approach to measurement. The complete list of competencies (2010 version) can be found as a core document at http://www.internationalmidwives.org.

Annex 8.2 - Monitoring midwifery competencies peer or supervisor assessment tool - Excerpt

ICM Essential Competencies	Peer or supervisor rating of current competence					Basis of this assessment		
Knowledge, skill, or professional behavior (KSB)	Not current in knowledge or not safe in skill				Current in knowledge and safe in skill	I discussed this topic with the individual	I observed or assisted with the performance of this skill	I evaluated performance of this skill using an objective assessment tool
	1	2	3	4	5			
Competency #1: Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health, and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families.								
The midwife has the knowledge and/or understanding of.....								
methods of infection prevention and control that are appropriate to the service being provided.								
human rights and their effects on health of individuals (includes issues such as domestic partner violence and female genital mutilation [cutting]).								
Additional statements follow….								
Professional behaviors:								
is responsible and accountable for clinical decisions and actions.								
acts consistently in accordance with professional ethics and values.								
Additional statements follow...								
The midwife has the skill and/or ability to…								
use appropriate communication and listening skills across all domains of competency.								
comply with all local reporting regulations for birth and death registration.								
Additional statements follow….								
ICM Competency #2: Midwives provide high-quality, culturally sensitive health education and services to all in the community in order to promote healthy family life, planned pregnancies, and positive parenting.								
The midwife has the knowledge and/or understanding of...								
growth and development related to sexuality, sexual development, and sexual activity.								
female and male anatomy and physiology related to conception and reproduction.								

Annex 8.2 (continued)

ICM Essential Competencies	Peer or supervisor rating of current competence					Basis of this assessment		
Knowledge, skill, or professional behavior (KSB)	Not current in knowledge or not safe in skill				Current in knowledge and safe in skill	I discussed this topic with the individual	I observed or assisted with the performance of this skill	I evaluated performance of this skill using an objective assessment tool
	1	2	3	4	5			
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a comprehensive health and obstetric/gynecologic and reproductive health history.								
perform a physical examination, including clinical breast examination, focused on the presenting condition of the women.								
Additional statements follow….								
Competency #3: Midwives provide high-quality antenatal care to maximize health during pregnancy and that includes early detection and treatment or referral of selected complications.								
The midwife has the knowledge and/or understanding of...								
anatomy and physiology of the human body.								
the biology of human reproduction, the menstrual cycle, and the process of conception.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take an initial and ongoing history each antenatal visit.								
perform a physical examination and explain findings to the woman.								
Additional statements follow….								
Competency #4: Midwives provide high-quality, culturally sensitive care during labor, conduct a clean and safe birth, and handle selected emergency situations to maximize the health of women and their newborns.								
The midwife has the knowledge and/or understanding of....								
physiology of first, second, and third stages of labor.								
anatomy of fetal skull, critical diameters, and landmarks.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a specific history and maternal vital signs in labor.								

Annex 8.2 (continued)

ICM Essential Competencies	Peer or supervisor rating of current competence					Basis of this assessment		
Knowledge, skill, or professional behavior (KSB)	Not current in knowledge or not safe in skill				Current in knowledge and safe in skill	I discussed this topic with the individual	I observed or assisted with the performance of this skill	I evaluated performance of this skill using an objective assessment tool
	1	2	3	4	5			
perform a screening physical examination in labor.								
Additional statements follow….								
Competency #5: Midwives provide comprehensive, high-quality, culturally sensitive postnatal care for women.								
The midwife has the knowledge and/or understanding of...								
physical and emotional changes that occur following childbirth, including the normal process of involution.								
physiology and process of lactation and common variations, including engorgement, lack of milk supply, etc.								
Additional statements follow….								
The midwife has the skills and/or ability to...								
take a selective history, including details of pregnancy, labor, and birth.								
perform a focused physical examination of the mother.								
Additional statements follow….								
Competency #6: Midwives provide high-quality, comprehensive care for the essentially healthy infant from birth to two months of age.								
The midwife has the knowledge and/or understanding of...								
principles of newborn adaptation to extrauterine life; e.g., Apgar scoring system for breathing, heart rate, reflexes, muscle tone, and color.								
basic needs of newborn: airway, warmth, nutrition, attachment (bonding).								
Additional statements follow….								
The midwife has the skill and/or ability to....								
provide immediate care to the newborn, including cord clamping and cutting, drying, clearing airways, and ensuring that breathing is established.								
promote and maintain normal newborn body temperature through covering (blanket, cap), environmental control, and promotion of skin-to-skin contact.								

Annex 8.2 (continued)

ICM Essential Competencies	Peer or supervisor rating of current competence					Basis of this assessment		
Knowledge, skill, or professional behavior (KSB)	Not current in knowledge or not safe in skill				Current in knowledge and safe in skill	I discussed this topic with the individual	I observed or assisted with the performance of this skill	I evaluated performance of this skill using an objective assessment tool
	1	2	3	4	5			
Additional statements follow….								
Competency #7: Midwives provide a range of individualized, culturally sensitive abortion-related care services for women requiring or experiencing pregnancy termination or loss that are congruent with applicable laws and regulations and in accord with national protocols.								
The midwife has the knowledge and/or understanding of...								
policies, protocols, laws, and regulations related to abortion-care services.								
factors involved in decisions relating to unintended or mistimed pregnancies.								
Additional statements follow….								
The midwife has the skill and/or ability to....								
assess gestational period through query about LMP, bimanual examination and/or urine pregnancy testing.								
educate and advise women (and family members, where appropriate), on sexuality and family planning post abortion.								
Additional statements follow….								

Module 9

Developing midwifery capacity for the promotion of maternal and newborn health

9.1 Introduction

Midwives and the midwifery profession have made a significant contribution to the improvement of the health of women and newborns, particularly in the period of pregnancy and childbirth. This contribution can be traced through anecdotal tales passed down through the generations, and in the recorded literature over time. Valid and reliable confirmation of this contribution has emerged in the more-recent evidence-based published literature. That literature presents the results of historical trend data, case study comparisons, and experimental trials conducted in broadly diverse geographic regions and countries. This compelling body of evidence has led to the recommendation that countries develop policies and strategies to promote skilled attendance at every birth (WHO and UNICEF, 2010). Midwives are considered among the cadres of practitioners who should be included in any country strategy to increase skilled attendance (WHO, 2006a; Gupta et al., 2011).

The World Health Organization (WHO) also recognizes that all skilled attendants need to function in collaboration with other health care professionals and providers at different levels of the health system, in health facilities, and in the community.

> Such collaboration will help to provide access to the full range of care women and/or their newborns may need, thus ensuring the required continuum of care. The collaboration, however, must be based on mutual respect and recognition of the specific contribution each type of care provider makes to the continuum of care.
>
> *[Source: WHO/ICM/FIGO 2004]*

The midwifery profession has been acknowledged and affirmed by many countries as a primary strategy for the promotion of safe motherhood services. Other countries, however, continue to deliberate the role of the midwife within the health care system, with particular debate about the position of midwives as autonomous practitioners, and the implication of that status with respect to requirements for supervision of practice, the settings in which midwifery care can be provided, and eligibility for direct financial reimbursement for services (Nightingale, 2010; O'Brien et al., 2010; Skår, 2010). Midwifery is continuing to emerge as a profession in many countries where a wide variety of providers have offered care during childbirth. The roles of these various traditional providers have evolved over time, in response to custom, circumstance, or identified need. These traditional practitioners share elements of the body of knowledge, skills, and abilities that characterize the midwifery scope of practice.

This module in the Toolkit for strengthening professional midwifery in the Americas recognizes that some countries do not have the capacity to prepare professional midwives immediately. The module therefore suggests some interim strategies that lead to and build capacity for providing skilled attendance at birth, while these countries are developing the profession of midwifery. Countries need to have policies in place that accommodate an ongoing assessment of health workforce requirements. Countries also need to have regulatory mechanisms that enable them to make modifications in the profile of the health workforce that these assessments identify as being necessary (see Module 2). These assessments should include use of health workforce planning indicators that address both general staffing and specific needs for providers skilled to offer maternal, newborn, and child health (MNCH) care (WHO, 2009; 2010). Countries also bear the compelling obligation to gather evidence on the outcomes of the health care services that are provided and on the impact that these services have on the health and well-being of women, infants, families, and the community.

9.2 Strategies based on enhancing the impact of community-based providers

Traditional birth attendants (TBAs) have a long history as childbirth attendants in many developing-country communities, although they are not now, and have never been, considered skilled providers of childbirth care. The proportion of births attended by skilled providers varies greatly by country (WHO, 2006b; WHO and UNICEF, 2010), and it can be assumed that TBAs and family members fill the service gap in many instances. Community health workers have emerged more recently, and they practice in a complementary role with TBAs or with skilled attendants to provide supportive services to pregnant and childbearing women and their newborns. It has been acknowledged that these community-based health service providers can contribute positively to maternal and newborn care (Darmstadt et al., 2005; Armed and Jakaria, 2009; Darmstadt et al., 2009; Prata et al., 2011). However, there are still gaps in the evidence addressing whether it is useful or cost-effective to make an investment in training these cadres to upgrade their skills to the level of a skilled birth attendant. Nonetheless, there is strong evidence that promoting a collaborative alliance between traditional birth providers based in the community and qualified birth attendants based in the community and in referral facilities extends the range of services that can be provided to women and families, increases access to health care services, and promotes referral to higher levels of care (Bhutta et al., 2009).

9.2.1 - Community partnerships with TBAs and other community-based health workers - a supportive strategy

Available evidence suggests that TBA training by itself as a stand-alone national strategy would not lead to achieving the Millennium Development Goal for reducing maternal mortality (Campbell et al., 2006). However, this evidence also shows that there is benefit in promoting collaboration and partnership with TBAs in order to promote safe motherhood.

Effort has been expended in many countries, over many years, to train TBAs and thus upgrade their level of knowledge, promote their skill in recognition and management of childbirth complications, and influence their use of safer birth practices (Foster et al., 2004; Alako and Daniel, 2007; Salako and Daniel, 2007; Garcés, 2012; Rowen, Prata, and Passano, 2011; Miller et al., 2012). A meta-analysis of 60 research studies that addressed the effectiveness of TBA training confirmed the association of this training with improvement in certain intrapartum, postnatal, and newborn care practices (e.g., clean delivery technique, cord care, management of birth asphyxia, early breast-feeding) (Sibley and Sipe, 2004; Sibley, Sipe, and Koblinksy, 2004). At the same time, it has been well documented that simply training TBAs to be more effective in their traditional role but without linking them effectively into a community-based referral system adversely affects the relationship between TBA training and the reduction of the maternal mortality ratio (Neonatal Mortality Working Group, 2008).

A number of the studies, including ones in the meta-analysis and others conducted subsequently, have indicated that rates of referral for facility births did not necessarily increase following TBA training. This finding was attributed to a variety of influences, including family resistance to the referral for personal, cultural, or financial reasons and the TBAs' reluctance to be perceived as not capable of managing the particular condition. However, other studies demonstrated that trained TBAs were more likely than nontrained TBAs to recognize complications and make timely and effective referrals to appropriate higher levels of care. Continuous support and supervision of these TBAs following training

was a key factor in sustaining the TBAs' more-effective practice patterns (Bisika, 2008; Ahmed et al., 2009; Leeetal., 2009). Therefore, because the impact of well-intended TBA training on reducing maternal mortality has not been consistently demonstrated (Ray and Salihu, 2004; Darmstadt et al., 2009), TBA training efforts have declined, in favor of the emphasis on education of skilled birth attendants.

Reliance on TBA-training and service strategies can lead countries to delay the development of initiatives to educate more professional cadres of birth attendants. However, available evidence also suggests that in countries in which skilled attendant coverage is high, training TBAs to provide key evidence-based interventions prior to referral offers some limited value to safe delivery care, and is a short-term supportive strategy for this limited purpose (Sibley and Sipe, 2006; Byrne and Morgan, 2011).

9.2.2 - "Birth attendants with midwifery skills" - an intermediate strategy

Module 4 of this Toolkit for strengthening professional midwifery in the Americas references the full range of basic competencies that are expected of the fully qualified midwife in providing comprehensive services to childbearing women, newborns, and families. Module 8 offers an approach to selecting subsets of the lists of knowledge, skills, and abilities. This approach may be useful for countries that are primarily interested in promoting skilled birth attendance (in accord with the WHO definition) but that need some longer period of time to build a professional midwifery workforce trained to the fullest capacity and range of professional competencies. It may be beneficial for countries to identify, from among the entire ICM list of competency statements, those clinical skills that address the situations that occur most commonly at birth, and that result in the major causes of morbidity and mortality in the country ("context-specific service") (Costello et al., 2006). This subset of competencies would represent those that are most critical to the well-being of women and infants at the time of childbirth (i.e., life-saving skills).

Education programs could then be developed, and teachers prepared to teach, within these abbreviated, more narrowly focused education programs. The sound educational principles outlined in Modules 5 and 6 of this toolkit would guide program and teacher development. Critical thinking would be primary among the abilities that would need to be fostered in the students.

Variations of this strategy have already been modeled in many international settings. A few country examples include Bangladesh (Bhuiyan et al., 2005; Ahmed and Jakaria, 2009), China (Edwards and Roelofs, 2006), and Mexico (Cragin et al., 2007). Various titles were assigned to the program graduates, including with generic use of the titles "skilled birth attendant" or "midwife." Published reports about these programs indicate that they varied widely in content, expected outcomes of education (competencies), and length of the education program. These variations make it difficult to derive a common body of lessons learned about this strategy and to assess the effectiveness of this approach (Adegoke et al., 2012). Critics caution that:

- Large numbers of these providers would need to be prepared in order to have any substantial impact on increasing the proportion of births attended by skilled providers. This would be costly, and it could inhibit the ability of governments to fund the education of professional birth attendant cadres (Wirth, 2008; Fauveau, Sherratt, and de Bernis, 2008).

- The students may vary widely in their academic background and in their ability to engage in critical thinking (Kruk, Prescott, and Galea, 2007). These factors may cause these students to withdraw ortobedismissedfrom these education programs. This situation would not serve the purpose of building either an interim birth attendant workforce or a cohort of midwifery aspirants.
- Graduates of these programs may have insufficient opportunities to acquire skills during their education programs, thus requiring very diligent programs of supervision and support-in-place, which are themselves resource-intensive and costly (Fauveau, 2006).

Countries that are considering development of these new skilled attendant cadres would be wise to work collaboratively with the local midwifery association and with the International Confederation of Midwives (Chamberlain et al., 2003) as they consider issues such as scope of practice, curriculum content, supervision strategies, regulatory approaches, and standards of practice. Guidance for each of these issues is presented in Modules 2, 4, 5, and 7 of this toolkit. The graduate of such a program would not be fully prepared as a midwife, according to the standards for education and essential competencies delineated by the ICM (2010) (see Module 4). However, the graduate of this more- limited program would have acquired a fund of knowledge and limited skills related to (at minimum) the intrapartum and newborn periods. That could serve as the foundation for further studies, leading to eventual qualification as a midwife, when the individual or country circumstances enable that professional advancement.

If countries follow the principles and guidelines offered in this toolkit when they design and implement this type of education program, they would contribute to the development and deployment of a more uniformly prepared cadre of non-midwife, “trained” or “skilled” birth attendants, provided that these individuals are trained to proficiency in their tasks (the WHO definition of skilled birth attendant). Proficiency can - and must be - externally validated, and no compromise should be accommodated. This, in turn, would enable valid and reliable research approaches that would generate evidence about the outcome and impact of this interim strategy.

9.2.3 - Promoting alliances – an enhancement strategy

Recent recommendations for the training of birth attendants in areas at great need of birth providers include preparing “midwife assistants” to conduct births, but also to serve as extensions of the midwife who serves in the community, and as a link to midwives working in health facilities. Promoting collaboration and alliances in practice among indigenous or trained TBAs, trained community workers, the new cadre of community or village midwives, and the professional skilled attendant workforce would be useful in all countries where these provider cadres are a viable presence in communities (Högberg, 2010). The important cultural and social roles that traditional providers play in their community should be appreciated. Even when professional services are available, many women continue to access theservices of these providers, particularly in the rural areas (Paul and Rumsey 2002; Mayhew et al., 2008; Do, 2009; Montagu et al., 2012).

Skilled providers may not be fully aware of the number or type of community-based providers who practice in their geographic setting, or aware of the type and extent of training they may have received. Personal preconceptions or biases may interfere with promotion of an open and receptive climate among traditional, alternative, and skilled providers (Dietsch, 2010). This may reduce the willingness of community-based providers torefer women and families to other providers and to health facilities when a higher level of care is needed. The potential benefit of the extended workforce (e.g., community outreach, helpful assistance) may be lost simply through failure to incorporate the services offered by these additional cadres into the health care referral and delivery system.

9.3 Strengthening professional midwifery services

9.3.1 - Promoting the concept of the community-based midwife

The annex to this Toolkit for strengthening professional midwifery in the Americas presents model curricula for midwifery education that are designed to maximize the opportunity for acquiring the knowledge and practical skills of midwifery within both urban and community-based settings. Community-based education offers educational access to individuals who may have an interest in the profession but who are place-bound by circumstances such as family obligations or cultural constraints.

Community-based education is a very appropriate strategy for countries that need to increase birth attendant coverage in certain geographic settings. The difficulties in deploying and retaining midwives in less-desirable geographic settings or to communities remote from their own family and social support networks have been well noted (Van Wagner et al., 2007). Similarly, it may be hard to recruit students who already reside in these underserved communities to the profession if they would need to leave their support networks in order to study in more central locations. These potential students include traditional community-based providers (TBAs and community health workers) who have the requisite level of education and the personal potential and interest to become midwives.

Community-based education is more likely to reflect the cultural values and traditions of the local area; therefore, the graduate of such a program is more likely to be accepted by the community as a trusted care provider. Graduates of these programs are also more inclined to remain in their community of origin (Mansoor, Hill, and Barss, 2011).

> Those assisting births and providing maternal care need to have the trust and respect of the community. Midwives from outside the area would have to adapt to local customs. If the midwife does not speak the local language, does not allow traditional birthing positions or does not respect delivery rituals or issues of privacy, few local women are going to use her services. Bringing in "outsiders" could therefore end up alienating from the health service those women most at risk. Cultural sensitivity and the ability to have one's help sought and advice followed may be just as important as technical skill in making an impact on maternal health.
>
> *[Source: Walraven and Weeks, 1999]*

Countries that emphasize this strategy must, however, develop concurrent strategies that provide support to the midwifery professional who practices in settings where it may be more difficult to receive supportive supervision of her work, and where opportunities for continuing professional development may be limited (see Section 9.4.1 and Module 7).

9.3.2 - Upgrading the skills of auxiliary nursing personnel

Some countries integrate "maternity nursing" studies within the curriculum of nursing studies, providing all nurse-graduates with some basic knowledge and skills in the care of pregnant women and newborns. Other countries extract that content and offer it as an optional course of study for those who wish to become qualified as midwives. Still other countries educate all nurses to also qualify as midwives at completion of the course of nursing studies.

The curricula for midwifery studies presented in the annex to this Toolkit for strengthening professional midwifery in the Americas provide one educational pathway for individuals who enter the midwifery profession directly and another

pathway for those who study midwifery as a second profession (e.g., in addition to preparation in nursing). Countries that need to enhance their skilled attendant workforce should be encouraged to examine the current nursing-education patterns and the maternal/newborn content within that programming. It may be possible, with relatively little investment of resources, to provide the additional educational input that would be required to upgrade members of the current nurse workforce (e.g., auxiliary nurses, enrolled nurses) to the accredited qualification of a midwife.

9.4 Retention of the existing midwifery workforce

Strategies designed to extend, enhance, and expand the impact of the midwifery workforce are essential to building a sufficient cadre of skilled birth attendants. Approaches are also needed to retain already qualified midwives within the current workforce. Challenges to retention include factors that affect satisfaction with the workplace environment and fulfillment with the choice of midwifery as a career. This latter factor is becoming more important in many countries as mobility within and between careers becomes increasingly available to women.

9.4.1 - Supporting midwifery practice in context

Recent deliberation about strategies to promote safe motherhood has focused on the advantages when birth occurs in various levels and types of health facilities (including those located in the community) (Hodnett et al., 2010). The discussion has reinforced a key recommendation that facility-based birth occur with midwives as the main providers, supported by other attendants working with them in a team (Campbell et al., 2006). However, the current and near-future situation in many countries is that midwives may work alone, often in isolated and rural settings, with little opportunity for assistance to cover the full range of midwifery duties (e.g., antepartum care, client education) in addition to provision of round-the-clock intrapartum services.

The midwife who works in a health facility is not necessarily in a better situation. Understaffing has been identified as one of the main factors responsible for poor quality of midwifery care. Understaffing in health facilities includes the practice of assigning midwives to other duties in the facility, where they have little opportunity to use their midwifery skills (often resulting in “de-skilling”) (Scotland and Bullough, 2004; Fullerton et al., 2010). Another form of understaffing is assigning multiple competing duties and tasks (e.g., housekeeping and clerical functions) to the midwife that are unrelated to professional practice (McKenna et al, 2002).

Modules 7 and 8 of this toolkit propose a number of strategies that could be used to extend programs of peer support, consultation, and supportive supervision to midwives working in these situations and settings. Such measures could improve the quality of midwifery care and also promote and enhance the midwife’s job satisfaction (Moseley, Jeffers, and Paterson, 2008; Chhea, Warren, and Manderson, 2010; Flinkman, Leino-Kirpi, and Salanterä, 2010; Sullivan, Lock, and Homer, 2011). Regardless of practice setting, all midwives can benefit from continuing education on emerging evidence-based practices and from skills enhancement (including acquiring or reaffirming competence in critical life-saving skills). By engaging with peer colleagues in discussions about their experiences, all midwives can gain from receiving feedback, encouragement, and support. Midwives can also plan ways in which they can collaborate, together finding their own opportunities and solutions to the problems that are specific to their country situation. For example, midwives in Indonesia created a program of rotating internships at district hospitals and training centers for both facility and village midwives. That, combined with a structured program of peer review and continuing education, was very successful in retaining midwives within the workforce (Walker et al., 2002).

Countries also need to develop health workforce retention policies that correspond with the health services careers available at the country. These policies would address the opportunities and incentives (e.g., education, financial compensation) that would be provided to health workers who choose to remain in service in their country (WHO, 2010b).

9.4.2 - Reintegration into the midwifery workforce

Countries that have implemented midwifery registration systems have a way and means of identifying midwives who have voluntarily let their practice authorization lapse, and midwives whose limited-time licensure has expired, but who were in good standing at the end of this term. These midwives represent a pool of already qualified, skilled providers who could be encouraged to return to active practice (Stergiou-Kita et al., 2010; Abimbola et al., 2012). Two reports from Australia provide models of reintegration programs developed to meet the needs of these midwives. One program (Bullen, 2003) was specifically designed for midwives who were currently in the nursing workforce but who had elected to work in other clinical practice areas. Their level of midwifery expertise had diminished due to lack of clinical experience. The re-immersion program focused on practical and life-saving midwifery skills, thus promoting competence and confidence for a resumption of midwifery duties. A second program model featured skills enhancement, a midwifery job description that provided flexible work hours for midwives with family responsibilities, and high levels of clinical support for practitioners (Flowers, 2004).

9.4.3 - Slowing the pace of international migration

Many countries face the challenge of losing midwifery practitioners who choose to practice midwifery in another international setting (Anderson and Issacs, 2007; Kingma, 2008). There are many factors that both “push and pull” midwives from one setting to another. Countries that wish to encourage midwives to remain in their home country need to support improvements in the economic and social status of midwives, such as enhancements in pay, working conditions, work schedules, and safety of the work environment (Buchan and Sochalski 2004; Stilwell et al., 2004; McElmurry et al., 2006; Dovlo, 2007; Thupayagale-Tshweneagae, 2007; Henderson and Tulloch, 2008; McAuliffe et al., 2009). Equallyimportant are opportunities for professional advancement (Thomas, 2006; Whitter et al., 2011; Campbell, McAllister, and Eley, 2012).

Autonomy in practice is another factor that needs to be carefully considered by countries as they build their skilled attendant workforce. The degree of respect afforded to the individual midwife, and the esteem afforded to the midwifery profession, is related to professional job satisfaction.

Countries that receive midwives from other countries have a compelling obligation to be certain that these midwives are equally qualified for practice. Effective systems of screening, assessment, and registration of internationally qualified midwives are essential to ensure that these practitioners meet equivalent professional standards (See Modules 2 and 3 for guidance) (Bieski, 2007; Bourgeault, Neiterman, and Lebrun, 2011). The midwifery association of the receiving country should be included as an essential partner in developing the mechanisms for accrediting these individuals for recognition (“titling”) and eligibility for entry into practice.

The health systems into which these midwives are integrated must also ensure that these practitioners receive supportive supervision during the period of transition. Three areas of evaluation are of critical importance: knowledge and skills (Module 4), clinical judgment, and language competency (Watts et al., 2005; Kingma, 2006). All individuals practicing under a similar professional definition of midwife would be expected to meet common standards of professional practice (Modules 2, 3, 4, 7, and 8).

9.5 Establishing or strengthening the midwifery professional association

The background paper (Module 1) in this toolkit set forth the premise that midwives should be active partners in all deliberations that affect the profession. Thisincludes advocacy for development of national health strategies in all countries that would give midwives and doctors complementary roles in maternity care, as well as equal involvement in setting public health policy (Högberg, 2004).

Countries that are building the capacity of midwives as a skilled provider cadre would be well served by actively collaborating with the International Confederation of Midwives. The ICM can serve as a resource for countries as they deliberate the many and varied issues that are fundamental to building midwifery to the scale of a profession that is equivalent in prominence and respect to that of its international professional peers. The ICM collaboration would work in two directions: from a “top-down” global and professional perspective and from a “bottom-up” personal and workplace viewpoint of practicing midwives (Lynch 2002).

The ICM would work with representatives of the midwifery community in-country. Together, they could help government officials who are responsible for establishing health care policy understand how to develop the midwifery profession in-country according to already established international standards and guidelines. The ICM would provide counsel to groups or coalitions of midwives in the country, to help them form common bonds and linkages with other country midwifery associations and receive very practical assistance, guidance, and support (Thompson, 2001; Zuyderduin, Obuni and McQuide, 2010).

Where necessary, the ICM can assist midwives to establish a professional association that can speak on behalf of midwives at policy-making levels. The ICM could provide support to countries to strengthen the skills of leaders of existing country associations, so that the voice of midwifery is heard more clearly. A checklist for assessing the status of a midwifery association, to identify the organizational capacities that could benefit from strategic growth and development, is provided in the annex to this module.

Similarly, countries would be well served by taking full advantage of the resources available through the World Health Organization. ICM and WHO are full collaborative partners and seek a common agenda for safe motherhood (Phumaphi, 2005). The WHO has generated an extensive library of educational, clinical, and policy materials that augment and supplement the information presented in this Toolkit for strengthening professional midwifery in the Americas.

9.6 References

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Annex 9.1: Member Association Capacity Assessment Tool (ICM 2010)

International Confederation of Midwives

Strengthening Midwives Associations

Member Association Capacity Assessment Tool (MACAT)

Name of association: _____

Name of person completing the questionnaire: _____

Position in the association _____

Date completed. _____

Please place a tick in the appropriate column. Answer **all** questions in each section.

	Yes	No	N/A
A. Governance			
A1. Board			
1. The association has a Board and/or an Executive Committee governed by a constitution and bylaws.			
2. The association has clearly defined roles and responsibilities for the Board/Executive Committee and members.			
3. The Board/Executive Committee meets at least twice a year.			
4. The Board/Executive Committee carries out the roles of strategy development.			
5. The Board/Executive Committee carries out the roles of policy formulation.			
6.The Board/Executive Committee carries out the roles of fund-raising.			
7. The Board/Executive Committee carries out the roles of public relations.			
8. The Board/Executive Committee carries out the roles of financial oversight.			
9. The Board/Executive Committee carries out the roles of lobbying.			
A2. Vision, mission			
10. The association has clearly stated vision and mission statements.			
11. The mission is developed in collaboration with members in some way (e-mail, or meetings).			
12. New members have access and are oriented to the association's vision, mission, and goals			

Annex 9.1 (continued)

	Yes	No	N/A
13. The activities of the association are consistent with the mission and vision.			
14. The vision and mission statements are shared with members, giving a sense of purpose and direction to the association.			
15. The vision and mission statements are reviewed and updated regularly with input from members at least every 3-5 years.			
A3. Goals and strategies.			
16. The association has a clear strategic planning process.			
17. The association has a clearly written strategic plan with achievable long-term and short-term goals.			
18. The association's goals and strategies, developed with input from members, are in line with the mission and vision.			
19. Mechanisms exist for reviewing and updating association goals with input from members.			
20. The association has realistic operational work plans, aligned with the strategic planning process.			
21. The association monitors and evaluates the quality and impact of its work.			
22. The association uses evaluation results to influence service delivery planning.			
A4. Legal status.			
23. The association is registered as an autonomous organization according to the country's legislation.			
24. The association is a member of another health care profession association a. Obstetric association b. Nursing association c. other			
25. If yes, to 24 above, the association has its own structure and decision-making processes and tools that are documented and transparent.			
26. The association has a constitution developed and shared with members.			
27. The constitution is reviewed with input from members every 5 to 10 years.			
28. All new members are given a copy of the constitution.			
Additional comments:			
B. Management Practices and Leadership.			
B1. Administrative policies and procedures.			
29. The association has clear policies and procedures for electing leaders and office bearers.			
30. The association has clear operational policies and procedures in place.			
31. The association has clearly defined roles and responsibilities for the leaders, for staff, if any, and for members.			
B2. Infrastructure and information systems.			
32. The association has office/space to support and facilitate its daily work.			
33. The office/space is well equipped and maintained with relevant communication systems (telephone, e-mail, fax, Internet).			

Annex 9.1 (continued)

	Yes	No	N/A
34. The association has systems in place to process/manage information, including an updated list of its members.			
B3. Authority and accountability.			
35. Guidelines for the working relationship between the Board/Executive Committee, staff, and members are clearly outlined in the policy documents.			
36. The Board/Executive Committee regularly informs members on the association's activities and at the annual general meeting.			
B4. Human resources.			
37. The association staff, if any, are recruited in a transparent, competitive manner, to fulfill its needs.			
38. The association, if it has staff, has clear human resources and employment policies in place (employment contracts, salary structures and benefits, job descriptions).			
39. The association incorporates capacity-building /development of staff as part of its annual plan.			
40. The association has information kits, policy manuals, etc. for its staff and members available on request.			
Additional comments:			
C. Financial Resource Management.			
C1. Accounting.			
41. The association has an accounting system.			
42. The association has audits conducted yearly.			
43. The association's accounting system enables it to produce a clear financial report when required.			
C2. Budgeting.			
44. The association has an annual budget that is approved by the Board/Executive Committee.			
45. The association has a person specifically responsible for budget management.			
C3. Financial reports.			
46. Donors, members, or others can access financial information on request.			
47. The association produces annual financial reports that are reviewed and approved by the Board/ Executive Committee.			
48. The association presents a full financial statement in its annual report.			
Additional comments:			
D. Functions.			
D1. Membership services.			
49. The association has mechanisms to identify the needs of its members.			
50. The association organizes general meetings with its members annually.			
51. The association has a mechanism for recruiting new members.			
52. The association has mechanisms for membership retention.			
53. The association has a membership structure.			

Annex 9.1 (continued)

	Yes	No	N/A
54. The association has a membership fee structure.			
55. The association has mechanisms for updating its membership list.			
56. New members are oriented to the information available and how to request it.			
57. The association has mechanisms in place to make recommendations on salaries and working conditions of its members.			
58. The association has mechanisms to provide continuing professional education for its members.			
D2. Advancing professional practice.			
59. The association develops or contributes to the development of professional standards for education and regulation.			
60. The association has capacity to support and publicly recognize positive quality practice by members (e.g., practice, education, research, policy, leadership, etc.).			
61. The association has mechanisms in place to share best practices and engage in mutual learning opportunities with other organizations.			
D3. Quality control for care.			
62. The association has mechanisms for providing guidance, advice, and information to its members on quality of care.			
63. The association contributes to/advocates for the development and implementation of midwifery regulation.			
64. The association has mechanisms to assist its members in meeting any continuing competency requirements needed for licensure or renewal of license.			
65. The association has a regularly reviewed Code of Ethics for members or works within the ICM code.			
66. All members have access to or are given the Code of Ethics in conjunction with other documents.			
67. The association is in attendance in situations where member midwives' professional practice is being questioned.			
68. The association is involved in human resources planning as it relates to MNCH practitioners and quality of health care provision.			
D4. Communication.			
69. The association has a clearly defined communication strategy for internal and external relationships.			
- with members.			
70. The association has mechanisms for regular (at least quarterly) two-way communication with its members.			
- with MoH.			
71. The association has a mechanism to regularly inform MoH and other relevant bodies of activities and issues impacting on its members and the midwifery profession.			
72. MoH regularly informs the association of issues impacting on midwives, women, and maternal, newborn, and child health.			
- with Women, Donors, Civic Society			
73. The association has communication systems in place such as newsletter and/or a website to communicate with all stakeholders (members, women, donors, civic society, and grassroots NGOs such as the White Ribbon Alliance for Safe Motherhood (WRA)).			

Annex 9.1 (continued)

	Yes	No	N/A
D5. Advocacy.			
74. The association has systems in place to facilitate advocacy for women, midwives, and newborns.			
75. There has a mechanism to provide advocacy training to association leadership and members (negotiation, public speaking, information kit, etc.).			
76. The association has representatives in key government committees and policy-making bodies on maternal, newborn, and child health and midwifery.			
77. The association has guidelines for how to involve NGO partners in advocacy networks serving the interests of its beneficiary groups.			
D6. Service delivery.			
78. The association has the relevant resources (human, capacity, financial, material) to achieve its mission.			
79. The association has the tools to monitor and evaluate the quality and impact of its work.			
80. The association uses evaluation results to influence service delivery planning.			
Additional comments:			
E. Collaboration, Partnerships, and Networks.			
E1. With women and government and other NGOs.			
81. The association involves women and families as true partners in service provision, including planning, decision-making, and civic activities.			
82. The association has established a collaborative relationship with the government.	.		
83. The association has collaborative relationships with national and international NGOs, including women's organizations.			
84. The association collaborates and networks with other health care professions' associations in the country.			
E2. Relationship with donors and the private sector.			
85. The association has mechanisms of maintaining relationships with current donors and establishing contact with potential.			
86. The association engages donors in a free and open dialogue.			
Additional comments:			
F. Visibility, Including Media Relations.			
87. The association engages the private sector in open dialogue relating to health issues.			
88. The association is approached by women and their families for information and advice on women's health issues.			
89. The Board/ Executive Committee and staff are recognized by their stakeholders as being highly skilled and credible in their field.			
90. The association is invited by government to provide midwifery expertise and contribute to policy and decision-making in midwifery issues.			
91. The association promotes its image and uses the media for public education.			

Annex 9.1 (continued)

	Yes	No	N/A
92. The association develops positive relationships with the media.			
93. The association is invited to take part in civic matters organized by other organizations and by government.			
Additional comments:			
G. Sustainability.			
94. The association has a diversified funding base capable of sustaining its programs over the long-term.			
95. The association actively engages in fund-raising and other resource mobilization activities as a means of limiting its dependence on donors.			
96. The association regularly seeks expertise (among its leaders and members when possible) to write fund-raising proposals and to help generate ideas for resource mobilization.			
Additional comments:			

Note: Guidelines for use of the MACAT tool can be downloaded from:
http://internationalmidwives.org/Portals/5/2011/Global%20Standards/MACAT%20Guidelines%20ENG.pdf

Please return the completed questionnaire to: International Confederation of Midwives
70 Laan van Meerdervoort
2517 AN The Hague The Netherlands

Professional Midwifery Education

ICM Resource Packet #2
Model Midwifery Curriculum Outlines

Note to readers of this Toolkit for strengthening professional midwifery in the Americas: *The resource packet in this annex is a slightly edited version of documents that the International Confederation of Midwives (ICM) has prepared for use by educators and policymakers as they develop or revise curricula for programs of professional midwifery education in their countries. The full set of the original documents can be obtained from the ICM website, at: http://www.internationalmidwives.org/.*

1 - Introduction

This resource packet contains a suggested outline of the organization and content for a three-year direct-entry preservice (basic) midwifery education program and a separate suggested outline for a preservice midwifery program (when the applicant comes with another health provider registration). The content is taken directly from the ICM *Essential Competencies for Basic Midwifery Practice* (ICM, 2010). The rationale for the organization of content by module and by year of study is based on the following precepts (Thompson et al., 2002):

- Learning is enhanced when one moves from the familiar to the unfamiliar (build upon prior knowledge and experience before introducing new knowledge, skills, and behaviors (KSBs));
- learning is enhanced when one moves from simple concepts to increasing levels of complexity (Benner, 1984) (healthy woman and newborn, then selected complications);
- learning is retained longer when it is put to immediate use (theoretical and practical learning in the same time frame);
- learning is enhanced by repetition (some of the KSBs are intentionally repeated for emphasis, and multiple opportunities for practical experience are planned throughout the midwifery program).

A review of each ICM competency with its KSBs also influenced the placement of specific content and practical experiences in a given year and a given module. A decision was made as to whether that specific competency and each of its KSBs was best learned in year one, two, or three of the direct-entry program, and whether there was a cluster of KSBs that fit logically with other KSBs in a specific module. It has been noted (Fullerton et al., 2011) that ICM Competency #1 (and its domains of ethics, epidemiology, and infection prevention; human rights; legal and regulatory frameworks; and administration and management KSBs) is foundational to the six other competencies, even though the content increases in complexity of knowledge and skills as the learner advances (see the document entitled Sample division of ICM Competency #1 and its KSBs in Appendix D of this annex). Those same authors also noted that professional behaviors are integrated and expected throughout the curriculum, and so are critical thinking and clinical reasoning. This approach requires an initial introduction to each of these areas, with reinforcement throughout the curriculum.

Practical hints

As there are many ways to design a curriculum and to organize the content within it, the following practical hints are offered for consideration in designing a three-year direct-entry midwifery curriculum.[1]

1. Review the program mission and philosophy statements for guidance in how to organize the content based on the ICM competencies (e.g., normal to abnormal midwifery care, simple or introductory to complex midwifery care, observational experiences to autonomous practice).
2. Begin by reviewing each of the seven ICM competencies and their related KSBs, affirming understanding and importance to midwifery practice in one's country.
3. Understand that all competency domains and core KSBs must be included, though some/all of additional KSBs may be needed depending on country health needs.
4. Have each midwifery teacher assign a temporary placement of each of the competencies and related KSBs by year or level throughout the three years of the program (may use a common worksheet to record initial decisions or mark directly on a printed copy of the ICM competency document).
5. Discuss the temporary placement of content from step #2 above with a group of experienced midwifery teachers, exploring rationale for each placement and mindful of the program's mission and philosophy statements.
6. Make an intentional assignment of content to a given level of the curriculum, noting rationale for placement in keeping with philosophy of teaching and learning.
7. Group together KSBs that are similar into one module/course unit and make deliberate decisions on which KSBs will be repeated for reinforcement of learning; e.g. components of health assessment in each practical area.
8. Determine how much time should/can be allocated to each module or course unit, given the weeks and hours available for the program.
9. Determine which modules/course units fit together and can be offered in the same time frame, given the realities of available learning resources (teachers, supplies, simulation labs, and/or practical sites and qualified preceptors) and the level of maturity of the learners (first, second, or third year).
10. Decide whether modules/course units that require practical experiences will have those experiences concurrently with learning theory, or whether the theory will come first (block teaching) followed by practical experience.

Eighteen-month post-registration program

In those countries that choose to provide basic midwifery education following completion of a prior health provider program, such as nursing, the steps outlined above can be useful as well. The major difference in approach for a post-registration midwifery program is the need for teachers to define/distinguish the content that was learned in the prior health provider program that contributes to midwifery competency so that it can be demonstrated (usually some form of challenge mechanism) prior to continuing with the additional midwifery KSBs. Some midwifery programs will set

[1] The ICM accepted a consensus decision in 2011 that the most common time length to allow the average learner time to acquire, apply, and demonstrate competence in each of the seven ICM competencies and their related knowledge, skills, and behaviors was three years. There are programs that are attempting to show that the ICM competencies can be demonstrated in less than three years, but further research is needed to determine whether such graduates have reached that goal.

prerequisites for post-registration health providers to be completed/challenged prior to entering an 18- month preservice midwifery program.[2] These prerequisites often include basic sciences (pharmacology, biology, human anatomy/physiology, and pathophysiology), psychology and sociology, nutrition, and basic health skills (ACME, 2005). Once this list of prerequisite competencies is completed, the midwifery teachers can follow the suggested steps above to determine which midwifery competencies with their remaining KSBs will be placed where in the 18-month program. The curriculum outline for a suggested 18-month preregistration midwifery program is included in Appendix A.2 of this annex.

Combined direct-entry and nurse-midwifery basic program

A third model of preservice midwifery education is the combination of direct-entry and post-nursing learners in the same program. That model will not be discussed here, but one example from State University of New York Downstate Medical Center can be reviewed at http://www.downstate.edu/CHRP/midwifery/program_summary.html. In this combined program, the direct-entry non-health professional learner is required to take three courses that the nurses do not have to take: basic health skills and integrated medical sciences I and II. All learners have completed a baccalaureate degree prior to entry into the midwifery program, and all learners take the midwifery courses together.

Organization of the packet

There are two sections to this packet. The first section provides an overview in narrative form of the allocation of ICM competency statements 1-7 and their related knowledge, skills, and behaviors to each year[3] of study in a direct-entry curriculum and to each six months of study in a post-registration midwifery curriculum. A brief discussion of how competencies and KSBs can be grouped within a suggested module follows. Appendix A.1 offers a graphic representation of a suggested three-year direct-entry curriculum. Appendix A.2 offers a similar graphic representation for an 18-month post-registration midwifery education curriculum, recognizing that a reasoned decision has been made as to which prerequisite content and KSBs have been demonstrated from their prior education and health provider practice. In both of the narratives, each module will have sub-units that do not appear on the graphic representations but will be discussed later in this packet.

Please note: There is no attempt in this resource packet to allocate every one of the KSBs under a specific competency statement in the suggested modules. Examples of some of the KSBs are included, but anyone organizing/evaluating an existing midwifery curriculum needs to make sure all the basic KSBs are included. Program teachers may include the KSBs agreed upon as being “additional” as needed, along with additional competencies needed within that particular country or region. Each of these additions need additional time allotted for them

[2] A second ICM decision was based on consensus that, on average, a post-registration learner will need about 18 months to be able to demonstrate all the ICM competencies. Again, this time frame has not been based on formal research, and it is subject to alteration if a post-registration graduate can demonstrate competency in full-scope midwifery practice.

[3] One of the most difficult areas to address in the ICM education standards was the concept of time allocated to the description of the preservice midwifery curriculum (program) since competency-based outcomes are expected rather than number of hours spent in learning. Teachers understand that given the variety of learning styles, motivation, and resources available, it may take one learner more time to demonstrate competency than another learner. So why use years or months or weeks to describe direct-entry and post-registration preservice midwifery programs? The simple answer is that we do not yet have valid research evidence of how long, on average, it takes a learner to achieve all of the ICM competencies with their individuals KSBs. In the absence of such evidence, the ICM relied on global consensus and expert opinion to provide the probable time frames for both types of preservice midwifery education programs. The important point is that if a country/education program can demonstrate that graduates have achieved the predetermined level of competency for full scope midwifery practice in less time or in designated hours of supervised midwifery practice, the ICM would consider that program as having met the competency standard.

It is important to note that the ICM competency statements 2-7 include midwifery care of individuals who are healthy as well as those with complications in a given practice area (e.g., antenatal). Since the narrative descriptions of module content in the sample curriculum outlines focus primarily on the separation of normal or healthy aspects of the reproduction/childbearing experiences from those complications encountered throughout the reproductive cycle, the KSBs in each competency have been separated into normal and complications. The third or highest level of curriculum content (3rd year in direct-entry and final 6 months in post-registration curricula) has the learner providing competent, autonomous midwifery care across the full scope of midwifery practice in which they care for all women regardless of normalcy or complications. The dominant or primary competency statement is reflected at the beginning of the year/level or in each module for ease of reference, knowing that some KSBs from other competencies may also be included/repeated for emphasis.

The second section of this packet includes a more detailed explanation of how a module/unit of instruction might be set up. Two sample modules (one primarily theoretical, and one with both theory and practical components) are included to demonstrate how midwifery teachers might organize the required content in the two types of preservice midwifery curricula. Here it is important to note that the length of time spent in a given module is directly related to the quality and availability of midwifery teachers, learning resources, and practical experiences. Practicality also enters the time equation if a midwifery program is housed within an academic setting, where semesters or quarters have a defined length in weeks and/or hours spent and credit allotment. Credit allotment normally follows a 1:1 hour ratio for theoretical learning and 1:3 hours ratio for practical learning. Weeks are often used to describe the length of time in a particular module, based on the host institution's requirements along with midwifery teachers' estimation of the availability of practical learning sites for the number of students in the program. Whatever method of describing the length of time spent in a given module, the important factor to remember is that competency demonstration is the key to success as a competent midwife. Some learners require more practical experiences to demonstrate competency, while other learners require fewer practical experiences. All of these factors are taken into account when designing a midwifery education program.

Section 1: Overview of suggested organization of midwifery content

Generic three-year direct-entry preservice midwifery program

(summarized graphically in Appendix A.1)

Year 01: Foundations of midwifery [32-36 weeks; 9 modules]

Competency 1: Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health, and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families

1. **Midwifery sciences:** Biology (embryology and human development), basic chemistry and microbiology, human anatomy and physiology, pharmacology and pharmacokinetics of common drugs used during childbearing.

2. **Basic health skills for midwives:** Knowledge and skills generic to performing health assessment (history, common laboratory tests, and physical examination) of healthy women and newborns, record-keeping. Review of adult cardiopulmonary resuscitation (CPR), basic management of shock including starting intravenous lines, administering blood products, administration of oxygen, and basic first aid.
   [Selected midwifery KSBs taken from Competencies 2-7].

3. **Life-cycle nutrition:** Basic knowledge of nutritional needs for healthy women throughout their life; newborn nutritional needs, including breast milk; infant nutritional needs.
   [Selected KSBs taken from Competencies 2-7 with focus on healthy individuals].

4. **Introduction to midwifery care:** Midwifery philosophy and model of care; midwifery care process, including critical thinking and clinical decisions-making; overview of scope of midwifery practice; roles and responsibilities of the midwife.
   [Also includes selected midwifery KSBs taken from competency 2-7].

5. **Becoming a midwife I:** Effective communication strategies, teamwork, professional and personal identity. Global health status of women and childbearing families (reproductive health), global status of professional midwifery and introduction to ICM, country perspectives, and challenges for professional midwifery.
   [Selected KSBs taken from Competencies 1-7].

6. **Midwifery (MW) care:** Healthy pregnancy: Anatomy and physiology of reproduction, confirmation of pregnancy and weeks of gestation, monitoring growth and development of fetus, care during pregnancy, common complications of pregnancy, physiological and psychological adaptation and changes.
   [Competency 3: Midwives provide high-quality antenatal care to maximize health during pregnancy and that includes early detection …of selected complications].

7. **Midwifery (MW) care:** Healthy labor/birth: Physiology of labor and birth; indicators of need for timely intervention; care and support during labor; pain relief; attendance of birth and immediate care of mother and newborn; inclusion of support persons for laboring woman; different models of birth and maternity care.
   [Competency 4: Midwives provide high-quality, culturally sensitive care during labor, conduct a clean and safe birth, and handle selected emergency situation to maximize the health of women and their newborns].

8. **Midwifery (MW) care: Healthy postpartum/newborn/families:** Normal physiological involution; physiology of lactation, care and support of new family, encouragement and support of exclusive breastfeeding (keeping mother, baby, family together as unit of care).
   [Competency 5: Midwives provide comprehensive, high-quality, culturally sensitive postpartum care for women.]

   Physiological adaptation to extrauterine life, immediate care needs of the newborn, characteristics of healthy newborns with common variations, normal newborn and infant growth and development, immunization needs, elements of health promotion and disease prevention in newborns and infants; healthy family development. [Competency 6: Midwives provide high-quality, comprehensive care for the essentially healthy infant from birth to two months of age].

9. **Well-woman health care:** Theory and practice related to pre-conception care; healthy family development; sexual development and sexual activity; health education targeted to sexual and reproductive health; provision of traditional and contemporary family planning methods; screening for cervical cancer.
   [Healthy aspects taken from ICM Competency 2: Midwives provide high-quality, culturally sensitive health education and services to all in the community in order to program healthy family life, planned pregnancies and positive parenting].

Year 02: Midwifery care of common complications of childbearing and newborns [32-36 weeks; 9 modules]

1. **Public health for midwives:** Definitions of health and wellness, determinants of individual health; principles of public health, including health promotion and disease prevention; basic epidemiology; community assessment strategies; individual, family, and community support systems, including agencies that provide maternal-child health and illness services. Direct and indirect causes of maternal and neonatal morbidity and mortality in the region/country; concept of alarm and transport; cultural traditions surrounding pregnancy; safe birth settings; universal precautions; basic demography, including population characteristics; adolescent reproductive health statistics; global and local principles of primary health care.
   [Selected KSBs taken from Competency 1 and 2].

2. **Midwifery ethics and law:** Codes of moral behavior; values, human rights, standards of practice; influence of values and beliefs on health and illness conditions; moral reasoning and ethical decision-making; legal aspects of midwifery care.
   [Selected KSBs taken from Competency 1.]

3. **Midwifery teaching and counseling:** Active listening; counseling skills specific to reproductive health; principles and practice of health education. Application of counseling skills with women experiencing psychosocial challenges during pregnancy; anticipatory guidance during reproductive years, with focus on childbearing; bereavement counseling for pregnancy loss.
   [Selected KSBs taken from competencies 2-7].

4 **Becoming a midwife II:** Advanced communication skills; interdependent team practice; professional identity; regulation of midwifery practice; core ICM documents.
   [Selected KSBs taken from Competencies 1-7].

5. **Pharmacology for midwives:** Advanced principles of pharmacology; review of basic pharmacology principles; indications, doses, routes of administration, and side effects of common drugs used for common complications of childbearing, such as magnesium sulphate; teratogenic nonprescription and street drugs, such as cocaine or ergot plants; prescribe, dispense, furnish, or administer (however authorized to do so in the jurisdiction of practice) selected life-saving drugs.
   [Selected KSBs taken from Competencies 2-7].

6. **Midwifery (MW) care:** Complications pregnancy: Diagnosis, treatment, and/or referral as indicated for complications prior to and during pregnancy, including sexually transmitted infections, urinary tract infections, common acute and chronic diseases specific to a geographic region such as malaria, tuberculosis, HIV; gender-based violence; spontaneous and induced abortion; pre-eclampsia/eclampsia; preterm pregnancy; multiple fetuses; placental disorders; gestational diabetes.
   [Complications and advanced KSBs from competencies 2-3; 7].

7. **Midwifery (MW) care: Complications labor/birth:** Diagnosis, treatment, and/or referral as indicated for complications during labor and birth, including fetal distress, preterm labor, malpresentations, cord prolapsed, shoulder dystocia, uterine bleeding, retained placenta, cephalopelvic disproportion, infection, premature rupture of membranes.
   [Selected KSBs from Competency 4].

8. **Midwifery (MW) care:** Complications PP/NB and families: Diagnosis, treatment, and/or referral as indicated for complications during the postpartum period and for newborns, including sub-involution, mastitis, postpartum hemorrhage, anemia, embolism, severe maternal depression; newborn jaundice, hypoglycemia, hypothermia, premature infant, congenital abnormalities, infection, dehydration; dysfunctional family unit.
   [Selected KSBs from Competencies 5-6].

9. **Basic life-saving skills for midwives:** Review of adult CPR; administration of selected life-saving drugs such as anticonvulsants, antibiotics, antiretroviral medications; immediate management of shoulder dystocia, prolapsed cord, severe maternal bleeding, shock, fetal distress; active management of third stage of labor, manual removal of the placenta, uterine compression for postpartum hemorrhage.
   [Select KSBs extracted from all competencies].

Year 03: Autonomous midwifery practice and ongoing professional development [32-36 weeks; 5 modules]

1. **Advanced midwifery:** Maternal death audits, legal and regulatory framework governing reproductive health for women of all areas, advocacy and empowerment strategies for women, leadership role in practice areas, beginning-level administration and management tasks and activities, importance of involvement in policy development for women's health and safe motherhood.
   [Selected KSBs taken primarily from Competency 1-2].

2. **Professional issues in midwifery:** ICM core documents relating to strengthening midwifery education and regulation; midwifery association development; the business of midwifery; history of midwifery in country and region; health policy development and implementation; the global context of midwifery care. Basic research designs and how to critique research reports; definition of evidence-based practice and how to implement valid research outcomes in professional practice; indicators of quality health care.
   [Selected KSBs from all competencies].

3. **Midwifery care of women with abortion needs:** Unintended pregnancy, medical eligibility criteria for early termination of pregnancy, laws and regulations related to abortion care services, spontaneous abortion, incomplete abortion, uterine involution and sub-involution, pregnancy loss/bereavement.

   [Competency 7: Midwives provide a range of individualized, culturally sensitive abortion-related services for women requiring or experiencing pregnancy termination or loss that are congruent with applicable laws and regulations and in accord with national protocols].

4. **Being a midwife and the business of midwifery:** Professional identity; criteria for licensure/regulation; plan for continuing professional development; business plans for professional midwifery practice (e.g. organizing a birth center or maternity home); exploration of various models of midwifery care, including homeopathy, water birth, acupuncture.
   [Selected KSBs related to professional behaviors from each competency].

5. **Autonomous midwifery care during the reproductive years:** This module uses the seven competency statements with their KSBs (application and synthesis) as the expected learning outcomes at the end of the midwifery program. The learner provides full scope midwifery practice in a variety of settings.

Post-registration preservice midwifery program

(summarized graphically in Appendix A.2)

Level 1: Foundations of midwifery [First 6 months; 9 modules]

1. **Introduction to midwifery:** Global health status of women and childbearing families (reproductive health), global status of professional midwifery and introduction to ICM, country perspectives and challenges for professional midwifery; definition of roles and responsibilities of the midwife and expectations of professional status.
   [Selected midwifery KSBs taken from Competency 1: Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health, and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families].

2. **Midwifery model of care and the care process:** ICM core documents (philosophy and model of care) and elements of the midwifery care process (Appendix B) that requires critical thinking, reflection, and clinical judgment throughout in preparation for providing midwifery care for essentially healthy women, families, and newborns.
   [Included in all competencies].

3. **Public health for midwives:** Definitions of health and wellness, determinants of individual health, principles of public health, epidemiology, and community assessment strategies; global and local principles of primary health care; individual, family, and community support systems, and agencies that provide health and illness services.
   [Selected KSBs from Competency 1-2].

4. **Ethics for midwives:** Codes of moral behavior, values, human rights, standards of practice, influence of values and beliefs on health and illness, critical thinking and moral reasoning; analysis of midwifery codes of ethics.
   [Selected KSBs from Competency 1 and professional behaviors from all competencies].

5. **Midwifery standards of practice:** Analysis of standards of midwifery practice required in legal jurisdictions of practice; professional identity; interdisciplinary teamwork.
   [Selected professional behaviors from all competency statements].

6. **Midwifery communication and counseling skills:** Active listening; counseling skills specific to reproductive health; principles and practice of health education throughout the childbearing cycle.
   [Selected KSBs from competencies 1-7].

7. **Health assessment of women:** Knowledge and skills required for taking health history and performing physical and pelvic examination of healthy nonpregnant and pregnant women; common laboratory tests used with women in their reproductive years; record-keeping.
   [Selected KSBs from competencies 2-5; 7].

8. **Midwifery care: Reproductive health:** Human sexuality, child spacing, and pre-conception counseling and care; methods of family planning.
   [Competency 2: Midwives provide high-quality, culturally sensitive health education and services to all in the community in order to program healthy family life, planned pregnancies, and positive parenting].

9. **Midwifery care:** Healthy pregnancy: Anatomy and physiology of reproduction, confirmation of pregnancy and weeks of gestation, monitoring growth and development of fetus, care during pregnancy, common complications of pregnancy.
   [Competency 3: Midwives provide high-quality antenatal care to maximize health during pregnancy, and that includes early detection …of selected complications].

Level 2: Healthy and complicated childbearing [Second 6 months; 9 modules]

1. **Demographics of maternal child health:** Direct and indirect causes of maternal and neonatal morbidity and mortality in the region/country, concept of alarm and transport, cultural traditions surrounding pregnancy, safe birth settings, universal precautions, professional ethics, partnership model of care with women and families, collaborative teamwork for women's health.
   [Selected KSBs taken from Competencies 1, 2, 3].

2. **Midwifery care:** Normal labor and birth: Physiology of labor and birth; indicators of need for timely intervention, care and support during labor; attendance of birth and immediate care of mother and newborn; inclusion of support persons for laboring woman.
   [Competency 4: Midwives provide high-quality, culturally sensitive care during labor, conduct a clean and safe birth, and handle selected emergency situation to maximize the health of women and their newborns].

3. **Midwifery care:** Abortion-related services: Unintended pregnancy; medical eligibility criteria for early termination of pregnancy; laws and regulations related to abortion care services; spontaneous abortion, incomplete abortion; uterine involution and sub-involution; pregnancy loss/bereavement.
   [Competency 7: Midwives provide a range of individualized, culturally sensitive abortion-related services for women requiring or experiencing pregnancy termination or loss that are congruent with applicable laws and regulations and in accord with national protocols].

4. **Basic live-saving skills for midwives:** Review of adult CPR; administration of selected life-saving drugs such as anticonvulsants, antibiotics, antiretroviral medications; immediate management of shoulder dystocia, prolapsed cord, severe maternal bleeding, shock, fetal distress; active management of third stage of labor; manual removal of the placenta, uterine compression for postpartum hemorrhage.
   [Select KSBs extracted from all competencies].

5. **Pharmacology for midwives:** Review of basic pharmacology principles; indications, doses, routes of administration, and side effects of common drugs used for healthy pregnancies and newborns and drugs used for common complications of childbearing, such as magnesium sulphate; teratogenic nonprescription and street drugs, such as cocaine or ergot plants; prescribe, dispense, furnish, or administer (however authorized to do so in the jurisdiction of practice) selected, life-saving drugs.
   [Selected KSBs taken from Competencies 2-7].

6. **Midwifery care:** Healthy newborns: Physiological adaptation to extrauterine life, immediate care needs of the newborn, characteristics of healthy newborns with common variations, normal newborn and infant growth and development, immunization needs, infant nutrition needs, elements of health promotion and disease prevention in newborns and infants.
   [Competency 6: Midwives provide high-quality, comprehensive care for the essentially healthy infant from birth to two months of age].

7. **Midwifery care:** Healthy postpartum: Normal physiological involution; physiology of lactation, care and support of new family, encouragement and support of exclusive breast-feeding.
   [Competency 5: Midwives provide comprehensive, high-quality, culturally sensitive postpartum care for women].

8. **Professional issues in midwifery I:** Professional identity development; ICM core documents relating to strengthening midwifery education and regulation; history of midwifery in country and region; current issues in midwifery education and practice in the country; membership in the midwifery association.
   [Selected KSBs from all competencies].

9. **Common complications of childbearing I:** Diagnosis, treatment, and/or referral as indicated for common complications prior to and during pregnancy, during labor and birth, the postpartum and postnatal periods.
   [Complications and advanced KSBs from competencies 1-6].

Level 3: Autonomous midwifery practice and ongoing professional development [Final six months; five modules]

1. **Advanced midwifery:** Maternal death audits, legal and regulatory framework governing reproductive health for women of all areas, advocacy and empowerment strategies for women, leadership role in practice areas, beginning-level administration and management tasks and activities, importance of involvement in policy development for women's health and safe motherhood.
   [KSBs primarily from Competency 1].

2. **Professional issues in midwifery II:** Professional identity; criteria for licensure/regulation; plan for continuing professional development; business plans for professional midwifery practice (e.g. organizing a birth center or maternity home); exploration of various models of midwifery care, including homeopathy, water birth, acupuncture; health policy development and implementation.
   [Selected KSBs related to professional behaviors in each competency].

3. **Evidence-based midwifery practice:** Basic research designs, how to critique research reports, definition of evidence-based practice and how to implement valid research outcomes in professional practice; indicators of quality health care.
   [Selected KSBs from Competencies 1-7].

4. **Midwifery care: complications reproductive years II:** Advanced diagnosis and treatment and/or referral of severe complications of childbearing, such as diabetes and cardiac disease; newborn anomalies, preterm infants, complications of induced abortion.
   [Selected KSBs from competencies 2-7].

5. **Autonomous midwifery care during the reproductive years:** This module uses the seven competency statements with their KSBs (application and synthesis) as the expected learning outcomes at the end of the midwifery program. The learner provides full scope midwifery practice in a variety of settings.

Section 2: Sample modules

Introduction

There are many ways to package the content (the ICM competency statements and related KSBs) needed in an educational curriculum and also many different terms to describe the packages. For example, the more traditional term within universities is “course.” Others use “instructional unit” to describe the content that is included in a specific area of study. The choice of “module” for these ICM resource packets was deliberate and based on the self- study approach to adult learning and the required demonstration of practice competency as a beginning midwife.

A module is a self-contained unit of instruction that provides clear directions to both learner and teacher on what is to be demonstrated at the end of the unit (learning outcomes), the elements of knowledge and specific skills needed, and the professional behaviors expected to successfully complete the learning outcomes. Competency in midwifery practice in all three domains of learning is evaluated by learner self-assessment and by direct observation by a qualified midwifery preceptor based on the learning outcomes expected. One suggested approach to developing a module can be found in the Module development worksheet presented in Appendix C.

This section of the resource packet includes an outline of two sample modules:

- Introduction to midwifery;
- midwifery care during healthy pregnancies.

These modules were chosen since they represent foundational theory (Introduction to Midwifery) and how antenatal KSBs are demonstrated in practice (Midwifery Care during Healthy Pregnancies). They also illustrate how a given module may be broken down into sub-units based on like or similar content. Sub-units may exist in some or all of the modules, depending on who will be the teacher of record (expert) and the logical grouping of content. For example, the Basic Sciences module most likely will have sub-units on biology/microbiology, general chemistry, human anatomy and physiology, pathophysiology, and pharmacology, with different teachers for each. The Reproductive Health module may have sub-units such as women’s health care, parent education, and family planning. The Labor and Birth module may have sub-units on labor care, care during birth and the immediate postpartum period, and common life-threatening maternal and newborn complications. However midwifery teachers may decide to group content into modules and sub-units, the decisions need to be carefully thought out, taking into account the needs of adult learners and the level of availability of experts to facilitate learning of both theory and practice.

Sample modules

It is important to note that these two sample modules include a suggested organization of content and also a broad outline of what might possibly be included, along with examples of the types of learning activities and resources available. Using the ICM Essential Competencies for Basic Midwifery Practice 2010 document as the primary reference point, the midwife teacher decides how to group like content and word the KSBs in language appropriate to the educational setting and country. This means there is some flexibility in use of the ICM competencies. They can be adopted as is, adapted to the common language of the country, or added to as country needs demand. However, each of the KSBs that have been indicated as “basic” must be included in the curriculum; none can be deleted when one is preparing a fully qualified midwife in keeping with the ICM definition.

Sample Module: Introduction to midwifery (4 weeks)[4]

Module introduction/description

This module is an introduction to the profession of midwifery and how midwives and midwifery care can promote the health of women and childbearing families globally. It will be divided into three sub-units: 1) factors affecting the status and health of women globally, 2) the International Confederation of Midwives, and 3) the roles and responsibilities of the professional midwife. Each sub-unit has its own learning outcomes, content list, and suggested learning activities. Once all sub-units are successfully completed, you will have met the Overall Learning Outcomes. Welcome to the exciting world of midwifery!

Overall learning outcomes

At the end of this module, the learner will be able to:

1. Understand the range of factors that affect the health of women globally.
2. Describe the global importance of the International Confederation of Midwives.
3. Discuss the roles and responsibilities of the professional midwife.

Overall content taken primarily from ICM Competency #1

Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health, and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families. Additional content on ICM added.

Note to learner: It is recommended that you take time to read through the entire module first before selecting one of the sub-units to begin study. In this module it does not make any difference which of the sub-units you begin with as each is an independent area and all three are needed to complete the overall learning outcomes. If you have any questions about this module, contact the teacher for clarification. You are encouraged to discuss your learning with peers, but do not depend on others to prepare the needed content. Your sharing will be richer when all have prepared ahead of time.

[4] This module most likely would be offered during the same time frame as Public Health, Professional Ethics, and Research and Evidence-Based Practice for the direct-entry learner since much of the content is complementary. It would be offered at the beginning of midwifery content for the post-registration learner.

Sub-unit 1: Factors that affect the health of women globally

At the end of this sub-unit, the learner will be able to:

1.1 Identify how poverty, malnutrition, low levels of education, and various forms of discrimination affect the health of women in many areas of the world.

1.2 Discuss how denial of the basic human right for safety affects the health of women globally.

1.3 Describe the society-maintaining and society-enhancing roles of women in the world that could lead to poor health.

1.4 Present a plan of action to improve the health of women in the learner's country of origin.

Content list

► Review of the community and social determinants of health (e.g., income, literacy, and education, with focus on young girls and women;

► review of basic human rights and their effect on health of women and girls if denied; e.g., domestic violence, female genital mutilation (FGM), HIV/AIDS;

► local culture and beliefs, including gender roles and status;

► indicators of quality health services.

Suggested learning activities (self-study)

1. There are several websites you may wish to peruse that report on the health status of young girls and women in various countries of the world. Most notable among these are:

    - Save the Children's State of the World's Women 2011 at www.savethechildren.org/;
    - Women Deliver reports on adolescents and women at www.womendeliver.org;
    - UNICEF The State of the World's Children 2011 at www.unicef.org/sowc/;
    - United Nations Development Program (UNDP) reports on progress toward targets of the eight Millennium Development Goals (MDGs) at http://www.undp.org/content/undp/en/home/mdgoverview.html;
    - UNFPA has a focus on women and midwives. Browse their website for information on gender equality, reproductive health, and other topics of interest. www.unfpa.org;
    - World Health Organization website has excellent resources on human rights and health. www.who.ch;
    - the Partnership for Maternal, Newborn and Child Health (PMNCH) also has a information website and frequent electronic communication with those supporting their advocacy efforts (you can join as individual). www.pmnch.org.

2. You are encouraged to visit your local health department's center for vital statistics to obtain the most recent report on the state of health for young girls and women, including morbidity and mortality ratios in your local area or country.

3. If there are peers from other countries in your midwifery class, you may find it helpful to compare the healthstatus of young girls and women by country as a group and explore possible reasons for any differences.

4. You are encouraged to review any worksheets provided by the teacher to organize your thinking about women's health in your country.

Other learning resources available

1. Thompson JB. Poverty, development, and women: Why should we care? JOGNN 2007;36(6):523-530.
2. Thompson JB. International policies for achieving Safe Motherhood: Women's lives in the balance. Health Care for Women International 2005;26(6):472-483.
3. Thompson JB. A human rights framework for midwifery care. Journal of Midwifery and Women's Health 2005;49:3,175-181.
4. Fill in country-specific resources here that are available to the learners.

Sub-unit 2: International Confederation of Midwives (ICM)

At the end of this sub-unit the learner will be able to:

2.1 Define the aims and objectives of the ICM.

2.2 Discuss how the ICM organizational structure and priorities can strengthen midwifery in the learner's country of origin.

2.3 Analyze the ICM core documents for relevance to the learner's country of origin.

2.4 Identify key global challenges and opportunities for the profession of midwifery that might be addressed by the ICM.

2.5 Create a draft ICM position statement to address a global midwifery challenge.

Content list

ICM priorities/aims and objectives ("Three Pillars")

- ► Organizational structure: membership, decision body, regions, headquarters;
- ► core documents and position statements: definition of midwife, scope of practice, code of ethics, standards for education and regulation;
- ► state of the World's Midwifery Report 2011;
- ► midwifery's global influence (Millennium Development Goals).

Suggested learning activities (self-study)

1. If you have access to the Internet, browse the ICM website to locate the most up-to-date information about the Confederation. www.internationalmidwife.org

2. Another source of ICM information is the new International Journal of Childbirth, which is available at both a paper edition and on-line.
3. It is suggested that you find out whether there is a midwifery association in your country and if it is a member of the ICM. If so, visit their headquarters to see what resources they might have on international midwifery and the ICM.

Learning resources available

1. The primary source for information on the International Confederation of Midwives is their website at www.internationalmidwives.org
2. Review ICM Position Statements on education, regulation, partnership with women and families, human rights.
3. The State of the World's Midwifery Report 2011 is available on a CD from UNFPA or on-line at www.internationalmidwives.org
4. Thompson JE, Herschderfer K, Duff E. (2005). The midwife takes center stage in the global arena in 2005: The International Confederation of Midwives (ICM). Journal of Midwifery and Women's Health 2005; 50(4):269-271.
5. Add other specific resources here that are available to the learner. May direct the learners to the WHO or UNFPA country offices, if they exist in the country.

Sub-unit 3: The professional midwife

At the end of this sub-unit, the learner will be able to:

3.1 Compare the definition of the midwife in your country with the ICM Definition of the Midwife (2011).

3.2 Discuss the advantages and disadvantages of the variety of education pathways for midwifery.

3.3 Evaluate the midwifery scope of practice in your country for its ability to meet the needs of women and childbearing families.

3.4 Discuss the advantages and disadvantages of the variety of regulatory recognition of midwives.

3.5 Define the core responsibilities of the midwife based on the profession's code of ethics, scope and standards of practice

Content list

► Definition of midwife and scope of midwifery practice;

► actions consistent with professional ethics, values, and human rights;

► actions consistent with standards of practice;

► responsibility and accountability for clinical decisions and actions;

- ► maintenance of midwifery knowledge and skills in order to remain current in practice;
- ► respect for individuals and of their culture and customs, regardless of status, ethnic origins, or religious beliefs;
- ► requirements of the regulatory body for midwifery practice;
- ► required local reporting regulations for birth and death registration;
- ► ICM essential competencies for basic midwifery practice 2010;
- ► ICM global standards for midwifery education 2010 with companion guidelines.

Suggested learning activities (self-study)

1. Visit the midwifery regulatory authority in the country to learn the local definition of a midwife and scope of practice allowed. Then compare these documents with the ICM Definition of a Midwife and Scope of Practice (2011).
2. Review the variety of health professional education programs in your country and discuss with peers the background and type of midwifery program you are enrolled in. Is this the same pathway to professional practice as that for doctors and nurses in your country? If not, why not?
3. You may also wish to discuss why there is a need for educational standards for health professionals.
4. Explore the following questions with peers and teachers. Is midwifery a profession? Are midwives professionals? Explain reasons for responses.
5. Explore whether there is a code of ethics or moral behavior for midwives in your country. If so, compare its contents to the ICM International Code of Ethics 2008. If there is no code of ethics specific for midwives, work with your peers to begin to develop one.
6. Examine the midwifery standards of practice and begin to discuss the roles and responsibilities of midwives in your country.
7. Request the specific reporting requirements for births and deaths in your country during your visit to the local health department/Ministry vital statistics department.

Other learning resources available

1. Fullerton, J.T., Johnson, P.G., Thompson, J.B., Vivio, D. Quality considerations in midwifery pre-service education: Exemplars from Africa. Midwifery. 2011;27(3):208-315.
2. Fullerton, J.T., Gherisi, A., Johnson, P.G., Thompson, J.B. Competence and competency: Core concepts for international midwifery practice. International Journal of Childbirth 2011;1:1, 4-12.
3. Fullerton, J.F., Thompson, J.E., Severino, R. The International Confederation of Midwives Essential competencies for basic midwifery practice: An updated study 2009-2010. Midwifery 2011; 27 (4):399-408.
4. Thompson, J.E., Fullerton, J.T., Sawyer, A. The International Confederation of Midwives' Global Standards for Midwifery Education (2010) with companion guidelines. Midwifery 2011;27(4):409-416.
5. Country-specific references need to be added here along with any worksheets or case studies teachers have prepared for use by learners.

Overall assessment of learning strategies and timing

1. There will be two paper-pencil tests given in this module. The first will be planned for midway through the module (give specific day and time), and the second is planned at the end of the module: **50% module grade**.
2. Each learner will be expected to actively participate in peer and group discussions, having prepared prior to those discussions: **25% module grade**.
3 Each learner will submit a 5-page paper addressing the question: "How do professional midwifery and midwives promote the health of women and childbearing families in the world?" (add specific date due) **25% module grade**.

Overall module evaluation[5]

You are expected to complete the following Module Evaluation and discuss with teacher(s). Please circle the response that most closely represents your evaluation of the following parts of this module:

1. I was able to meet the following learning outcomes in time allotted:
   a. Understand the range of factors that affect the health of women globally

      Yes **Partially** **No**

   b. Describe the global importance of the International Confederation of Midwives

      Yes **Partially** **No**

   c. Discuss the roles and responsibilities of the professional midwife

      Yes **Partially** **No**

2. The learning activities helped me to learn **Yes** **Partially** **No**
3. The group work helped me to learn **Yes** **Partially** **No**
4. The learning resources were available and helpful **Yes** **Partially** **No**
5. The teacher was an effective facilitator of my learning **Yes** **Partially** **No**
6. The teacher stimulated me to learn **Yes** **Partially** **No**
7. The teacher was fair and unbiased in assessing my learning **Yes** **Partially** **No**
8. The most helpful aspect(s) of the module was: (please explain)
9. Suggested changes in the module (please be specific)

Name _____ Date_____

Note: It is suggested that learners sign their evaluation so that details can be discussed with the midwifery teacher. This is an important lesson in being accountable for one's critique, and it often eliminates unwarranted comments on those aspects of teaching and learning that cannot be changed; e.g., clothing, physical features, personalities. Likewise, any learner evaluation by a teacher needs to be openly discussed with the learner.

[5] The module evaluation can be brief or very detailed, depending on choices of the midwifery teachers.

Sample Module:
Midwifery care during healthy pregnancies
(8 weeks)[6]

Module introduction/description

This module introduces the learner to the knowledge, skills, and professional behaviors needed to provide both high-quality antenatal care that maximizes health during pregnancy and early detection of potential threats to the health of the pregnant woman or her developing fetus. This module is a continuation of your practical application of knowledge, skills, and professional behaviors to the care that women and families receive during one of the most important life events – that of pregnancy and preparing for birth. This module offers you many opportunities to work together with women and families to achieve the best outcomes of each pregnancy. Enjoy!

Overall learning outcomes

At the end of this module, the learner will be able to:

1. Provide high-quality, evidence-based antenatal care for women seeking midwifery services.
2. Conduct a series of childbirth education classes with a group of pregnant women.

Overall content taken primarily from healthy aspects of ICM Competency #3: *Midwives provide high-quality antenatal care to maximize health during pregnancy, and that includes early detection and treatment or referral of selected complications.*

Note to learner: : In this module, there are many KSBs related to the provision of antenatal care (Sub-unit 1). Each of them needs to be understood prior to working with pregnant women and families to help them prepare for childbirth and parenting (Sub-unit 2). Whenever possible, you will be applying knowledge and skills to the actual care of pregnant women while you are continuing to learn the KSBs of antenatal care.

Sub-unit 1: Components and practice of antenatal care

At the end of this sub-unit, the learner will be able to:

Theoretical outcomes:

1.1 Understand key elements of reproductive anatomy, physiology, genetics, and biology.

1.2 Articulate the principles for correctly dating a pregnancy.

1.3 Identify the components of a health history and focused physical examination for each antenatal visit.

1.4 Know the normal findings (results) of basic screening laboratory tests.

[6] It is the midwife teachers' decision on how to sequence modules in Year 02. The Healthy Pregnancy module, with its practice component, most likely would come after an initial 3-4 weeks of study for Demographics and Midwifery Care Process, and 8 weeks of Reproductive Health. It would be then followed by 12-16 weeks (depending on volume of practical experiences available) for a combination of Healthy Labor/Birth, Healthy Postpartum, Healthy Newborn, and Life-Saving Skills. Note that the content of the latter is divided into separate modules, but the practical component should focus on keeping the mother/baby care together whenever possible

1.5 Describe the normal progression of pregnancy for the woman and her developing fetus.

1.6 Know the basic principles of pharmacokinetics of drugs taken by women during pregnancy and effects on woman and fetus.

1.7 Understand comfort measures used to relieve common complaints of the pregnant woman.

1.8 List the components of a new and repeat antenatal visit.

Practical/clinical outcomes:

1.1 Conduct a complete antenatal visit according to the midwifery care process.

1.2 Perform health assessment of the pregnant woman safely with minimum discomfort to the woman and obtaining accurate results.

1.3 Perform an abdominal examination of the woman in a systematic manner using correct techniques.

1.4 Correctly confirm pregnancy and its normal progression.

1.5 Accurately determine normal fetal growth and development throughout pregnancy.

1.6 Teach and/or demonstrate measures to decrease common discomforts of pregnancy.

1.7 Identify the pregnant woman's specific concerns and/or needs during each visit and work with her to develop and implement a plan of care.

1.8 Correctly identify common variations from normal during pregnancy and institute appropriate first-line management based on evidence-based guidelines, local standards, and available resources.

1.9 Record findings accurately and completely for each antenatal visit.

1.10 Accurately assess the effectiveness of your midwifery care.

Content list for theory and practice

- Reproductive anatomy, physiology, menstrual cycle, process of conception;
- signs and symptoms of pregnancy;
- dating pregnancy by menstrual history, size of uterus, fundal growth patterns, and use of ultrasound (if available);
- calculating expected date of birth;
- placental development, circulation, and function;
- components of health history and focused physical examination for antenatal visits;
- normal findings with basic laboratory tests used in country;
- pregnancy body changes, common discomforts, normal fundal growth;
- normal psychological changes during pregnancy;

- measures to assess fetal well-being during pregnancy;
- nutritional needs of pregnant woman and developing fetus;
- safe, locally available non-pharmacological substances for relief of common discomforts of pregnancy;
- pharmacokinetics of drugs prescribed, dispensed, or furnished to pregnant woman;
- effects of prescribed medications, street drugs, traditional medicines, and over-the-counter drugs on pregnant woman and fetus;
- prevention of STI and HIV infection;
- signs and symptoms and indications for immediate intervention of referral of common complications of pregnancy, including HIV infection, malaria, vaginal bleeding, pre-eclampsia, syphilis;
- indications for use of selected life-saving drugs such as antibiotics, anticonvulsants, antimalarials, antiretrovirals.

Suggested learning activities (self-study)

1. Complete the required/recommended readings selected by the teacher as the best available on the topics to be learned.
2. If a midwifery textbook is available, it is helpful to read those chapters related to the provision of prenatal care to understand and learn the required content.
3. In a small group of peers, analyze selected antenatal case studies prepared by teachers based on actual situations.
4. You may find it useful to review female anatomy and reproductive physiology from a medical or obstetric text, common drugs used in pregnancy in a pharmacology text, and normal laboratory test values from a laboratory manual.
5. Understanding the menstrual cycle and fertilization of the human egg may be a challenge initially. Review the program's audiovisual aids or charts that graphically represent the interaction of hormones needed for conception.
6. If the program has plastic models available, handling a female pelvis may help you understand the relationship of pelvic bones, where the developing uterus fits, and what effect early and late pregnancy have on associated structures such as the bladder and intestines. Group work with peers using the plastic model can also be a helpful learning strategy.
7. You may also wish to browse the World Wide Web for the most up-to-date information on prescription drugs, over-the-counter drugs, and traditional remedies.
8. Talking with women from the community (focus groups) may give you additional insight into how, when, and why they use traditional remedies during pregnancy.

9. You may wish to plan some observation days early in the module to watch an experienced midwife conduct an antenatal visit, with permission of the pregnant woman, the midwife, and the practical site.
10. Follow the schedule of your practical days and hours in an assigned setting. Prepare for each site by reviewing written policies or protocols for antenatal care, and request an orientation to the site and records. Plan for daily discussion of progress in learning with the midwife preceptor, and identify your specific learning needs prior to each day of practical work.
11. If you are having difficulty in taking an organized history, you may wish to obtain permission to audio record the session for review afterwards.
12. Clinical laboratory practice of hand skills needed during antenatal care, such as abdominal palpation or pelvic examination, can provide good learning experiences in a safe environment.

Other learning resources available

1. Search the WHO website for the Midwifery Modules and review the Community Module. The other modules address the common causes of maternal death, such a pre-eclampsia/eclampsia, hemorrhage, obstructed labor, and infection. These will be used more in Year 03, when addressing complications of childbearing.
2. Some programs have videos of teachers providing antenatal care that can be viewed by learners as needed.
3. Audiovisual aids, PowerPoint slides, and simulation models may be available for use.
4. Worksheets, case studies, and sample questions to stimulate application of knowledge to practice and reflection on practice are helpful teacher-designed tools to facilitate learning.
5. Insert specific journal citations, preferably from the country or region, that reflect current evidence- based practice during normal pregnancy.

Assessment of learning strategies and timing

1. There will be three written examinations to sample test theoretical knowledge and its application to clinical cases. Each will be offered (date, time) approximately three weeks apart. (60%).
2. Learners will be expected to lead a seminar on a selected topic. (20%).
3. Participation in discovery-based learning with a small group. (20%).
4. Formative assessment of clinical care ongoing throughout module.
5. Final demonstration of competent midwifery care in practical setting by end of module. (Pass/fail).

Sub-unit 2: Health counseling and childbirth education

At the end of this sub-unit of study, the learner will be able to:

2.1.1 Provide need-based advice and health counseling (anticipatory guidance) for a variety of pregnant women.

2.1.2 Design a series of childbirth education sessions that includes basic preparation for labor, birth, and parenting.

Content list

- ► Measures to alleviate common discomforts of pregnancy;
- ► health education (hygiene, sexuality, work inside and outside home);
- ► danger signs and symptoms;
- ► emergency preparedness;
- ► selection of safe site for labor and birth;
- ► when and how to contact the midwife;
- ► essential elements of birth planning;
- ► physiology of lactation and methods to prepare women for breast-feeding;
- ► preparation of home and family for the newborn;
- ► signs and symptoms of labor onset;
- ► techniques for increasing relaxation and pain relief measures for labor.

Suggested learning activities (self-study)

1. Begin by reading assigned readings.
2. Refer to your midwifery text to learn about health education needs of pregnant women and peruse the Web for childbirth preparation classes.
3. In discussion with peers, begin to think about what anticipatory guidance throughout pregnancy is needed when. Then design a plan for anticipatory guidance for each trimester; for example: first trimester: effects of early hormonal changes, nausea, urinary frequency; second trimester: nutritional needs as pregnancy advances, fetal growth and development; third trimester: preparation for labor and birth, newborn care, breast-feeding, emergency preparedness.
4. You may find it helpful to role play with peers the provision of advice, for example, on how to alleviate round ligament pain, backache, and leg edema.
5. You may decide to observe another midwife leading a formal childbirth education class before you design the content for your own bench/clinic conferences or formal classes for pregnant women and their partners.
6. Work with peers to design a series of four to six classes with content and activities to help pregnant women (and their partners, if available) prepare for labor, birth, and care of their newborn.
7. Work with teacher to schedule childbirth classes, and learn about the setting and women who will participate in the class. If classes are not routine in the setting, it may necessary to advertise their availability and recruit some pregnant women to attend. Remember, pregnant women are important partners in your learning journey, and many will be willing to help you gain the experiences needed to become a good midwife.
8. Keep of diary of learning progress in providing prenatal care, reflecting on progress and future learning needs to discuss with the teacher.

Other learning resources

1. The program may have teaching aids that can be used during childbirth preparation classes.
2. Request time to be observed teaching a childbirth education class, with feedback from teacher and peers.
3. Add country-specific articles and materials as options to enhance learning.

Assessment of learning strategies and timing

1. Small group plan for anticipatory guidance by trimester of pregnancy. (25%).
2. Simulation presentation of measures to relieve common discomforts of pregnancy. (25%).
3. Teacher and parent feedback on childbirth education classes. (50%).

Overall module evaluation[7]

You are expected to complete the following Module Evaluation and discuss with teacher(s). Please circle the response that most closely represents your evaluation of the following parts of this module:

10. I was able to meet the following learning outcomes in time allotted:

a. Provide high-quality, evidence-based antenatal care for women seeking midwifery services

Yes **Partially** **No**

b. Conduct a series of childbirth education classes with a group of pregnant women

Yes **Partially** **No**

11. The learning activities helped me to learn **Yes** **Partially** **No**
12. The learning resources were available and helpful **Yes** **Partially** **No**
13. The teacher was an effective facilitator of my learning **Yes** **Partially** **No**
14. The teacher stimulated me to learn **Yes** **Partially** **No**
15. The teacher was fair and unbiased in assessing my learning **Yes** **Partially** **No**
16. The practical experience was sufficient for demonstrating antenatal care

Yes **Partially** **No**

17. The clinical teacher/preceptor was available to me at all times **Yes** **Partially** **No**
18. The most helpful aspect(s) of the module was (please explain)
19. Suggested changes in the module (please be specific)

Name _____ Date_____

It is suggested that learners sign their evaluation so that details can be discussed with the midwifery teacher. This is an important lesson in being accountable for one's critique, and it often eliminates unwarranted comments on those aspects of teaching and learning that cannot be changed; e.g., clothing, physical features, personalities. Likewise, any learner evaluation by a teacher needs to be openly discussed with the learner.

[7] The module evaluation can be brief or very detailed, depending on choices of the midwifery teachers.

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Fullerton JT, Gherissi A, Johnson PG, Thompson JB. Competence and competency: core concepts for international midwifery practice. Int J Childbirth 2011; 1(1):4-12.

International Confederation of Midwives. ICM Global Standards, competiences and Tools. Available at: http://www.internationalmidwives.org/what-we-do/global-standards-competencies-and-tools.html. [Accessed on 13 March 2013].

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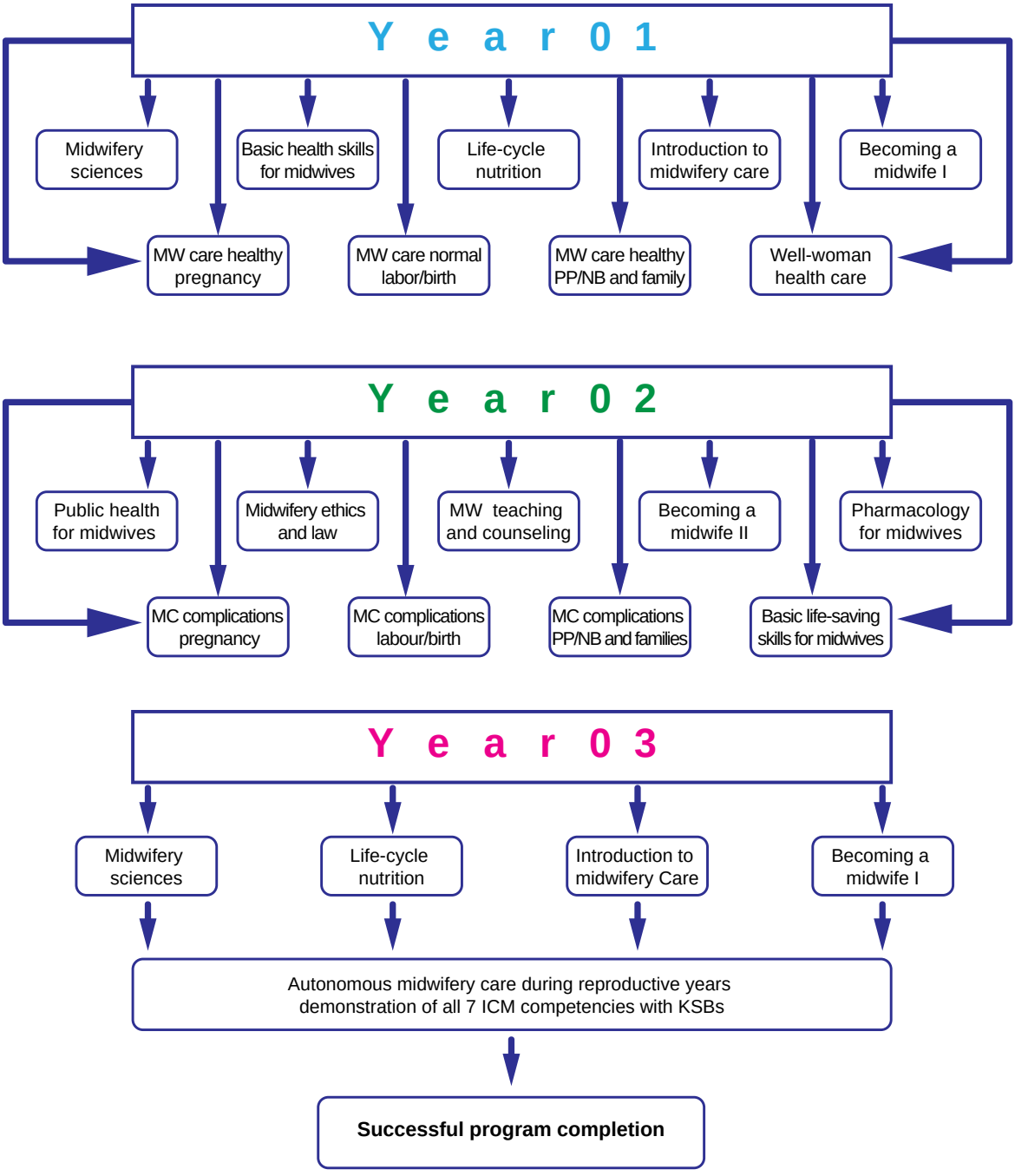
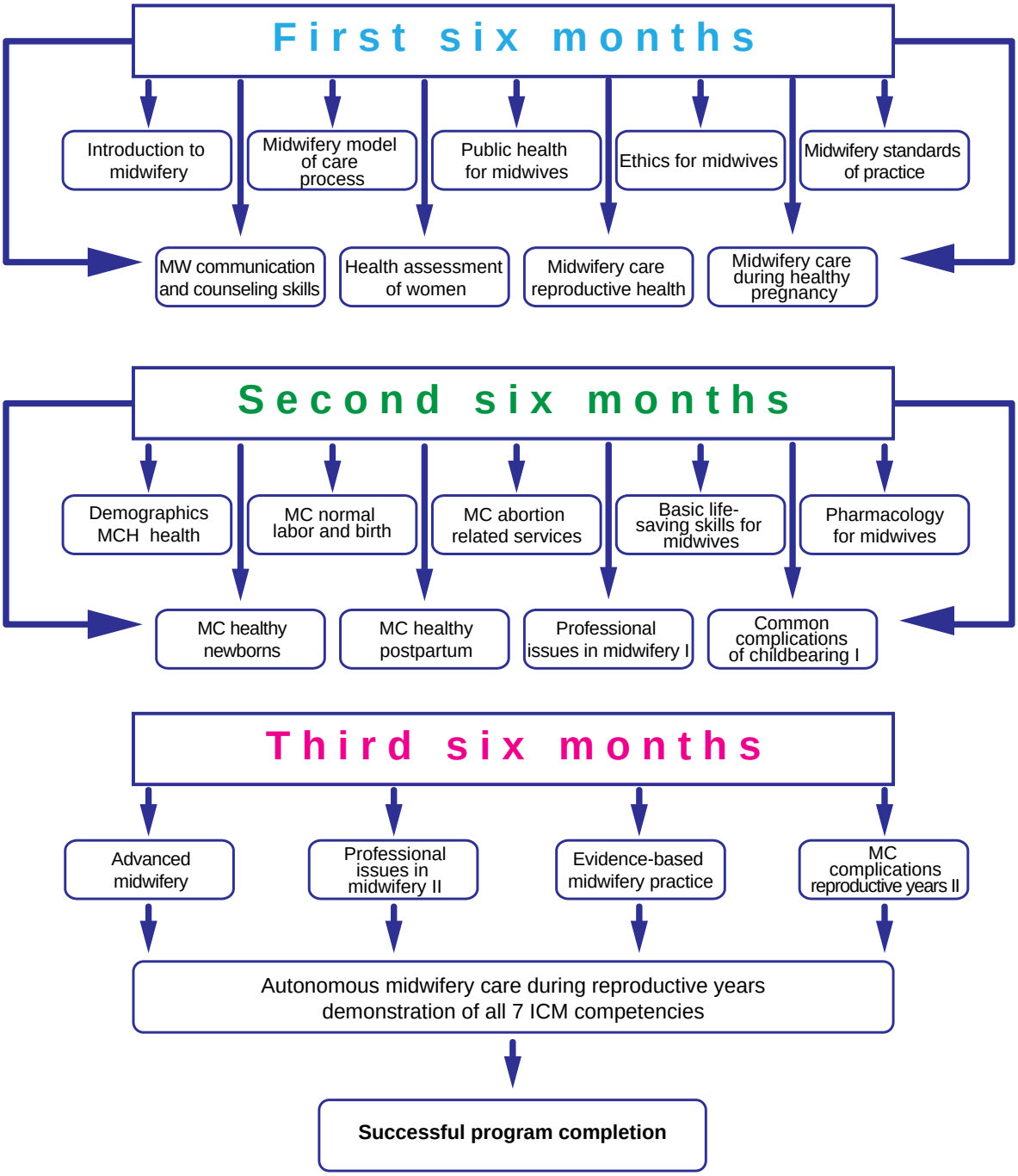
Appendix A.1
Suggested modules for professional three-year direct-entry midwifery (MW) program



Appendix A.2
Suggested modules for professional 18-month post-registration health provider midwifery program



Appendix B

Midwifery care process[8]

This care process is dynamic, continuous, and circular when needed, following an orderly succession of steps and requiring critical thinking and various types and levels of decision-making throughout. At times, data collected or decisions made or unanticipated outcomes will require revisiting an earlier step and replanning with the woman. Note also the following graphic, which illustrates the circular nature of the care process.

1. ***Assessment:***

   Includes: History and current needs expressed by woman, physical examination, laboratory findings. [cognitive, psychomotor, affective functions]

   Sources of data: Woman, family, available records, observation.

   Criteria for success: Systematic and accurate data collection done in culturally appropriate, respectful manner.

2. ***Decision-making:***

   Includes: Organizing data collected to clarify actual or potential midwifery diagnoses based on woman's needs/problems and determining if emergency action required. [Cognitive and affective functions].

   Sources of data: See Step 1.

   Criteria for success: Correct interpretation of data that results in accurate midwifery diagnoses.

3. ***Planning:***

   Includes: Prioritizing need for action in partnership with the woman, determining which needs/problems will be resolved by midwifery actions; need for consultation or referral. [Cognitive and affective functions].

   Sources of data: Steps 1 and 2.

   Criteria for success: Comprehensive plan with input from woman/family, including alternates when available based on evidence/sound rationale.

4. ***Implementation:***

   Includes: Timely, appropriate, safe midwifery care provided with compassion and cultural sensitivity, promoting self-care when possible. [Cognitive, affective, psychomotor functions].

   Sources of data: Steps 1, 2, and 3.

   Criteria for success: Timely intervention with safe, evidence-based, efficient, ethical, compassionate care-giving, along with appropriate recording of data and plan of care

[8] This schemata of the midwifery model of care has been used with midwifery teachers and learners in a variety of countries for the past 40 years. It was updated in keeping with three ICM publications (*Midwifery Philosophy and Model of Care, Essential Competencies for Basic Midwifery Practice, and the International Code of Ethics for Midwives*), along with the ACNM *Life-Saving Skills Manual for Midwives* 1991. J. Thompson, 4/12.

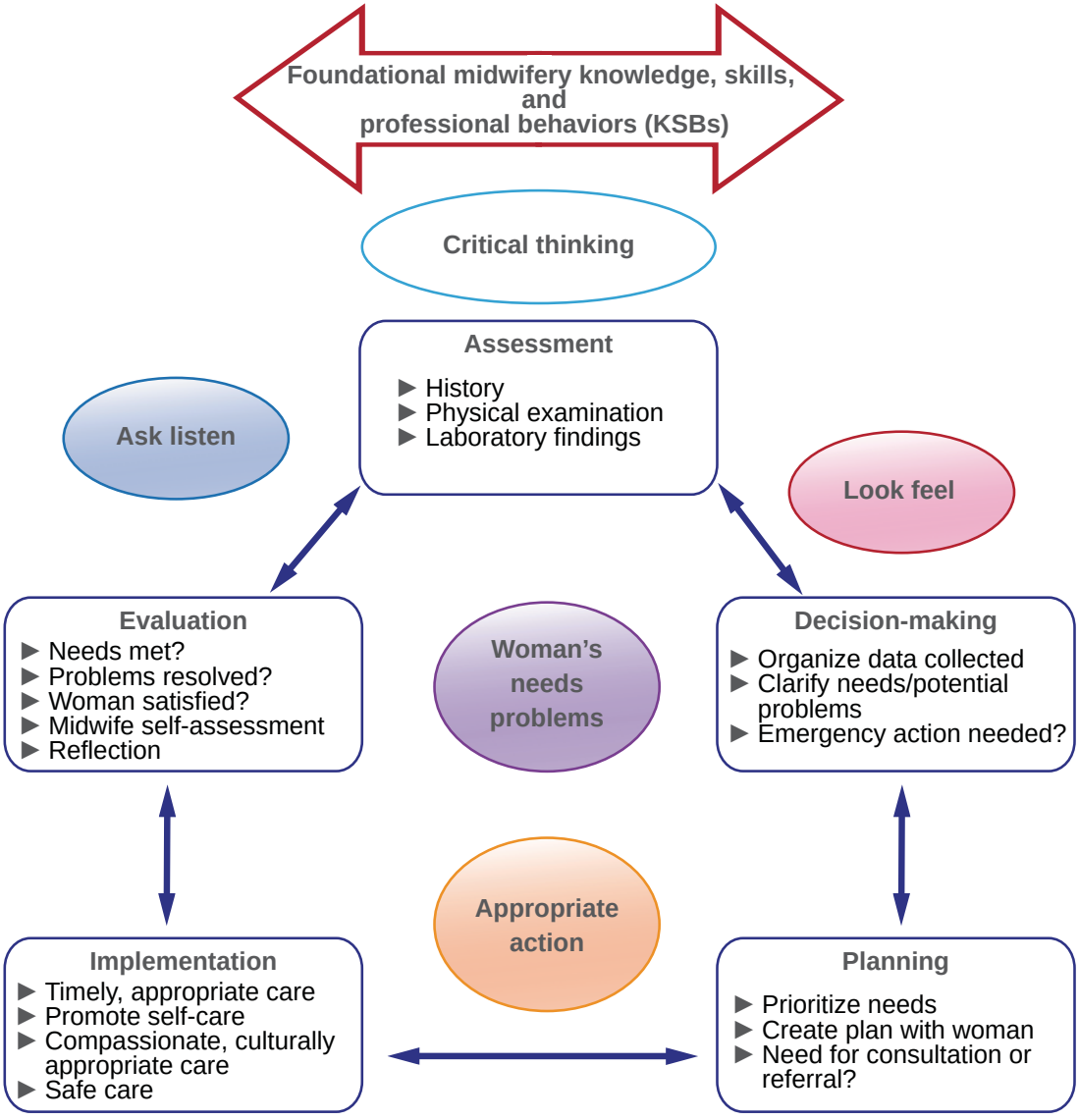
5. ***Evaluation:***

Includes: Feedback from woman/family on needs met, satisfaction; midwife self-assessment and reflection on outcomes and whether new approach needed; confirmation/validation from colleagues, teachers. [Cognitive, affective functions].

Sources of data: Self, woman, family, peers, supervisors.

Criteria for success: Extent to which care given met needs of woman and midwifery goals. Outcomes of midwifery care includes improved health/well-being of women and newborns.

The midwifery care process



Appendix C

Module development worksheet[9]

Introduction to module: Brief description of what is in the module. Should convince the learner that the module is important and worth learning.

Module title: Specific enough for learner to understand the central focus of the content.

Hours of study: Estimate of time that will need to be spent learning to meet outcomes. May also reflect the total time allotted for a given module.

Learning outcomes: Very specific statements about what the learner is expected to know, do, or feel at the end of the module. There are usually 5-20 outcomes in each module, especially if sub-units are included. If sub-units included, begin with overall learning outcomes, then the more specific learning outcomes for each sub-unit that, when completed, will allow the learner to demonstrate successful completion of the overall module outcomes.

- In writing outcomes use very clear and specific performance verbs:[10]
    - o List;
    - o name;
    - o describe;
    - o outline a plan
    - o demonstrate;
    - o explain;
    - o compute;
    - o determine
    - o perform.

Content included: This may be a list of the ICM Essential competency and KSBs included, or a group of related concepts, such as health assessment or parent education.

Learning activities for acquiring knowledge and skills: These may be many types of activities. The midwifery teacher needs to use different types of learning activities that promote competency development and demonstration. Each module will use only a few activities, not all of them.

a. reading from the textbook

b. reading journal articles

c. completing a worksheet

d. attending a lecture with significant time for dialogue with teacher

e. observing a procedure

[9] This document is based on original by M.K. McHugh, University of Pennsylvania Graduate Program in Nurse-Midwifery. Used with permission.

[10] Many educators refer to Bloom's Taxonomy for levels of demonstration, from knowledge through comprehension.

f. practicing on a model in the skills lab

g. viewing a film

h. reading from an Internet site

Resources: This section would include written materials, worksheets, case studies, Web-based articles, audiovisual aids.

Clinical outcome statements: Easy and efficient to organize clinical outcome statements according to the steps of the midwifery care process (assessment, decision-making, planning, implementation, and evaluation) tailored specifically to the area of practice, e.g., intrapartum care. This is performance time for learners, requiring affective, psychomotor skills, and knowledge application. Thus the outcome statements should be written in such a way to 'lead' the learner to successful performance.

Learning activities for developing clinical competence: This is clinical practice with a variety of women seeking midwifery care in a variety of practical sites, supervised by qualified midwifery teacher/preceptor.

Learner Assessment: The learner must be told how and when s/he will be evaluated on the theory portion of the module. Sometimes a small quiz can be attached that the student can take before the big exam(s). Timing of assessment of clinical performance also needs to be specified, including learner self-assessment at periodic intervals.

Module evaluation form: Can be a very short form to ask the learner what aspects of the module (teacher, activities, resource, practical experiences) were helpful. Learner should also be asked what changes in the module are needed. It is vital that teachers use this feedback positively, and follow-up with individual learners who need to talk further about their experiences during the module.

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Appendix D
Sample division of ICM Competency #1 and its KSBs

Introduction

One approach to the organization of midwifery content and its placement throughout a midwifery program is to go through each of the seven ICM competencies with their KSBs, making a note as to what level or sequence the KSBs might have for each competency statement. This Appendix D document illustrates what Competency #1 might look like when divided into three levels, from simple to advanced to complex theory and skills. It is a suggested approach only, but may be useful to midwifery educators or consultants in constructing a new midwifery curriculum or in evaluating an existing midwifery curriculum. The same process could be followed to analyze the other six ICM competency statements and their associated knowledge, skills, and behaviors.

It is important to note that the suggested "levels" may be used to determine what modules or course units are offered when in the overall curriculum, but are not directive for any particular year or month of placement. For example, in direct-entry programs, the pre-midwifery competencies may be offered in the same time period as the introduction to midwifery practice with healthy women, based on the premise that learners will be eager to begin providing midwifery care for women and childbearing families. In post-registration midwifery programs, the content needed as a "prerequisite" to midwifery content may be required prior to entry into the midwifery program, or it will be integrated with the midwifery content at the beginning of the program. In some programs, the teachers may decide to integrate healthy and complicated childbearing content in the same course units or modules, following the way in which each of ICM competencies #2 through #7 are structured. Other teachers will separate normal or healthy reproductive content from reproductive complications. Whatever the approach used in deciding what content to place where and when in the curriculum, the important point is that all ICM competencies with their KSBs are included and that they can be identified by program teachers and learners.

Note to readers: Many professional midwifery programs have described the courses, content, and placement on their program website. Midwifery teachers may find it helpful to review such websites on direct-entry and post-registration midwifery programs prior to making a final decision on what organizational pattern is best or preferred in their situation (country). Sample websites are included in the ICM Resource Packet #3 (Key Resources Available for Midwifery Education), which is part of the ICM series entitled Model Curriculum Outlines for Professional Midwifery Education.

Sample division of KSBs from ICM Competency #1:

"Midwives have the requisite knowledge and skills from obstetrics, neonatology, the social sciences, public health and ethics that form the basis of high-quality, culturally relevant, appropriate care for women, newborns, and childbearing families."

First-level content: Pre-midwifery competencies[11]

Knowledge

- Basic sciences – biology (embryology and human development), basic chemistry and microbiology, human anatomy and physiology, pharmacology;
- sociology and psychology;
- social determinants of health – income, literacy and education, water supply and sanitation, housing, environmental hazards, food security, disease patterns, common threats to health;
- public/community health – health promotion, disease prevention and control strategies including relevant national programs, epidemiological principles, community assessments, interpretation of vital statistics;
- principles of community and population-based primary health care;
- components of individual, family, and community support systems and how to mobilize sources of support when indicated;
- nutrition throughout life cycle;
- principles of research and evidence-based practice;
- indicators of quality health care services;
- principles of health education – how, what, when, and where to teach;
- national and local health services and infrastructures, including referral systems;
- human rights and effects on health of individuals;
- local culture and beliefs, and influences on values and behavior;
- traditional and modern health practices (beneficial, harmful);
- critical thinking and clinical reasoning theoretical foundations;
- professional behaviors – codes of ethics;
- basis and use of health screening and diagnostic tests;
- theories of collaborative work relationships.

Skills

- Think critically, reason morally, and use problem-solving skills;
- Practice in accord with accepted standards (evidence-based care) and code of ethics;
- Work collaboratively with others in health care;

[11] The knowledge, skills, and behaviors that come from other health provider education are generally agreed to include basic sciences, social studies, professional ethics, and basic skills in physical assessment, clinical reasoning, etc., according to ICM Competency #1 and the Accreditation Commission for Midwifery Education (ACME) 2005 document titled "The Knowledge, Skills, and Behaviors Prerequisite to Midwifery Clinical Coursework." It is the responsibility of midwifery program faculty to determine if prior health provider education has included these competencies and that the applicant can demonstrate them at the time of entry into the midwifery education program. If the prerequisite post-registration content is integrated with the midwifery content, then the program will need to determine the criteria for beginning the midwifery content.

- demonstrate principles of effective communication;
- provide health education using appropriate teaching materials, aids, and resources;
- calculate correct dose and administer medications to adults and newborns by appropriate route;
- use appropriate communication and listening skills;
- take a comprehensive health history and perform a basic screening physical examination;
- assemble, use, and maintain equipment and supplies appropriate to setting of practice;
- initiate emergency intervention to facilitate survival (e.g. basic cardiac life support, manage shock, basic first aid and resuscitation, administer oxygen);
- record and interpret relevant findings, including what was done and what needs follow-up;
- evaluate outcomes of patient care and patient satisfaction.

Professional behaviors

- Willingness to think critically and reason morally;
- willingness to accept responsibility and accountability for decisions and outcomes of those decisions (moral agent);
- acts consistently in accordance with professional ethics, values, and human rights;
- behaves in a courteous, nonjudgmental, nondiscriminatory, and culturally appropriate manner with all clients;
- is respectful of individuals, their culture and customs;
- maintains confidentiality of all client information;
- advocates for informed choice, participatory decision-making, and the right to self-determination;
- maintains/updates knowledge and skills in order to remain current in practice (e.g., self-evaluation, peer review, continuing education to maintain and validate quality practice).

Note: Each of these content areas can be packaged with logical groupings of specific competencies. For example, a module on public health might include community assessment, social determinants of health, primary health care (including health promotion and disease prevention and control strategies), and disease patterns (epidemiology) and vital statistics. A module on professional ethics might include what it means to be a moral agent and an advocate for client choice, and how to promote human rights and ethical decision-making. A module on health assessment most likely will include history-taking, physical examination, clinical decision-making, and principles of asepsis. A module on health care systems might include national and local health services and their infrastructure, referral and social services agencies concerned with reproductive health, and relevant national programs for maternal and child health. A module on basic sciences might include principles of pharmacology. A module on social sciences might include culture, human development, psychosocial dimensions of childbearing, and psychological well-being of women.

Second-level content: Midwifery care of essentially healthy women and newborns

- Social, epidemiologic, and cultural context of maternal and newborn care (ICM competency #1).

Knowledge

a. Direct and indirect causes of maternal and neonatal mortality and morbidity in local community and strategies for reducing them.

b. The concept of alarm (preparedness), resources for referral to higher health facility levels c. Benefits and risks of available birth settings (birth planning).

d. Strategies for advocating with women for a variety of safe birth settings.

Skills and behaviors

a. Uses universal/standard precautions, infection prevention and control strategies, and clean technique b. Maintains the confidentiality of all information shared by the woman.

c. Works in partnership with women and their families; enables and supports them in making informed choices about their health and their right to refuse testing or intervention.

d. Works collaboratively (teamwork) with other health workers to improve the delivery of services to women and families.

e. Complies with all local reporting regulations for birth and death registration.

Third-level content: Midwifery care of women and newborns with life-threatening conditions, including advanced midwifery practice

- Social, epidemiologic, and cultural context of maternal and newborn care (ICM competency #1).

Knowledge

a. Methodology for conducting maternal death review and near-miss audits.

b. Legal and regulatory frameworks governing reproductive health for women of all ages, including laws, policies, protocols, and professional guidelines

c. Advocacy and empowerment strategies for women

Skills and behaviors

a. Take a leadership role in the practice arena, based on professional beliefs and values.

b. Assume administration and management tasks and activities, including quality and human resource management (additional skill).

c. Take a leadership role in policy arenas (additional skill).

As noted earlier, each of the ICM seven competencies can be intentionally divided into levels prior to decisions on placement in a particular place in the curriculum.

Pan American Health Organization
World Health Organization
Americas